

# **Filogenetski odnosi unutar roda *Aurinia* Desv. (Brassicaceae) utvrđeni analizom regije ndhF kloroplastne DNA**

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**Bartolić, Paolo**

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Sveučilište u Zagrebu  
Prirodoslovno-matematički fakultet  
Biološki odsjek

Paolo Bartolić

**Filogenetski odnosi unutar roda *Aurinia* Desv.  
(Brassicaceae) utvrđeni analizom regije *ndhF* kloroplastne  
DNA**

Diplomski rad

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Ovaj rad je izrađen na Botaničkom zavodu Biološkog odsjeka Prirodoslovno-matematičkog fakulteta Sveučilišta u Zagrebu pod vodstvom prof. dr. sc Zlatka Libera i neposrednim vodstvom dr. sc Ivane Rešetnik. Rad je predan na ocjenu Biološkom odsjeku Prirodoslovno-matematičkog fakulteta Sveučilišta u Zagrebu radi stjecanja zvanja magistra Eksperimentalne biologije.

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Sveučilište u Zagrebu  
Prirodoslovno-matematički fakultet  
Biološki odsjek

Diplomski rad

### **FILOGENETSKI ODNOSI UNUTAR RODA *Aurinia* Desv. (BRASSICACEAE) UTVRĐENI ANALIZOM *ndhF* REGIJE KLOROPLASTNE DNA**

Paolo Bartolić  
Rooseveltov trg 6, 10000 Zagreb, Hrvatska

*Aurinia* Desv. je rod unutar tribusa *Alysseae* (Brassicaceae) rasprostranjen poglavito na Balkanskom i Apeninskom poluotoku. Vrste roda *Aurinia* su višegodišnje biljke s pokrovom od zvjezdasto razgranjenih dlaka, listovima rozete izveruganog ili zupčastog ruba, uspravnih stabljika te grozdastim cvatovima sastavljenim od cvjetova isključivo žute boje. Cilj ovog diplomskog rada je bio odrediti srodstvene odnose unutar roda *Aurinia* usporedbom sekvenci kodirajuće regije *ndhF* kloroplastne DNA. Iz sakupljenih uzoraka lisnog tkiva, a koji su još na terenu osušeni u vrećicama sa silika-gelom, izolirana je ukupna stanična DNA. Regija *ndhF* kloroplastne DNA je umnožena lančanom reakcijom polimerazom (PCR), pročišćena i sekvencirana. Filogenetske analize (Bayesovska i metoda maksimalne štedljivosti) i analiza haplotipova potvrđile su monofiliju roda pri čemu su se svi analizirani uzorci grupirali u tri skupine u skladu s geografskim položajem, a ne s dosadašnjom taksonomijom. Vrsta *A. saxatilis* je bila genetički najraznolikija dok su amfi-jadranske vrste *A. leucadea* i *A. sinuata* bile genetički najsrodnije. Grčki endemi, *A. gionae* i *A. moreana*, su toliko srodnici s vrstom *A. saxatilis* da ne zaslužuju taksonomski rang zasebnih vrsta. Genetska raznolikost vrsta *A. corymbosa* i *A. petraea* ukazuje na to da su one preživjele pleistocenske klimatske oscilacije u više neovisnih mikrorefugija.

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Ocenitelji:    Zlatko Liber, prof. dr. sc.  
                  Biljana Balen, prof. dr. sc.  
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### **PHYLOGENETIC RELATIONSHIPS WITHIN GENUS *Aurinia* Desv. (Brassicaceae) INFERRRED FROM CHLOROPLAST *ndhF* SEQUENCE DATA**

Paolo Bartolić

Rooseveltov trg 6, 10000 Zagreb, Croatia

*Aurinia* Desv. is a genus within the tribus *Alysseae* (Brassicaceae), distributed mainly in the Balkan and Apennine Peninsula. Species of this genus are perennial plants with an indumentum of stellate hairs, sinuate or dentate rosette leaves, grooved stems with thickening bases, and raceme inflorescences composed of exclusively yellow flowers. The aim of this thesis was to determine the relationships within the genus *Aurinia* by comparing the sequences of the *ndhF* region of chloroplast DNA. Total cellular DNA was isolated from the collected tissue samples, which were dried immediately in the field using plastic bags filled with silica-gel. The *ndhF* region of chloroplast DNA was amplified by polymerase chain reaction, purified and sequenced. Phylogenetic analyses (Bayesian and Maximum Parsimony methods) and haplotype network confirmed the monophyly of the genus, while all the analysed samples were grouped into three groups according to geographical location, not the current taxonomy. The species *A. saxatilis* was genetically most diverse, while the amphi-Adriatic species *A. leucadea* and *A. sinuata* were genetically the most related. The Greek endemic species, *A. moreana* and *A. gionae*, have proven to be so closely related to *A. saxatilis* that they do not deserve the taxonomic rank of separate species. The genetic diversity of the species *A. corymbosa* and *A. petraea* indicated that they survived Pleistocene climate oscillations in multiple independent microrefugia.

(41 pages, 5 figures, 3 tables, 56 references, original in Croatian)

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Key words: *Aurinia*, Brassicaceae, phylogeny, *ndhF*.

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Assistant Supervisor: Ivana Rešetnik, dr. sc.

Reviewers: Zlatko Liber, prof. dr. sc.

Biljana Balen, prof. dr. sc.

Goran Kovačević, prof. dr. sc

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# UVOD

## Opće značajke roda *Aurinia*

Porodica Brassicaceae (hrv. krstašice) sastoji se od 321 roda i 3660 vrsta (Al-Shehbaz 2012) od kojih su mnoge vrste važne i zanimljive čovjeku. Ekonomski važnost porodice ponajviše se veže uz vrste roda *Brassica* čiji se mnogobrojni kultivari uzgajaju diljem svijeta bilo kao povrće ili kao krmne biljke. Ovoj porodici pripada i vrsta *Arabidopsis thaliana* (L.) Heynh, modelni organizam u molekularnoj biologiji i genetici te prva biljna vrsta čiji je genom u potpunosti sekvenciran. S 272 svojte i 29 endema porodica krstašica predstavlja četvrtu najveću porodicu unutar flore Hrvatske, a unutar nje je i stenoendemični monotipski rod *Degenia* (FCD, Nikolić i sur. 2015). Porodica je u nekoliko pokušaja dijeljena u tribuse (von Hayek 1911, Schulz 1936, Janchen 1942, Avetisian 1983), međutim dokazano je da tribusi, koji su predloženi na morfološkim karakteristikama ponajviše se bazirajući na oblik ploda, nisu monofiletski (Al-Shehbaz i sur. 2006). Glavna teškoća u taksonomiji unutar porodice Brassicaceae je izrazita konvergencija koja zahvaća većinu morfoloških karakteristika upotrebljenih u determinaciji (Al-Shehbaz 2012). Razvoj molekularnih metoda za utvrđivanje filogenetskih odnosa između raznovrsnih taksonomske razina doveo je do povećanog interesa za rješavanje problema taksonomije porodice Brassicaceae, kako na višim taksonomskim razinama tribusa tako i na nižim razinama kao što su rodovi (Rešetnik i sur. 2013). Jedan od najvećih tribusa unutar ove porodice je tribus *Alysseae* koji sada obuhvaća 24 roda i 277 vrsta rasprostranjenih većinom u Europi i Aziji. Većina vrsta pripada rodu *Alyssum* dok su ostali rodovi *Odontarrhena* s 87 vrsta, *Hormathophylla* s 11 vrsta, *Bornmuellera* i *Clypeola* s devet vrsta, *Aurinia* i *Meniocus* sa sedam vrsta, *Berteroa* i *Irania* s pet vrsta, *Fibigia* i *Galitzkyia* s tri vrste, *Clastopus*, *Cuprella*, *Phyllolepidium* i *Physoptychis* s dvije vrste te *Acuston*, *Alyssoides*, *Brachypus*, *Degenia*, *Lepidotrichum*, *Lutzia*, *Pterygostemon*, *Resetnikia* i *Takhtajaniella* s jednom vrstom (Španiel i sur. 2015). Morfološke osobine tribusa su zeljasto ili polugrmovito tijelo, gusto pokriveno većinom zvjezdastim ili rašljastim dlakama, žuti ili bijeli (rijetko ružičast) vjenčić, filamenti koji su većinom okriljeni, nazubljeni ili posjeduju druge nastavke, spljoštena ili napuhana komuščica s malim brojem sjemenki koje su većinom okriljene te osam kromosoma u haploidnim stanicama (Rešetnik i sur. 2013).

Vrste roda *Aurinia* su višegodišnje biljke, više ili manje drvenaste pri bazi stabljike te na svojoj površini imaju dlakavi pokrov sačinjen od zvjezdastih, razgranjenih ili ljskavih dlaka. Bazalni listovi su veći od stabljičnih te su im peteljke odebljalih baza izbrazdane na gornjoj površini. Cvjetne stapke većinom su smještene aksilarno te nose okruglaste cvatove. Lapovi su uspravno-stršeći, nisu vrećasti pri bazi dok su latice žute, izrUBLjene do dvocjepane, ponekad cjelovite. Filamenti nisu okriljeni niti nazubljeni, imaju maleni, gotovo okruglasti privjesak pri bazi. Tučak se sastoјi od kratkog vrata i glavičaste njuške. Plod je okruglasta ili eliptična komuščica, spljoštena ili sa zaklopcima u sredini ispupčenim, a prema rubu stisnutim. U svakoj komuščici nalazi se do 8 sjemenki koje su većinom okriljene (Akeroyd 1993).



**Slika 1.** *Aurinia leucadea* (Guss.) K. Koch

Rod *Aurinia* opisao je 1815. godine Nicaise Auguste Desvaux (Desvaux 1815), ali su ga autori nerijetko svrstavali kao sekciju unutar roda *Alyssum* (Koch 1836, Schulz 1936, Savulescu 1955, Pignatti 1982). Prvi koji ga je ponovno izdvojio kao zaseban rod bio je Dudley (1964) na temelju sljedećih morfoloških osobina: listovi u rozeti uglavnom izveruganog ili zupčastog ruba s peteljkama odebljale baze koje ostaju na izdanku (rod *Aurinia*) vs. cjeloviti listovi neodebljalih baza peteljki koje ne ostaju na izdanku (rod *Alyssum*), stabljični listovi barem upola kraći od listova u rozeti vs. stabljični listovi i listovi u rozeti uglavnom iste veličine, rašireni vs. uspravni lapovi te njuška tučka s dva režnja vs. cjelovita njuška. Dudley također navodi kako je rod *Aurinia* u bliskom srodstvu s rodom *Berteroia* što potvrđuju i filogenetska istraživanja (Warwick i sur. 2008, Rešetnik 2011, Rešetnik i sur. 2013) u kojima su rodovi *Aurinia*, *Berteroia* i *Galitzkya* formirali dobro podržanu filogenetsku granu unutar tribusa *Alysseae*.

U najnovijim klasifikacijama rod *Aurinia* sadrži sedam vrsta, isključivo žutih cvjetova, rasprostranjenih poglavito na Balkanskom i Apeninskom poluotoku:

1. *Aurinia corymbosa* Griseb.-duljina stablje slike iznosi 20 do 50 cm, a cijelu površinu biljke prekrivaju dlake koje su razgranate ili zvjezdaste. Bazalni listovi su duguljasto suličasti ili naopako jajasti, cjeloviti ili izverugani i zupčasti. Cvjet je u obliku gronje. Lapovi su dugački od 1.5 do 2.5 mm dok je duljina latica u prosjeku 4 mm te su dvocjepane i žute boje. Vrat tučka je dugačak 1 do 2 mm. Komuščica je dugačka od 3.5 do 5.5 mm, okruglasta do eliptično-okruglasta i gola sa zaklopcima koji su izrazito napuhani. Duljina sjemenki je od 1.7 do 2.5 mm te ih ima od 2 do 4 u svakom pretincu komuščice. Krilce sjemenke je od 0.2 do 0.5 mm široko.  $2n = 16$ .
2. *A. gionae* (Quézel & Contandr.) Greuter & Burdet-kao i *Aurinia corymbosa* Griseb. ali su bazalni listovi dulji, duguljasto suličasti do linearne suličasti. Cvjet je više-manje metličast s laticama duljine od 4 do 5.5 mm. Komuščica je dugačka od 6 do 13 mm dok su sjemenke duljine od 3 do 4.5 mm te ih ima od 2 do 6 u svakom pretincu komuščice. Krilce sjemenke je od 0.2 do 1 mm široko.  $2n = 16$ .

3. *A. leucadea* (Guss.) K. Koch-visina biljke je od 10 do 40 cm, stabljika je uobičajeno drvenasta pri bazi te je površina biljke prekrivena zvjezdastim dlakama. Bazalni listovi su duguljasto suličasti, cjeloviti ili izverugani i zupčasti. Cvjet je grozdast, lapovi su duljine od 2.5 do 3.5 mm, a laticice 5 do 6 mm, duboko izrubljene i žute. Vrat tučka je dugačak od 1 do 2 mm. Komuščica je dugačka 7 do 10 mm, okruglasta ili jajasto okruglasta i gola s napuhanim zaklopcima. Sjemenke su duljine od 3 do 4 mm, te ih ima od 4 do 6 u svakom pretincu komuščice. Krilce sjemenke je od 0.5 do 0.7 mm široko.  $2n = 16$ .
4. *A. moreana* Tzanoud. & Iatroú-posjeduje izrazito drvenasti zbiti donji dio biljke s bazalnim listovima koji su duguljasto suličasti do lopatasti, cjeloviti ili neznatno izverugani te sivkasto-zelene boje. Stabljika je nerazgranjena, duljine do 12 cm te nosi cvatove u obliku jednostavnih grozdova. Vrat tučka dugačak je od 0.3 do 0.8 mm. Duljina komuščice je od 3.5 do 6 mm, a širina od 2.5 do 5 mm, u većini slučajeva duljina je veća od širine te je zaobljena pri vrhu. U svakom pretincu komuščice nalazi se od 3 do 6 sjemenki.  $2n = 16$ .
5. *A. petraea* (Ard.) Schur (uključujući *A. microcarpa* (Vis.) Greuter & Burdet)-duljina stabljike je od 15 do 60 cm te je površina biljke prekrivena dlakama koje su razgranjene ili više-manje zvjezdaste. Bazalni listovi su naopako jajasti do duguljasti, izverugani ili perasto rascijepljeni. Cvjet je grozdast s lapovima dugačkim otprilike 2 mm i laticama duljine od 4 do 4.5 mm koje su žute s dvocjepanim vrhom. Vrat tučka je dugačak od 1 do 1.5 mm. Komuščica je dugačka od 3 do 5 mm, eliptična do naopako jajasta, gola sa zaklopcima koji su napuhani, ali sa uskim spljoštenim rubom. Sjemenke su duljine od 1.5 do 1.8 mm te ih ima po dvije u svakom pretincu komuščice. Krilce sjemenke je od 0.1 do 0.3 mm široko.  $2n = 16$ .

6. *A. saxatilis* (L.) Desv.-površina biljke prekrivena je zvjezdastim dlakama, visina same biljke je od 10 do 50 cm te je stabljika često drvenasta pri bazi. Bazalni listovi su naopako jajasti do duguljasto suličasti, izverugani perasto rascijepljeni do cjeloviti. Cvjet je u obliku gronje s lapovima duljine 2 do 4 mm i žutim laticama duljine od 3 do 8 mm koje su izrubljene ili dvocjepane. Komuščica je gola sa zaklopcima koji su skoro ravni. Sjemenke su dugačke od 2 do 2.7 mm te ih ima po dvije u svakom pretincu. Krilce sjemenke je od 0.3 do 1.1 mm široko.  $2n = 16$ .
7. *A. sinuata* (L.) Griseb.-duljina stabljike iznosi od 15 do 50 cm, drvenasta pri bazi te je površina prekrivena dlakama. Listovi suličasti do duguljasto suličasti, bazalni listovi izverugani i zupčasti. Lapovi su duljine 3 do 4 mm, a latice 5 do 8 mm, izrubljene i bijedno žute. Komuščica je dugačka 7 do 12 mm, okruglasta ili elipsoidna sa vrlo napuhanim zaklopcima. Sjemenke su većinom okriljene te ih ima 4 do 8 u svakom pretincu komuščice

## Taksonomska problematika roda *Aurinia*

Dosadašnja saznanja o filogenetskom položaju roda *Aurinia* dobivena su na temelju rezultata molekularnih istraživanja tribusa *Alysseae* (Warwick 2008, Rešetnik 2011, Rešetnik i sur. 2013). U istraživanju Warwick iz 2008. provedena je analiza jezgrinih regija ITS (engl. *Internal Transcribed Spacer*) 85 svojti, među njima dvije jedinke vrste *Aurinia saxatilis*, kako bi se utvrdio opseg tribusa kao i filogenetski položaj tribusa unutar porodice Brassicaceae. Rezultati su potvrdili postojanje tribusa *Alysseae* s. s. koji se sastoji od 12 rodova (*Alyssoides*, *Alyssum*, *Aurinia*, *Berteroa*, *Bornmuellera*, *Clastopus*, *Clypeola*, *Degenia*, *Fibigia*, *Galitzkya*, *Hormathophylla*, i *Physoptychis*). Šest dobro podržanih filogenetskih ogrankova formirali su se unutar filogenetske grane *Alysseae* uključujući dva *Alyssum* ogranka, *Alyssoides* (uključuje rodove *Alyssoides*, *Bornmuellera*, *Clastopus*, *Degenia*, *Fibigia*, *Hormathophylla* i *Physoptychis*), *Bornmuellera*, *Hormathophylla* te *Berteroa* filogenetskog ogranka pri čemu se posljednji sastoji od rodova *Aurinia*, *Berteroa* i *Galitzkya*. U istraživanju Rešetnik iz 2011. cilj je bio utvrditi filogenetske odnose unutar tribusa, opseg samog tribusa kao i njegov filogenetski položaj unutar

porodice Brassicaceae. Rezultati analiza regija ITS te regija *ndhF* i *trnL-trnF* kloroplastne DNA za 351 uzorak pokazali su kako je tribus *Alysseae* monofiletski te sadrži 14 rodova (*Alyssoides*, *Alyssum*, *Aurinia*, *Berteroa*, *Bornmuellera*, *Clastopus*, *Clypeola*, *Degenia*, *Fibigia*, *Galitzkya*, *Hormathophylla*, *Lepidotrichum*, *Phyllolepidum* i *Physoptychis*), rodovi *Lobularia* i *Farsetia* isključeni su iz tribusa *Alysseae* i priključeni tribusu *Anastaticeae*, rod *Ptilotrichum* priključen je tribusu *Arabideae*, rod *Didymophysa* priključen je tribusu *Thlaspideae*, dok položaj roda *Asperuginoides* nije razjašnjen. Unutar tribusa *Alysseae* javljaju se četiri dobro podržane skupine među kojima je i skupina *Aurinia*-*Berteroae* koja je dobro podržana u svim filogenetskim analizama i uvijek sadrži rodove *Aurinia*, *Berteroae* i *Galitzkya* koji su se, s većinom pripadajućih vrsta, također odvojili u dobro podržane grane. Po Dudleyjevom opisu (1964) rod *Aurinia* je polifiletski te su nedavna istraživanja temeljena na analizama regije ITS i morfološkim analizama dlaka pomoću skenirajućeg ili pretražnog elektronskog (SEM) mikroskopa (Cecchi 2011) te regija ITS i regija *ndhF* i *trnL-trnF* kloroplastne DNA (Rešetnik i sur. 2013) dovela do isključenja dviju svojti iz roda. *Aurinia rupestris* s. l. (syn. *Ptilotrichum rupestre* s. l.), koja se morfološki razlikuje od ostalih vrsta roda *Aurinia* (jednostavnii grozdasti cvatovi vs. razgranati cvatovi, jednostavnii vs. okriljeni filamenti, cjeloviti vs. izverugani ili zupčasti rubovi listova rozete, uglavnom sjedeće zvjezdaste dlake s 24-33 zraka vs. uzdignute zvjezdaste dlake s 8-16 zraka, bijele vs. žute latice), izdvojena je u zasebni rod *Phyllolepidum* Trinajstić, sestrinski rodu *Bornmuellera* (Al-Shehbaz 2012, Cecchi 2011, Rešetnik 2011). Za rijetku endemičnu psamofitsku svojtu sa zapadnih obala Crnog Mora, *Aurinia uechtritziana* (široki, razgranati cvatovi sa ponekim listom, debele, blagookruglaste napuhane, biovulatne komuške, bijeli cvjetovi i latice rascjepane na dva djela) također je potvrđeno (Cecchi 2011, Rešetnik 2011, Rešetnik i sur. 2013) da spada u zaseban rod *Lepidotrichum*, sestrinski rodu *Bornmuellera*, kao što je to predložio Velenovsky (1889). Što se tiče filogenetskih veza unutar samoga roda *Aurinia*, rezultati ITS analiza za *A. saxatilis* pokazuju grupiranje uzoraka s različitim lokaliteta, međutim unutar ove skupine postoji velika raznolikost. Oba grčka endema *A. moreana* i *A. gionae* svrstale su se u skupinu *A. saxatilis* kako po ITS podacima tako i podacima kloroplastne DNA što ukazuje na njihovu blisku srodnost (Rešetnik 2011, Rešetnik i sur. 2013). Filogenetski položaj vrsta *A. petraea* i *A. corymbosa* nije u potpunosti jasan na temelju dosadašnjih istraživanja (Rešetnik 2011, Rešetnik i sur. 2013) no za sada su opisane kao zasebne vrste uključujući svojtu *A. microcarpa* unutar vrste *A. petraea* (Akeroyd 1993). *A. leucadea* je obalna hazmofitska vrsta

okojadrske rasprostranjenosti, čiji je *locus classicus* Capo di Leuca (Italija), a taksonomski se dijeli na četiri podvrste: tipična podvrsta subsp. *leucadea* (istočna obala Italije i obale Hrvatske), subsp. *scopulorum* (Vis, Palagruža, Kamik, Svetac, Jabuka), subsp. *diomedea* (Tremitski otoci) i subsp. *media* (Istra i Kvarnerski otoci). Vrsta *A. sinuata* ima nešto veći areal i prilagođena je na raznovrsnija staništa (Rešetnik 2011). Odnosi između svojti roda *Aurinia* nisu u potpunosti razjašnjeni zbog nepodudarnosti između podataka jezgrine i kloroplastne DNA. Štoviše, samo u ITS stablima filogenetske grane se donekle podudaraju sa sadašnjom taksonomskom podjelom dok se u kloroplastnim analizama svoje odvajaju u geografski definirane filogenetske grane (Rešetnik i sur. 2013).

## Molekularna sistematika biljaka

Molekularna filogenija upotrebljava podatke o primarnoj strukture molekula DNA, RNA i proteina kako bi dobila informacije o srodstvenim odnosima među organizmima. Rezultati istraživanja molekularne filogenije se obično prikazuju filogenetskim stablima. O molekularnoj sistematici govorimo onda kada rezultate molekularne filogenije upotrebimo za utvrđivanje taksonomskih odnosa među svojtama te za izradu klasifikacijskih sustava. Koncept molekularne filogenije i sistematike se temelji na pretpostavci da je razlika u primarnoj strukturi između makromolekula dvije svoje proporcionalna vremenu koje su te dvije svoje provere kao zasebne svoje. Danas se za utvrđivanje srodstvenih odnosa najčešće istražuju i uspoređuju razlike u primarnoj građi molekula DNA. Danas su najčešće metode istraživanja molekula DNA za potrebe biljne sistematike AFLP metoda (engl. *Amplified Fragment Length Polymorphism*) i različiti oblici određivanja primarne strukture DNA poznati pod nazivom sekvenciranje DNA (npr. automatsko Sangerovo sekvenciranje te različita sekvenciranja nove generacije ili NGS sekvenciranja (engl. *Next Generation Sequencing*). Sekvenciranjem DNA određuje se sastav i redoslijed nukleotida (A, T, G, C) u nekoj sekvenci DNA, a veličina sekvene je obično nekakav gen, intergenska regija te u novije vrijeme kompletni genom. AFLP metoda se obično upotrebljava za utvrđivanje srodstvenih odnosa unutar ili između usko srodnih vrsta dok se DNA sekvenciranje upotrebljava za utvrđivanje srodstvenih odnosa od razine vrste i više.

Bez obzira na upotrebljenu DNA metodu uvijek je prvi korak molekularne sistematike uzorkovanje tkiva za izolaciju DNA i sama izolacija DNA. Kvalitetno sakupljeno i pohranjeno biljno tkivo preduvjet je kvalitetno izolirane DNA, a kvalitetno izolirana DNA tj. onaj izolat koji uz DNA ne sadrži proteine, RNA i neke druge kemijske spojeve je preduvjet za uspješnu kasniju primjenu bilo koje DNA metode. Danas se za izolaciju biljne DNA za taksonomske potrebe obično koristi svježe lisno tkivo ili češće, a osobito ako se uzorak sakuplja na terenu daleko od laboratorija, lisno tkivo osušeno u vrećicama sa silika gelom. Sušenjem lisnog tkiva u silika gelu dovodi do potpunog gubitka vode već prilikom same ekspedicije čime se spriječava mogućnost rada enzima koji bi doveli do degradacije DNA. Na ovaj način sakupljeno i pohranjeno tkivo omogućava visokokvalitetnu izolaciju DNA različitim metodama izolacije. Danas je za potrebe sistematike izolacija DNA pomoću već gotovih izolacijskih kompleta, baziranim na primjeni kolona s DNA selektivnom membranom, postao standardni postupak. Usporedbe pojedinih homolognih regija DNA ili čak cjelokupnih genoma između taksona daje nam podatke kojima se mogu utvrditi srodstveni odnosi između taksona u istraživanju pomoću različitih filogenetskih analiza.

Filogeografska mreža haplotipova, metoda maksimalne štedljivosti i Bayesovski pristup često se koriste za interpretaciju filogenetskih odnosa pomoću DNA sekvenci. Filogeografska mreža haplotipova koristi se za vizualizaciju međusobnih genetskih odnosa te utvrđivanje biogeografske strukture na razini populacija ali isto tako i na višim taksonomskim razinama. Metodom statističke štedljivosti tvori se najkraća razapinjuća mreža (engl. *minimum spanning network*). U prvom se koraku vrhovi grafa koji predstavljaju haplotipove povezuju bridovima ukoliko se haplotipovi razlikuju u samo jednom nukleotidu, a zatim se povezuju svi oni haplotipovi koji se razlikuju u dva, te zatim i više nukleotida sve dok svi vrhovi nisu povezani ili je dosegnuta kritična vrijednost povezivanja (engl. *connection limit*; Templeton i sur. 1992). Kritična vrijednost povezivanja je vjerojatnost nepostojanja nezapaženih supstitucija između haplotipova koja se može procijeniti na temelju broja različitih nukleotida između haplotipova i ukupne duljine sekvence.

Metoda maksimalne štedljivosti (engl. *Maximum Parsimony* – MP) temelji se na načelu nazvanim 'Ockhamova britva' (engleski franjevac i skolastički filozof Willam Ockham (1287-1347)) koje glasi da je najvjerojatnija ona hipoteza koja može objasniti određenu pojavu na temelju najmanjeg mogućeg broja pretpostavki. Primijenjeno u filogeniji, načelo pretpostavlja da je filogenetsko stablo koje iziskuje najmanji broj evolucijskih promjena za objašnjenje srodstvenih odnosa između analiziranih svojti je najvjerojatniji prikaz tijeka evolucije. Duljina određenog stabla jednaka je zbroju koraka (engl. *steps*) odnosno supsticija nukleotida koje su se morale dogoditi na pojedinim nukleotidnim mjestima tijekom evolucije od zajedničkog pretka.

Bayesovska filogenetska analiza (engl. *Bayesian inference of phylogeny* – BI) temelji se na posteriornim vjerojatnostima (engl. *posterior probability*), koristeći formulu koju je osmislio T. Bayes, 1763. godine. Bayesovskom metodom izračunavaju se posteriorne vjerojatnosti filogenetskog stabla, duljine grana i mnogi drugi parametre. Posteriorne vjerojatnosti se procjenjuju tehnikom uzorkovanja *Markov chain Monte Carlo* (MCMC) koja simulira nasumične parametre i predlaže njihovo novo stanje, odnosno novi set parametara, njihovom promjenom nasumičnim operatorima. Rezultat Bayesovske analize su filogenetska stabla s posteriornim vjerojatnostima svakog grananja. Filogenetska grana ili ogrank za koji je Bayesovska vjerojatnost 95 % ili više smatra se vrlo pouzdanim (Simpson 2005).

U biljnoj stanici se nalaze tri genoma koji se upotrebljavaju za utvrđivanje filogenetskih odnosa: jezgreni, mitohondrijski i kloroplastni. Jezgreni genom se nasljeđuje s roditelja na potomke kroz procese mitoze i mejoze, spolnom ili nespolnom reprodukcijom. U slučaju spolne reprodukcije jezgreni genom se nasljeđuje biparentalno. S druge strane, mitohondrijski i kloroplastni genom se nasljeđuju uniparentalno. Kod kritosjemenjača ovi se organeli prenose takozvanim majčinskim nasljeđivanjem tako što jajna stanica majke sadrži mitohondrije i kloroplaste koji se dalje dijele. Zanimljivo je da se kod četinjača kloroplasti i mitohondriji nalaze u spermalnoj stanici pa se nasljeđuju po očinskoj liniji (Liber 1996).

## Regija *ndhF* kloroplastne DNA

Kloroplastni genom se sastoji od jedne, kružne dvolančane DNA na kojoj se jasno razlikuju četiri dijela: velika regija s genima u jednoj kopiji – LSC (engl. *Large Single Copy Region*), mala regija s genima u jednoj kopiji – SSC (engl. *Small Single Copy Region*) i dvije regije tzv obrnute ponavljače sekvencije koje sadržavaju iste gene, istog redoslijeda, ali suprotnog smjera čitanja, a koje su s jedne strane odvajene malom, a s druge strane velikom regijom s genima u jednoj kopiji-IRA i IR<sub>B</sub> (engl. *Inverted Repeats*) (Buchanan i sur. 2015). Kloroplastni gen *ndhF* se nalazi u maloj regiji s genima u jednoj kopiji (engl. *Small Single Copy-SSC*). U duhanu (*Nicotiana tabaccum* L.), regija *ndhF* je dugačka 2233 bp (engl. *base pairs-BP*), a funkcija joj je kodiranje jedne od proteinskih podjedinica enzima NADH dehidrogenaza (Kim i Jansen 1995, Olmstead i Reeves 1995). Usporedba *ndhF* sekvenci riže (*Oryza sativa* L.) i duhana sugerira da je stopa supstitucije nukleotida kod regije *ndhF* u prosjeku dva puta veća od one kod kloroplastne regije *rbcL* koja je poznata kao najčešće upotrebljavana kloroplastna regija za filogenetska istraživanja (Olmstead i Reeves 1995). U istraživanjima filogenetskih odnosa između različitih rodova, regija *ndhF* pokazala se informativnjom od regije *rbcL* s otprilike 300% više informativnih nukleotidnih mesta za porodice Acanthaceae (Scotland i sur. 1995) i Asteraceae (Kim i Jansen 1995), 60% kod porodice Solanaceae i 50% kod Scrophulariaceae (Olmstead i Sweere 1994, Olmstead i Reeves 1995). Kloroplastni gen regije *ndhF* sastoji se od dva dijela koja su međusobno vrlo različita: 5' dio koji se sastoji od 1380 bp sličniji je u stopi i tipu nukleotidne supstitucije *rbcL* regiji dok je 3' dio, koji se sastoji od 855 bp, bogatiji adeninom i timinom, ima višu razinu suspostitucije baza i pokazuje veći afinitet prema trasnverziji (Kim i Jansen 1995). Kim i Jansen (1995) tvrde da su osobine 5' i 3' dijela regije *ndhF* odraz različitih funkcija tih dijelova te je prisutnost takve različite evolucije unutar istog gena vrlo pogodna za filogenetsku rekonstrukciju budući da se može koristiti onaj dio koji odgovara evolucijskoj starosti skupine koja je predmet istraživanja. Varijabilniji dio koristi se u slučaju kada je skupina koja se istražuje evolucijski mlađa kao što su npr. Poaceae, potporodica Pooideae (Catalan i sur. 1997). Kloroplastna regija *ndhF* se u većini slučajeva amplificira u dva preklapajuća segmenta. Amplifikacija i početnice opisani u Olmstead i Sweere (1994) primjenjivi su na većinu kritosjemenjača. Insercije i delekcije nisu neobične pojave za regiju *ndhF*. Neki indeli regije *ndhF* (kod porodice Solanaceae, Olmstead and Sweere 1994; i

Acanthaceae, Scotland i sur. 1995) su filogenetski informativni, dok su neki (kod porodice Acanthaceae, Scotland i sur. 1995; i Poaceae, Clark i sur. 1995) posljedica homoplazije. Upotreba regije *ndhF* za utvrđivanje filogenetskih odnosa na razini roda pokazala se uspješnom u mnogih porodica kritosjemenjača uključujući Acanthaceae (Scotland i sur. 1995), Asteraceae (Kim i Jansen 1995), Brassicaceae (Beilstein, 2008), Orchidaceae (Neyland i Urbatsch 1996), Poaceae (Clark i sur. 1995), Scrophulariaceae (Olmstead i Reeves 1995) i Solanaceae (Olmstead i Sweere 1994). Na višim taksonomskim razinama regija *ndhF* korištena je kod podrazreda Asterideae s. l. (Kim i Jansen 1995). Korištenje kloroplastnog genoma u filogenetskim analizama uglavnom pokazuje starije događaje unutar evolucije pojedine skupine, budući da posjeduje nekoliko zanimljivih svojstava. Unutar kloroplastnog genoma nema rekombinacija i obično se majčinski nasljeđuje i stoga ima manju djelotvornu veličinu populacije od jezgrine DNA. Činjenica da kloroplastna DNA ima malu veličinu populacije i da se nasljeđuje samo kroz sjeme, općenito rezultira jačom geografskom strukturom kloroplastnih naspram jezgrinih markera. Iako su zbog toga kloroplastni markeri na neki način idealni za istraživanje kolonizacijskih ruta, bez obzira na broj ukupno analiziranih kloroplastnih markera oni još uvijek predstavljanju samo jedan jedini lokus koji se nasljeđuje kao jedna cjelina. Za dobivanje cjelokupne slike vezane uz evolucijsku povijest pojedine istraživane vrste ili skupine potrebna je analiza više nezavisnih lokusa što obično u praksi znači veći broj nepovezanih jezgrinih gena. Bez obzira na navedene nedostatke upotreba kloroplastnih regija često izuzetno pridonosi nedvosmislenom razjašnjavanju filogeografske povijesti istraživane skupine kao što je nedavno potvrdilo i istraživanje vrste *Astragalus onobrychis* (Záveská i sur. 2019).

## **Ciljevi rada**

Ciljevi ovog rada su:

- odrediti filogenetske odnose vrsta unutar roda *Aurinia* i utvrditi obrasce genetske raznolikosti pojedinih vrsta koristeći sekvene regije *ndhF* kloroplastne DNA
- ispitati da li je dobivena genetska divergencija u skladu s trenutnom taksonomijom roda
- rekonstruirati filogeografiju svih sedam vrsta roda *Aurinia*
- istražiti prostornu podudarnost između rekonstruiranih filogeografskih i usporediti s lokacijama do sada poznatih glacijalnih refugija

# MATERIJALI I METODE

## Biljni materijal

Sakupljanje uzoraka provedeno je tijekom dugogodišnjih istraživanja dr. sc. Ivane Rešetnik i suradnika. Sakupljeni su uzorci svih sedam vrsta roda *Aurinia*, ponajviše s Balkanskog poluotoka te nekoliko iz srednje Europe i Italije. Uzorak za analize molekule DNA je prikupljen kao lisno tkivo koje je odmah na terenu pohranjeno u vrećice sa silika gelom. Molekula DNA je izolirana iz lisnog tkiva 282 jedinke iz 140 populacija od kojih je na temelju kvalitete izolirane DNA 138 jedinki odabrano za PCR. Amplifikacija kloroplastne regije *ndhF* uspješno je provedena na 101 jedinki koje su zatim odabrane za daljnje filogenetske analize. U analize su uključene i sekvene *ndhF* preuzete iz baze GenBank (<http://www.ncbi.nlm.nih.gov>); jedan uzorak vrste *A. moreana*, po dvije vrste iz rodova *Berteroia* i *Galitzkya*, te jedna vrsta iz roda *Fibigia* koja je služila kao *outgroup*. Tablica s uzorcima nalazi se u prilogu 1.

## Izolacija DNA

Ukupna stanična DNA svake istraživane jedinke izolirana je iz 30 mg osušenog lisnog tkiva primjenom izolacijskog kompleta *GenElute Plant Genomic DNA Miniprep* (Sigma®):

1. izvagano lisno tkivo stavljeno je u plastičnu epruvetu od 2,0 ml (safe-lock Eppendorf®) u koju je dodana čelična kuglica za usitnjavanje te je 60 s usitnjavano u prah u uređaju *Tissue Lyser* (Qiagene®) na 30 Hz/s,
2. nakon usitnjavanja u epruvetu je dodano 350 µl prethodno ugrijane otopine *LyseA* i 50 µl prethodno ugrijane (65 °C kroz 5 min) otopine *LyseB* te je dobiveni homogenat kratko izmiješan u „vorteks“ miješalici (GVLab-Gilson®),
3. dobiveni homogenat inkubiran je 10 min na 65 °C uz povremeno miješanje, u „vorteks“ miješalici,

4. dodano je 130 µl otopine *Precipitation solution* (taloženje degradiranih proteina), promiješano laganim treskanjem epruvete te inkubirano 7 min na -20 °C,
5. sadržaj epruvete centrifugiran je 5 min na 16110 x g (centrifuga 5415 D Eppendorf®),
6. 650 µl gornjeg vodenog sloja pipetom je preneseno na plavu kolonu s filterom, te je centrifugirano 1 min na 16110 x g ,
7. 650 µl filtrata prebačeno je u čistu epruvetu od 1,5 ml te je dodano 700 µl otopine *Binding Solution* (omogućava selektivno vezanje DNA molekula na filter bijele kolone) i kratko izmiješano u „vorteks“ miješalici,
8. na bijele kolone *GenElute Miniprep Binding* dodano je 500 µl otopine *Column Preparation*, centrifugirano 1 min na 16110 x g , te je odbačen filtrat
9. 650 µl filtrata s otopinom *Binding Solution* nanešeno je na pripremljenu kolonu *GenElute Miniprep Binding*, te je centrifugirano 1 min na 16110 x g ,
10. nakon centrifugiranja filtrat je bačen te je dodan ostatak filtrata s otopinom *Binding Solution* i centrifugirano 1 min na 16110 x g ,
11. kolona *GenElute Miniprep Binding* prebačena je u novu epruvetu od 2 ml, dodano je 500 µl otopine *Wash Solution* (glavni sastojak 70%-tni etanol), te je centrifugirano 1 min na 16110 x g (ispiranje DNA vezane na filter),
12. nakon centrifugiranja filtrat je bačen, dodano je novih 500 µl *Wash Solution* otopine i centrifugirano 3 min na 16110 x g ,
13. kolona *GenElute Miniprep Binding* ostavljena je na sobnoj temperaturi oko 5 min da ispari sav etanol prisutan u ostacima otopine *Wash Solution*,
14. kolona *GenElute Miniprep Binding* prebačena je na novu-epruvetu od 2 ml te je na membranu kolone dodano 75 µl otopine *Elution Solution* prethodno zagrijane na 65 °C (vodena otopina TRIS-a (tris(hidroksimetil)aminometan) i EDTA (etilendiamintetraoctena kiselina) koja održava pH iznad 8 i na sebe veže katione što je bitno za sprječavanje degradacija DNA kroz duži vremenski period), te je centrifugirano 1 min na 16110 x g ,

15. na membranu kolone dodano je još 75 µl otopine *Elution Solution* prethodno zagrijane na 65 °C, te je centrifugirano 1 min na 16110 x g, nakon centrifugiranja otopina DNA sakupljena je kao filtrat te je čuvana na temperaturi od -20 °C.

Koncentracija DNA u otopini *Elution Solution* izmjerena je spektrofotometrom Nanophotometer (Implen ®) dodatkom 1,5 µl otopine DNA na vrh kivete.

### **Umnožavanje regije *ndhF* kloroplastne DNA lančanom reakcijom polimerazom**

**Tablica 1:** početnice korištene pri umnažanju i sekvenciranju te njihov nukleotidni slijed

Za umnožavanje kloroplastne regije *ndhF* odabrani su uzorci čija je DNA bila najbolje kvalitete te koji najbolje pokrivaju geografsku rasprostranjenost vrsta (Tablica 1., Prilog 1). Za PCR umnožavanje kloroplastne regije *ndhF* korištene su PCR početnice 5F, i 2100R (Beilstein i sur. 2006). Umnožavanje se odvijalo u ukupnom volumenu od 20 µl u uređaju GeneAmp PCR System 2700 (Applied Biosystems®). Zbog velike duljine PCR-om umnožene regije (2 kb) prilikom sekvenciranja uz dvije spomenute PCR početnice upotrebljene su još dodatne dvije unutarnje PCR početnice (989R i 989F) kako bi se cijelokupna regija prepolovila i pokrila sekvenciranjem dva kraća dijela (Tablica 1).

Svaka reakcijska otopina (ukupno 20 µl) sadržavala je sljedeće sastojke:

- 1,93 µl 10 x PCR Buffer (100 mM Tris-HCl, 500 mM KCl, 15 mM MgCl<sub>2</sub>; Takara Bio Inc.)
- 1,35 µl DNA (c ≈ 5 ng/µl)
- 1,56 µl dNTP (2.5 mM smjesa-dATP, dCTP, dGTP, dTTP; Takara Bio Inc.)
- 0,77 µl početnica 5F i 2100R (10 pmol/µl)
- 0,12 µl Taq HS polimeraze (5 U/µl; Takara Bio Inc.)
- 13,5 µl sterilizirane deionizirane vode (Qiagen®)

**Tablica 1:** početnice korištene pri umnažanju i sekvenciranju te njihov nukleotidni slijed

Početnica	Slijed nukleotida
5F	5'- ATGGAACATACATATCAATATTGAG -3'
989R	5'- CCCATACCTAGAGCTAACATCA -3'
989F	5'- TGATGTTAGCTCTAGGTATGGG -3'
2100R	5'- CAAAGAAACTYGTAAKACSTACTCC -3'

Reakcija umnožavanja DNA odvijala se prema sljedećem programu (Beilstein i sur. 2006):

- Početna denaturacija: 1 ciklus na 96 °C, 4 minute
- Umnovažavanje DNA: 40 ciklusa
  - denaturacija DNA: 94 °C, 30 s
  - sparivanje početnica: 52 °C, 1 minuta
  - sinteza novog lanca DNA: 72 °C, 2 minute
- Završna sinteza preostalih kalupa DNA: 1 ciklus na 72 °C, 7 minuta

Uspješnost umnažanja je provjerena elektroforezom na 0.8%-tnom gelu agaroze u 0.5 x pufera TBE (45 mM tris-borata i 1 mM EDTA, pH 8), kroz jedan sat na 5 V/cm (Sambrook i sur. 1989). Uzorci za elektroforezu su pripremljeni tako da su 2 µl otopine DNA pomiješana s 2 µl sterilizirane destilirane vode i s 1 µl boje za nanošenje (30% saharoze, 0.25% brom-fenolnog modrila i 0.25% ksilen-cijanola; Sambrook i sur. 1989). Dobivena otopina je nanesena u jažice agaroznog gela. Nakon što je brom-fenolno modrilo iz uzorka putovalo oko 3 cm elektroforeza je prekinuta, a gel je uronjen u otopinu etidijevog bromida u 0.5 x puferu TBE ( $c = 5 \mu\text{g/ml}$ ) na 25 min. Etidij evbromid se specifično veže uz nukleinske kiseline interkaliranjem između dušičnih baza, a molekule DNA postaju vidljive kada se gel osvijetli UV svjetlom transiluminatora T-2202 (Sigma®). Debljina i sjaj trake DNA na gelu korišteni su kao pokazatelj uspješnosti umnažanja te se na temelju toga donijela odluka o sekvenciranju ili nesekvenciranju PCR uzorka.

## **Automatsko sekvenciranje**

Neposredno prije sekvenciranja DNA, kako bi se iz sekvencijske otopine uklonile nevezane početnice i defosforirali nevezani nukleotidi, provedeno je pročišćavanje PCR otopine upotrebom egzonukleaze I (Thermo Scientific®) i termoosjetljive alkalne fosfataze FastAP™ (Thermo Scientific®) na sljedeći način:

- pripremljena je sljedeća reakcijska otopina:
  - 20 µl PCR-produkta
  - 2 µl egzonukleaze I (10 U)
  - 4 µl termosjetljive alkalne fosfataze FastAP™ (1 U)
- otopina je promiješana na 'vorteks' mijesalici GVLab (Gilson®) i inkubirana na 37 °C 15 min
- reakcija je zaustavljena zagrijavanjem otopine na 85 °C 15 min

Bez daljnje obrade 5 µl ovako pročišćenih PCR-prodakata pomiješano je sa 5 µl svake od četiri početnica ( $c = 10 \mu M$ ) i poslano u Macrogen Service Center (Amsterdam, Nizozemska) koristeći EZseq uslugu DNA sekvenciranja. Automatskodideoksi sekvenciranje je provedeno korištenjem paketa BigDyeTM Terminator Cycle Sequencing Kit (Applied Biosystems®) po uputama proizvođača. Kapilarna elektroforeza provedena je na uređaju ABI 3730xl DNA Analyzer (Applied Biosystems®).

Dobivene kloroplastne sekvence DNA iz oba smjera vizualizirane su (.ab1 format), spojene u jedinstven redoslijed i međusobno sravnjene uz pomoć računalnog programa Genious version 6.1 (<http://www.genious.com>).

## **Filogenetska analiza**

Filogenetska analiza obuhvaćala je izradu filogeografske mreže haplotipova, metodu maksimalne štedljivosti i Bayesovsku filogenetsku analizu.

### **Filogeografska mreža haplotipova**

Filogeografska mreža između haplotipova je konstruirana po metodi statističke štedljivosti (*statistical parsimony*; Templeton i sur. 1992). Filogenetska mreža izrađena je pomoću programa TCS (Clement i sur. 2000) uz kritičnu vrijednost pozivanja od  $P > 0.95$ .

### **Metoda maksimalne štedljivosti**

Analiza maksimalne štedljivosti provedena je heurističkom pretragom (engl. *heuristic search*) na temelju 1000 ponavljanja nasumičnog postupnog dodavanja sekvenci (engl. *stepwise addition*) uz zamjenu grana između stabala (engl. *branch swapping*) upotrebom algoritma raspolavljanja i ponovnog sastavljanja stabala (engl. *tree bisection reconnection-TBR*). Na temelju dobivenih najštedljivijih stabala izgrađeno je 50%-tno dogovorno stablo (engl. 50% *majority-rule consensus tree*). Pouzdanost filogenetskog stabla analizirana je pomoću metode bootstrap (Felsenstein 1985). Vrijednosti bootstrap dobivene su analizom stabala na temelju 1000 poduzoraka bootstrap. Stabla su pronađena na isti način kao i u osnovnoj pretrazi, ali na temelju 100 ponavljanja. Analize su provedene pomoću programskog paketa PAUP\* 4.0b10 (Swofford 2001). U MP analizu uključena su i dva uzorka roda *Berteroia* (KF022955 i KF022956) i *Galitzkya* KF022982 i KF022983 iz GenBank baze (<https://www.ncbi.nlm.nih.gov/nuccore>). Stablo je zakorijenjeno pomoću uzorka vrste *Fibigia clypeota* (KF022972).

## Bayesovska filogenetska analiza

Bayesovska filogenetska analiza provedena je pomoću programa MrBayes 3.1.2 (Huelsenbeck i Ronquist 2001). Najprikladniji evolucijski model supstitucije nukleotida odabran je na temelju Akaikeovog informacijskog kriterija (engl. *Akaike Information Criterion-AIC*, Akaike 1974). Duljina grana nije bila ograničena (engl. *unconstrained*), a priorna raspodjela duljina grana na stablu zadana je pomoću eksponencijalne vrijednosti parametra  $\lambda$ . Navedeni je parametar izračunat za svaku regiju DNA na temelju prosječne duljine grana stabla ( $\overline{brl}$ ) dobivenog analizom maksimalne vjerodostojnosti po formuli (Brown i sur. 2010):

$$\lambda = -\frac{\ln (0,5)}{\overline{brl}}$$

Algoritam Markovljevih lanaca uz proces poduzorkovanja Monte Carlo (engl. *Markov Chain Monte Carlo-MCMC*) prepostavljao je dva neovisna prohoda (run) od po četiri simultana lanca tijekom 107 generacija, uz uzorkovanje stabala svakih 1000 generacija. Potreban broj generacija pri kojoj vrijednosti maksimalne vjerodostojnosti uzorkovanih stabala postižu stacionarnost utvrđena je grafički. Time je utvrđena duljina faze ugrijavanja (engl. *burn-in*) lanca, te je iz analize isključeno prvih 2500 stabala. Konačan broj uzorkovanih stabala na temelju kojih su izračunate posteriorne vjerojatnosti (engl. *posterior probabilities-PP*) pojedinih grana je bio 15,000 (2 prohoda x 7,500 stabala). Na temelju navedenih stabala izgrađeno je 50%-tno dogovorno stablo (engl. 50% *majority-rule consensus tree*). Učinkovitost procesa poduzorkovanja MCMC provjerena je izračunavanjem efektivne veličine uzorka (engl. *effective sample sizes-ESS*) pomoću programa Tracer v1.4 (Rambaut i Drummond 2007). U MP analizu uključena su i dva uzorka roda *Berteroia* (KF022955 i KF022956) i *Galitzkyia* (KF022982 i KF022983) iz GenBank baze (<https://www.ncbi.nlm.nih.gov/nuccore>). Stablo je zakorijenjeno pomoću uzorka vrste *Fibigia clypeota* (KF022972).

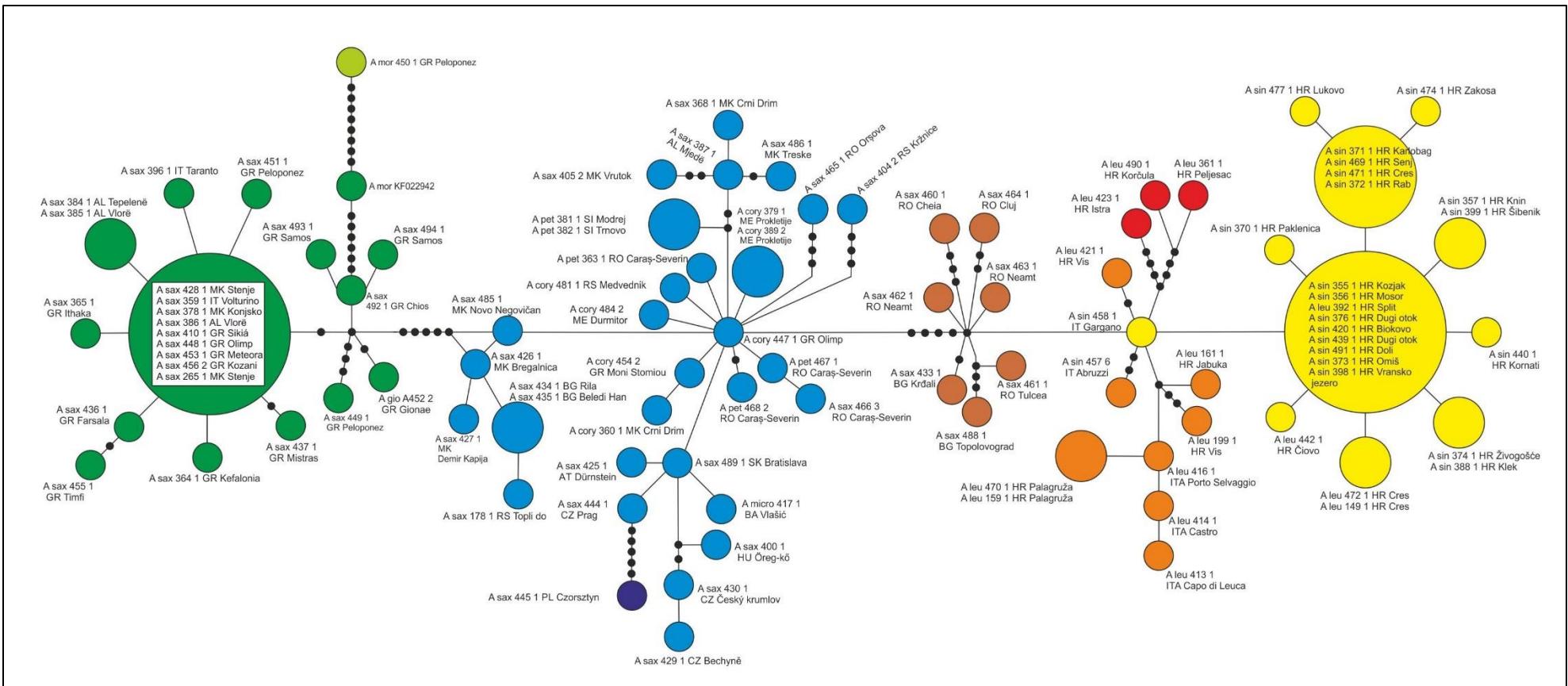
# **REZULTATI**

Duljina obje regije *ndhF* nakon PCR umnožavanja, pročišćavanja, sekvenciranja i višestrukog sravnjivanja iznosila je 2005 bp. Sve dobivene sekvence su dodatno provjerene, višestruko sravnjene (engl. *multiple sequence alignment*) pomoću programa Geneious 11.1.5 (<https://www.geneious.com>) te prebačene u FASTA format koji je korišten prilikom dalnjih analiza. Sravnjene sekvence nalaze se u pdf formatu u Prilogu 2.

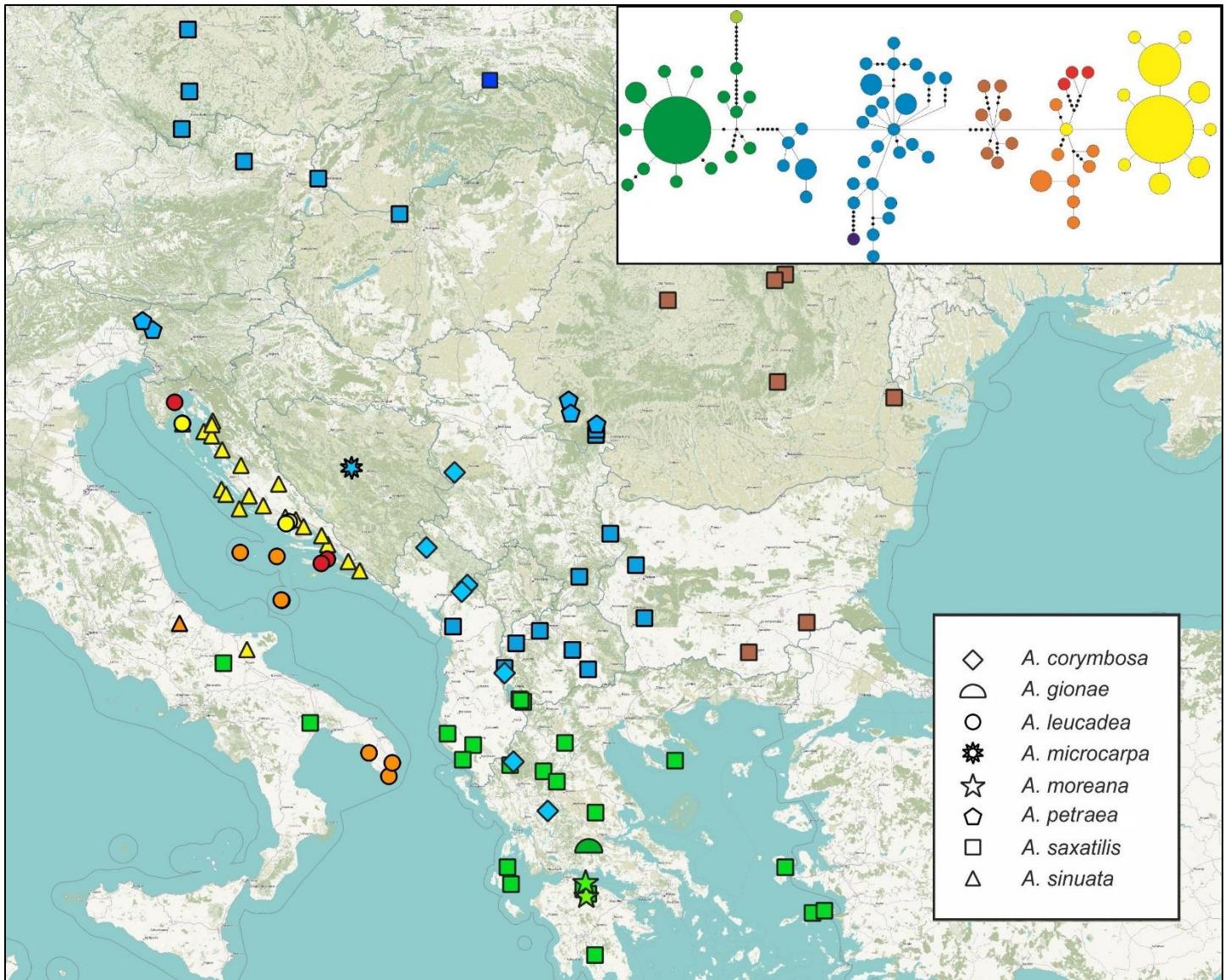
## **Filogeografska mreža haplotipova**

Zapaženo je ukupno 75 kloroplastnih haplotipova koji su se razlikovali u ukupno 128 polimorfna mjesta od kojih je 117 predstavljalo nukleotidne supstitucije, a 11 insercije/delecije (Prilog 2). Od 11 insercija/delecija njih dvije bile su dulje od 1 bp. Pod prepostavkom da je svaka insercija/delecija duža od jednog baznog para jedan evolucijski događaj, svako je takvo mjesto u sekvencama svedeno na jednu baznu promjenu tako da je duljina sekvenci za analizu iznosila 1996 bp uključujući 130 polimorfnih mjesta. Od 75 zapaženih haplotipova njih dva su zapažena kod devet jedinki, jedan kod četiri jedinke te njih osam kod dvije jedinke. Haplotipovi su prikazani pomoću haplotipske mreže (Slika 2). Cjelokupna rasprostranjenost jedinki prikazana je na geografskoj karti gdje je vrsta prikazana različitim simbolom dok je bojom prikazana pripadnost haplotipskoj skupini (Slika 3). Prvi od dva najčešća haplotipa zabilježen je kod devet jedinki koje su sve uzorkovane na području hrvatske obale i otoka. Osam njih je vrste *A. sinuata*, a jedan vrste *A. leucadea*. Haplotip koji je zabilježen kod četiri jedinke također čine uzorci vrste *A. sinuata* sakupljenih na hrvatskoj obali te su udaljeni samo jedan mutacijski korak od prethodno navedenih devet jedinki. Drugi od dva najčešća haplotipa, kojeg također čini devet jedinki, sastoji se isključivo od uzoraka vrste *A. saxatilis*-četiri s područja Grčke, tri s područja Makedonije i po jednog s područja Albanije i Italije. Najudaljeniji haplotip pripada uzorku vrste *A. moreana* koji je udaljen devet mutacijskih koraka od prvog uzorka iste vrste, te čak 16 koraka do prvog uzorka različite vrste (*A. saxatilis*).

Uzorci vrste *A. leucadea* sakupljeni na jugu talijanske pokrajine Apulije (A413, A414, A416) najблиže su uzorcima iste vrste sakupljenima na otocima Vele i Male Palagruže (A470, A159), zatim s uzorcima vrste *A. leucadea* sa otoka Jabuke (A161) i uzorkom vrste *A. sinuata* sa sjevera Apulije (A458) koji je jedan mutacijski korak udaljen od prvog uzorka vrste *A. sinuata* iz Hrvatske. Većina uzoraka vrste *A. leucadea* iz Hrvatske vrlo je bliska s uzorcima vrste *A. sinuata*, isključujući dva uzorka s otoka Visa (A199, A421), koji su tri i četiri mutacijska koraka udaljeni od najbližeg uzorka *A. sinuata* iz Hrvatske, te tri uzorka sa Pelješca, Korčule i Istre (A361, A490 i A423) koji su šest mutacijskih koraka udaljeni od najbližeg uzorka vrste *A. sinuata* iz Hrvatske. Uzorci s Pelješca i Korčule također su i osam mutacijskih koraka udaljeni od uzorka iz Istre. Uzorak vrste *A. sinuata* iz Abruzzija (A457) tri je mutacijska koraka udaljen od prethodno navedenog uzorka vrste *A. sinuata* sa sjevera Apulije (A458) te četiri mutacijska koraka do prvog uzorka vrste *A. sinuata* iz Hrvatske. Uzorci vrste *A. saxatilis* u većini slučajeva stvaraju skupinu odvojenu na temelju vrste i geografskog položaja što se najbolje vidi na uzorcima iz Grčke (A364, A365, A378, A386, A410, A436, A437, A448, A449, A451, A453, A455, A456, A492, A493, A494) koji su najbliži međusobno te s uzorcima iz Albanije (A384, A385 i A386), Makedonije (A265, A378 i A428) i Italije (A359). Međutim, postoje i uzorci iz Makedonije (A368, A405, A426, A427, A485, A486) Bugarske (A434 i A435), Srbije (A178 i A404) i Albanije (A387) koji su bliži uzorcima vrste *A. petraea* iz Rumunjske (A363, A467 i A468) i Slovenije (A381 i A382) i uzorcima vrste *A. corymbosa* iz Crne Gore (A379, A389 i A484), Grčke (A447 i A454) i Srbije (A481). Ista situacija zapažena je i sa uzorcima vrste *A. saxatilis* iz Češke (A429 i A430, A444), Austrije (A425), Mađarske (A400) i Slovačke (A489) koje su bliže prethodno navedenim uzorcima vrste *A. petraea* i *A. corymbosa* nego npr. uzorcima vrste *A. saxatilis* iz Grčke ili Bugarske. Uzorak vrste *A. gionae* (A452) te uzorak vrste *A. moreana* (A450) najbliži su uzorku vrste *A. saxatilis* s otoka Chiosa (A492) te ostalim uzorcima te vrste iz Grčke. *A. moreana*, kao što je već navedeno, udaljena je 16, a *A. gionae* dva mutacijska koraka od uzorka s Chiosa. Uzorak vrste *A. petraea* subsp. *microcarpa* (A417) najbliži je uzroku vrste *A. saxatilis* iz Slovačke.



**Slika 2.** Prikaz haplotipova dobivenih analizom statističke štedljivosti u računalnom programu TCS; veličina krugova odgovara broju jedinki kojima pripada pojedini haplotip; crne točke između haplotipova predstavljaju mutacijske korake odnosno haplotipove koji nisu zapaženi.



**Slika 3.** Geografska rasprostranjenost sakupljenih uzoraka roda *Aurinia* i njihova pripadnost haplotipskoj grupi (slika gore desno: haplotipovi dobivenih analizom statističke štedljivosti u računalnom programu TCS, haplotipske grupe su označene različitim bojama) te taksonomska pripadnost (slika dolje desno: različiti simboli označavaju pripadajuće vrste).

## Maksimalna štedljivost

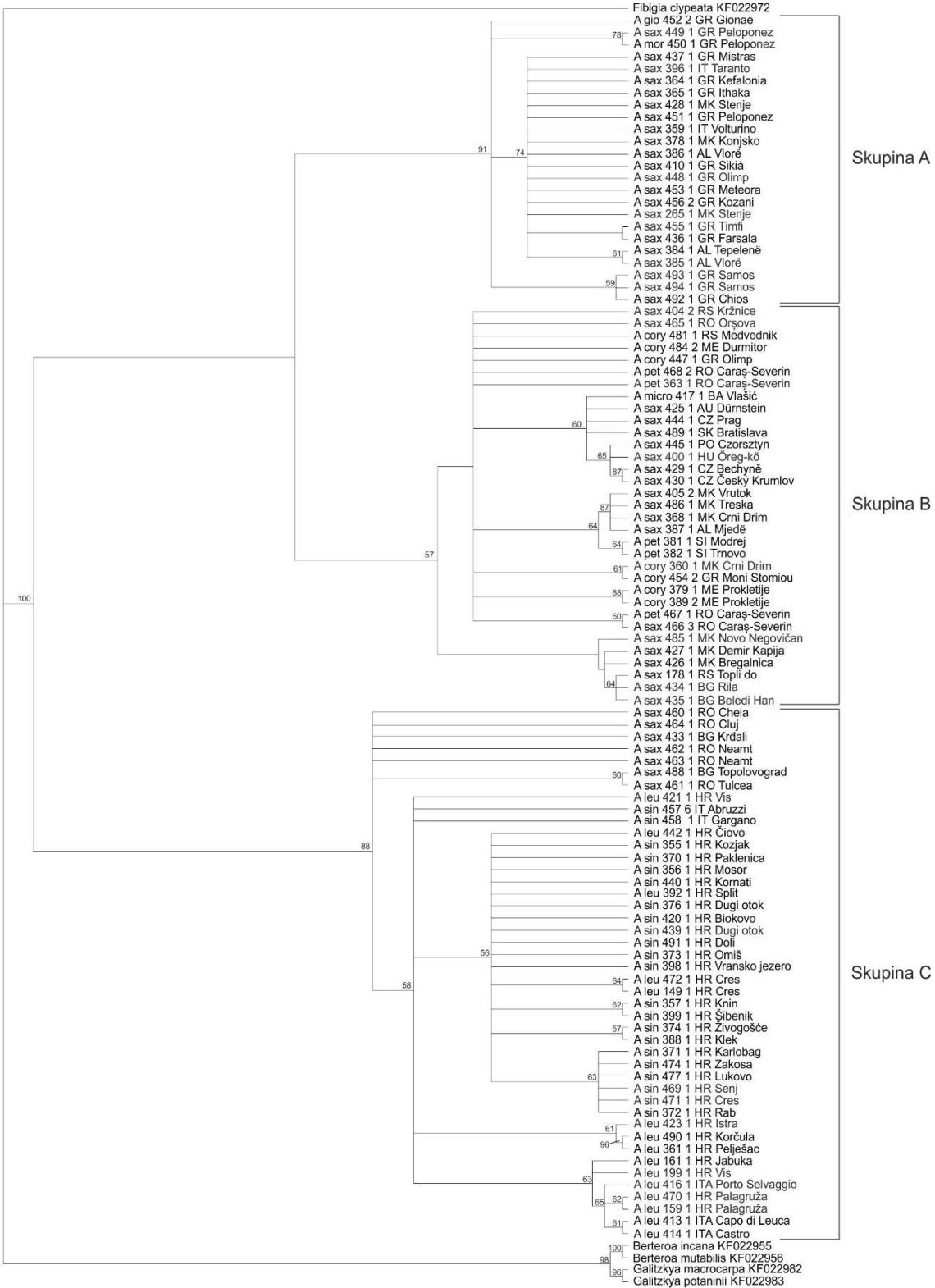
Osnovne značajke MP analize prikazane su u tablici 2. Dobiveno filogenetsko stablo prikazano je na Slici 3.

**Tablica 2:** Osnovne značajke analize maksimalne štedljivosti na istraživanim sekvencama *ndhF* roda *Aurinia*.

Broj sekvenci	106
Dužina sravnjenih sekvenci	2005
Konstantna mjesta	1782
Neinformativna mjesta	136
MP informativna mjesta	87
Broj stabala	11
Dužina stabala	260
Indeks konzistencije (CI)	0.9308
Indeks homoplazije (HI)	0.0692
CI bez neinformativnih mjesta	0.85
HI bez neinformativnih mjesta	0.15
Indeks retencije (RI)	0.9701
Razmjerni indeks konzistencije (RC)	0.9029

Filogenetska stabla dobivena analizom MP pokazuju formiranje tri skupine, A, B i C (prikazane na Slici 3.) od kojih su skupine A i C dobro podržane. Skupina A ima *bootstrap* (BS) vrijednost od 91% i sadrži uzorke vrste *A. saxatilis* iz Grčke (A364, A365, A410, A436, A437, A448, A449, A451, A453, A455, A456, A492, A493 i A494), Albanije (A384, A385 i A386), Makedonije (A265, A378 i A428) i Italije (A359 i A396) te uzorke vrste *A. gionae* (A452) i *A. moreana* (A450) koji su također iz Grčke.

Skupina C ima BS vrijednost od 88%; sadrži sve uzorke vrste *A. sinuata* i *A. leucadea* te uzorke vrste *A. saxatilis* iz Rumunjske (A460, A461, A462, A463, A464) i Bugarske (A433, A488). Skupina B slabo je podržana sa BS vrijednošću od 57%; sadrži uzorke vrste *A. saxatilis* iz Makedonije (368, 405, 426, 427, 485 i 486) Češke (A429 i A430, A444), Bugarske (434 i 435), Rumunjske (465 i 466), Srbije (178 i 404), Albanije (387), Austrije (A425), Mađarske (A400) i Slovačke (A489), uzorke vrste *A. corymbosa* iz Crne Gore (A379, A389 i A484), Grčke (A447 i A454) Makedonije (A360) i Srbije (A481), uzorke vrste *A. petraea* iz Rumunjske (A363, A467 i A468) i Slovenije (A381 i A382) te uzorak vrste *A. petraea* subsp. *microcarpa* iz Bosne i Hercegovine (A417). Unutar sve tri skupine formiraju se manje skupine na temelju geografskog položaja uzoraka te su većinom jako slabo podržane.



**Slika 4.** 50%-tno dogovorno bootstrap stablo dobiveno MP analizom sekvenci regije *ndhF* roda *Aurinia*. Stablo je ukorijenjeno pomoću uzorka vrste *Fibigia clypeata* (KF022972). Na člancima stabla prikazane su bootstrap vrijednosti (>50%) za pojedine podskupine na temelju 1000 poduzoraka bootstrap.

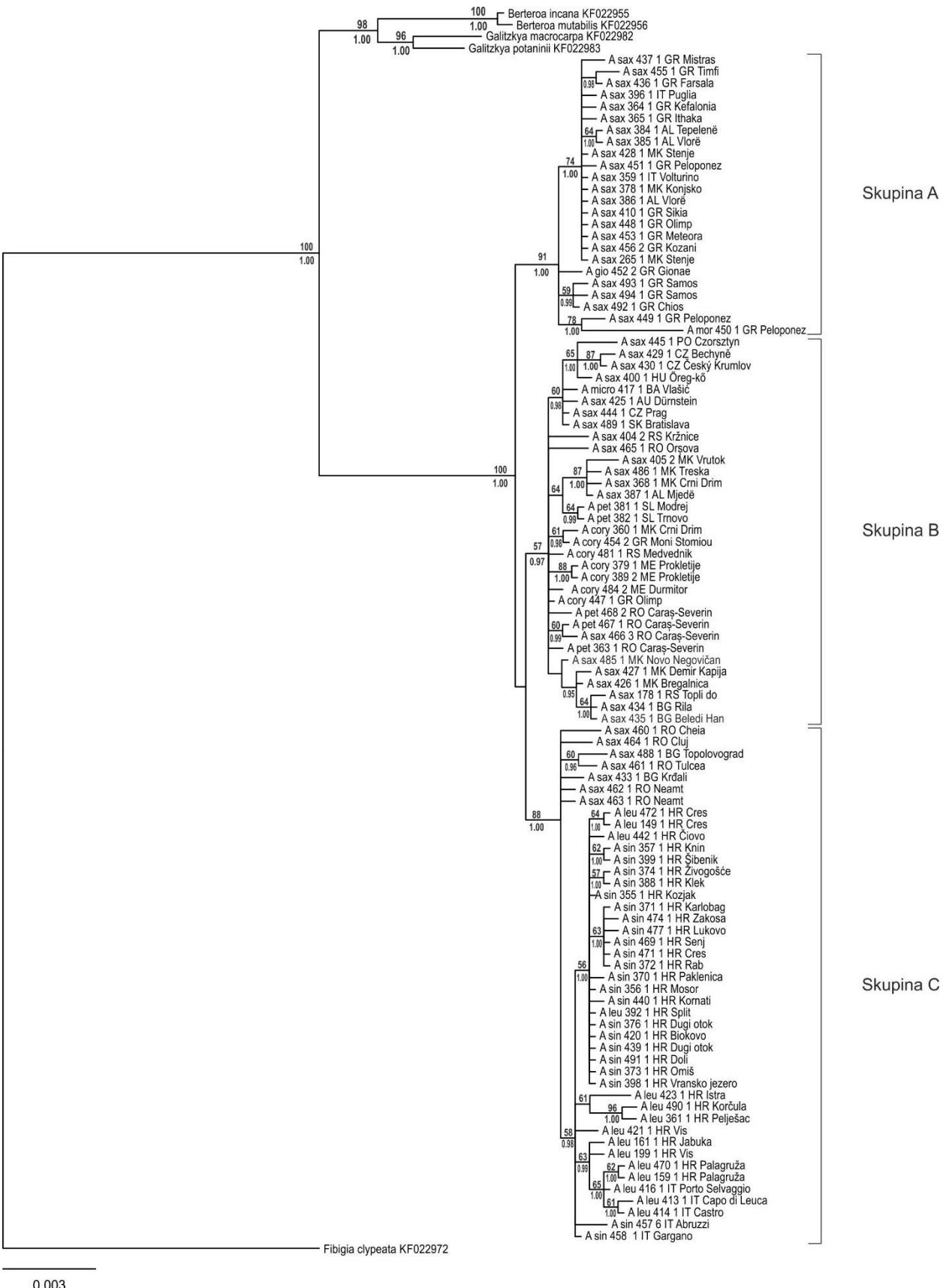
## Bayesovska filogenetska analiza

Najprikladniji evolucijski model supstitucije nukleotida, dobiven pomoću programskog paketa MrModeltest 2.4. i primjenjen Bayesovskoj analizi, bio je GTR+G prema Akaikeovom informacijskom kriteriju. Parametri evolucijskog modela GTR+G prikazani su u tablici 3. Filogenetska stabla pronađena su Bayesovskom filogenetskom analizom pomoću programa MrBayes 3.2.6 (Huelsenbeck i Ronquist 2001). Budući da je Bayesovsko stablo svojim grananjem bilo vrlo slično stablu dobivenom metodom maksimalne štedljivosti, na grane ovakvog stabla uz postojeće posteriorne vjerojatnosti (engl. *posterior probabilities*-PP) kao mjeru pouzdanost grananja, moglo su se dodati i bootstrap vrijednosti sa stabla maksimalne štedljivosti (Slika 5).

**Tablica 3.** Parametri evolucijskog modela GTR+G za istraživanu regiju *ndhF* kloroplastne DNA.

Frekvencije nukleotida		
fA	0.2977	
fC	0.1369	
fG	0.1558	
fT	0.4096	
Stope supstitucije		
rAC	1.4994	
rAG	1.2132	
rAT	0.1263	
rCG	0.2925	
rCT	0.9074	
rGT	1	
Parametar oblika gama raspodjele		0.4989

Kao i kod stabla maksimalne štedljivosti i kod filogenetskog stabla dobivenog Bayesovskom analizom moglo su se uočiti tri skupine skupina A čija je PP vrijednost bila 1.00, skupine B čija je PP vrijednost bila 0.97 i skupine C čija je PP vrijednost bila 1.00. Također dolazi i do formiranja manjih skupina unutar tri prethodno navedene skupine koje su u nekim slučajevima podržane visokom PP vrijednošću.



**Slika 5.** Filogenetsko stablo dobiveno Bayesovskom analizom sekvenci *ndhF* vrsta roda *Aurinia*. Stablo je ukorijenjeno pomoću uzorka vrste *Fibigia clypeata* (KF022972). Bayesovske posteriorne vjerojatnosti ( $\geq 0.95$ ) prikazane su ispod, a *bootstrap* vrijednosti ( $> 50\%$ ) iznad grana.

## RASPRAVA

Monofilija roda *Aurinia* potvrđena je s maksimalnom pouzdanošću u provedenoj analizi maksimalne štedljivosti (100%) i Bayesovskoj filogenetskoj analizi (1.00 PP), što je u skladu s dosadašnjim istraživanjima (Warwick 2008, Rešetnik 2011). Kao što je bilo i očekivano dva najsrodnija roda, *Berteroa* i *Galitzkya*, odvojila su se od roda *Aurinia* s vrlo velikom pouzdanošću i u analizi maksimalne štedljivosti (98% BS) i u Bayesovskoj filogenetskoj analizi (1.00 PP). Također kao i u prijašnjim istraživanjima (Rešetnik 2011) kloroplastna regija *ndhF* pokazala je geografsko grupiranje istraživanih uzoraka. Sukladno tome, pomoću ove kodirajuće kloroplastne regije nije bilo moguće do kraja razjasniti filogenetske odnose svih sedam vrsta roda *Aurinia* niti su dobiveni rezultati u skladu s trenutnom taksonomijom. Sam rod *Aurinia* se u sve tri analize podijelio na tri velike skupine koje su na oba stabla označena sa A, B i C (Slika 4 i Slika 5).

Skupina A sadrži vrste *A. saxatilis*, *A. moreana* i *A. gionae* te je geografski je većinom ograničena na južni dio Balkanskog poluotoka (južna Albanija, južna Makedonija, Grčka) s dva uzorka na južnom dijelu Apeninskog poluotoka (Slika 2). Na Balkanskom poluotoku geografski se na nju nadovezuje skupina B koja sadrži vrste *A. saxatilis*, *A. corymbosa*, *A. petraea* i *A. petraea* subsp. *microcarpa* te obuhvaća veće geografsko područje od južnog i centralnog dijela Balkanskog poluotoka preko jugozapadnih Karpata prema centralnoj Europi i Julijskih Alpa. Skupina C koja sadrži vrste *A. saxatilis*, *A. leucadea* i *A. sinuata* geografski je najzanimljivija jer obuhvaća dvije disjunktne regije-centralni dio Karpata i istočni dio Balkanskog poluotoka te balkansku i apeninsku obalu Jadranskog mora.

Kloroplastna DNA u nekim slučajevima nije pogodna za definiranje granice između vrsta budući da zbog procesa kao što su *chloroplast capture* ili *incomplete lineage sorting* različite vrste mogu dijeliti isti haplotip te time pokazivati geografsku umjesto taksonomske strukture što je zabilježeno u prethodnim (Gutiérrez-Larena i sur. 2002, Frajman i Oxelman 2007), ali i u ovom istraživanju u nekoliko slučajeva: kod uzorka vrste *A. leucadea* iz Splita (A392) koji dijeli isti haplotip kao većina uzoraka vrste *A. sinuata* iz Dalmacije (Slika 2), kod vrlo sličnih haplotipova između uzoraka vrste *A. leucadea* s otoka Cresa i Čiova čiji su haplotipovi samo jedan mutacijski korak od onih vrste *A. sinuata* iz Dalmacije te kod vrlo bliskih haplotipova

različitih vrsta u grupi B kao što su npr. uzorci A466 (*A. saxatilis*), 467 (*A. petraea*) i A447 (*A. Corymbosa*) (Slika 2).

Grupiranje prema geografskim regijama, a ne prema taksonomiji nije neuobičajeno za rezultate dobivene analizom kloroplastnog genoma. Brojna istraživanja na raznim rodovima i skupinama na Balkanskem otoku pokazala su geografski odvojene skupine koje nisu ili su samo djelomično odgovarale taksonomskim obuhvatima svojti, kao na primjer unutar roda *Heliosperma* (Frajman i Oxelman 2007) te roda *Silene* (Durović i sur. 2017). Veći broj različitih vrsta unutar svake skupine najvjerojatnije ukazuje na relativno brzu diversifikaciju cijelog roda u jednom trenutku njegove evolucijske prošlosti. Dosadašnja istraživanja pretpostavljaju da se divergencija roda dogodila na prijelazu pliocen-pleistocen, ali zbog nepouzdanosti sekundarnih kalibracija uzetih u analizama točnije datiranje nije bilo moguće (Rešetnik 2011). Osim toga nakon prvobitne diversifikacije vrlo je vjerojatno kasnije tijekom izmjene ledenih doba dolazilo do kontakta i izmjene genetskog materijala između pojedinih vrsta na mjestima sekundarnih susreta.

### ***A. saxatilis***

*A. saxatilis* imaju najveću rasprostranjenost unutar roda što odgovara i najraznolikijim genetskim obrascem koji je vidljiv u činjenici da su uzorci prisutni u svakoj od tri skupine dobivene u analizama (Slika 2, Slika 4 i Slika 5). Unutar skupine A nalaze se uzorci vrste *A. saxatilis* iz Grčke, Makedonije, Albanije i Italije. Srodnost uzoraka iz Albanije i Makedonije s uzorcima iz Grčke logično je budući da su lokaliteti u relativnoj blizini onih iz Grčke te ne postoji barijera koja bi spriječila izmjenu genetskog materijala. Srodnost uzoraka iz Italije s onima iz Albanije i Grčke najvjerojatnije je posljedica promjene razine mora, odnosno isušivanja Sredozemnog mora prije između 5,59 i 5,33 milijuna godina tijekom mesinske krize saliniteta (Krijgsman i sur. 1999) kada je jugoistočni dio Apeninskog poluotoka bio spojen s Balkanskim poluotokom ili tijekom pleistocena kada su u hladnim razdobljima obale na Otrantskim vratima bile udaljene svega 50 km. Ista je situacija genetske povezanosti populacija iz Italije s onima iz Grčke i Albanije zabilježena i kod vrste *Anacamptis palustris* (Jacq.) R.M.Bateman, Pridgeon & M.W.Chase što je također objašnjeno povezanošću tijekom mesinske krize saliniteta (Musacchio

i sur. 2006). Formiranje skupine A koja se sastoji gotovo isključivo od uzoraka vrste *A. saxatilis* ukazuje na središnju i južnu Grčku kao potencijalni refugij iz kojeg se širila dalje prema središnjoj Europi. Štoviše, lokacije nekih uzoraka podudaraju se s lokacijama refugija na području Grčke navedenih u Médail i Diadema (2009)-Olimp (A448), Pindsko gorje (A453) i Peloponez (A449, A451) te se slična grupiranja u populacijskim analizama na području Grčke mogu vidjeti i kod drugih vrsta kao što su *Euphorbia myrsinoides* L. (Falch i sur. 2019) i *Edraianthus graminifolius* (L.) A. DC. (Surina i sur. 2014). Na području jugoistočnog Balkana dolazi do protoka genetskog materijala s vrstama *A. petraea* i *A. corymbosa* što se može vidjeti u skupini B. Uzorci vrste *A. saxatilis* iz Rumunjske i Bugarske grupiraju se u skupinu C s uzorcima vrste *A. sinuata* i *A. leucadea* te je njihov položaj nejasan. Moguće je da su povezani sa populacijama *A. saxatilis* iz Male Azije međutim ti uzorci nisu bili dostupni za analizu.

### ***A. gionae* i *A. moreana***

Oba grčka endema *A. gionae* i *A. moreana* grupirala su se s uzorcima vrste *A. saxatilis* u skupinu A. *A. moerana* morfološki je vrlo slična *A. saxatilis* dok je s druge strane *A. gionae* zbog napuhnutih komuščica morfološki sličnija vrsti *A. corymbosa*. Iako je navedeni uzorak vrste *A. gionae* sakupljen na *locus classicus* koji se nalazi na vrhu planine Giona u središnjoj Grčkoj, u podnožju planine nađene su i populacije *A. saxatilis* (I. Rešetnik, usmeno priopćenje), te je moguće da ovdje prisutna izmjena genetskog materijala između dva taksona. Očita genetska odvojenost uzorka vrste *A. moreana* na filogeografskoj mreži haplotipova (Slika 2) moguća je posljedica dulje vremenske izolacije istraživane populacije. Areal vrste *A. moreana* čini nekoliko lokaliteta na poluotoku Peloponez te se često nalaze unutar kanjona koji su poznata mikrorefugijalna staništa. S obzirom na rezultate dobivene ovim istraživanjem najvjerojatnije je potrebna izmjena taksonomskog statusa za ove dvije vrste, ali su potrebna daljnja istraživanja s drugim genetskim markerima te većim brojem uzoraka kako bi se to sa sigurnošću moglo utvrditi.

## **A. corymbosa i A. petraea**

Svi uzorci vrste *A. corymbosa* pripadaju skupini B međutim nisu formirali jednu zajedničku grupu nego je u nekoliko slučajeva došlo do formiranja manjih, geografski definiranih skupina: A379 i A389 (88% BS i 1.00 PP) koja se oba nalaze na planini Prokletije u Makedoniji te uzoraka A360 i A454 (61% BS i 0.98 PP) od kojih se prvi nalazi na Crnom Drimu u Makedoniji, a drugi u Moni Stomiou u Grčkoj, lokaliteti koji su međusobno udaljeni oko 300 km. Populacije ove vrste se često nalaze na izoliranim planinskim visinama te je unutar ove vrste najvjerojatnije prisutna genetska raznolikost kao posljedica više različitih mikrorefugija što je česta pojava kod visokoplaninskih biljaka na Balkanu (Frajman i Oxelman 2007, Kutnjak i sur. 2014, Surina i sur. 2014). Uzorci vrste *A. petraea* također se svi svrstavaju u skupinu B te ne formiraju veću grupu već samo jednu koja se sastoji od dva uzorka vrste *A. petraea* iz Slovenije A381 i A382 (64% BS i 0.99 PP). Za razliku od vrste *A. corymbosa*, populacije *A. petraea* karakteristično se nalaze u riječnim kanjonima koji također predstavljaju poznate mikrorefugije te su vjerojatno razlog dobivene genetske raznolikosti.

Vrste *A. corymbosa* i *A. petraea* su jasno odvojene od vrste *A. saxatilis* kako morfološki (napuhane vs. plospnate komuščice) tako i filogenetski budući da skupina B ima slabiju podršku (57% i 0.97 PP) baš zato jer se u njoj nalaze tri odvojene vrste. Međutim, lokalni protok gena nije isključen kao što se može vidjeti na primjeru grupiranja uzoraka vrste *A. petraea* (A467) i *A. saxatilis* (A466) iz Rumunjske koji tvore srednje podržanu grupu. Budući da je u analizi bio samo jedan uzorak *A. petraea* subsp. *microcarpa* nije moguće donijeti pouzdani zaključak o njegovom taksonomskom položaju te su potrebna detaljna populacijska istraživanja.

### **A. leucadea i A. sinuata**

*A. leucadea* i *A. sinuata* su oboje amfi-jadranske, hazmofitske vrste te su međusobno filogenetski najsrodnije (Slika 4, Slika 5). *A. sinuata* je na hrvatskoj obali puno rasprostranjenija i ima kontinuiran areal pa veliki broj populacija dijeli iste haplotipove (Slika 2). S obzirom da veći broj populacija dijeli iste haplotipove vjerojatno se vrsta u određenom trenutku brzo proširila odnosno stalno je prisutan *gene flow*. *A. leucadea* nema tako kontinuirani areal kao *A. sinuata* pa su haplotipovi pojedinačni. Prisutna je izmjena genetskog materijala između ove dvije vrste što se može vidjeti na primjeru uzoraka vrste *A. leucadea* s Čiova A442, Cresa A149, A472 te A392 iz Splita koji čak dijeli isti haplotip kao populacije vrste *A. sinuata*.

Sedam uzoraka vrste *A. leucadea* odvaja se u skupinu koju čine uzorci sa hrvatskih pučinskih otoka i Italije dok drugih osam ne formira nikakvu veću skupinu. Nije iznenađujuće da su uzorci s pučinskih otoka genetski bliži onima iz Italije budući da je razina Jadranskog mora tijekom glacijala u pleistocenu bila i do 130 m niža te je tadašnja kopnena granica bila u razini srednje jadranske depresije (Dawson 1992, Frenzel i sur. 1992). Rezultati prethodnih istraživanja u slučaju biljnih (*Centaurea* subsect. *Phalolepis* (Cass.); Garcia-Jacas i sur. 2019, *Campanula gorganica* skupina; Park i sur. 2006, *Cardamie maritima* skupina; Kučera i sur. 2010, *Edraianthus graminifolius* (L.) A. DC; Surina i sur. 2014, *Euphorbia barrelieri* skupina; Frajman i Schoenswetter 2017) i životinjskih vrsta (kornjaši iz porodica *Tenebrionidae* Latreille i *Curculionidae* Latreille; Gridelli 1950) pokazuju biogeografsku povezanost između Balkanskog i Apensinskog poluotoka. Zanimljivo je da dvije populacije s otoka Visa, A199 i A421, imaju poprilično različite haplotipove s obzirom na to da se nalaze na istom otoku te su međusobno udaljeni manje od 20 km. Takav obrazac može ukazivati na dulju genetsku izoliranost unutar dubokih otočnih uvala koja je prisutna usprkos maloj geografskoj udaljenosti. Uzorci *A. leucadea* s Korčule, Pelješca i Istre ne svrstavaju se u jednu od većih skupina što je najvjerojatnije također posljedica dulje vremenske izolacije.

## ZAKLJUČAK

Na temelju provedenih analiza na rodu *Aurinia* može se zaključiti sljedeće:

- analize kloroplastne regije *ndhF* pokazale su grupiranje svih sedam vrsta roda *Aurinia* u tri skupine koje se temelje primarno na geografskoj te djelomično na taksonomskoj osnovi,
- u sve tri provedene analize (haplotipska mreža, metoda maksimalne štedljivosti i Bayesovska filogenetska analiza) dolazi do odvajanja uzoraka u tri primarno geografski definirane skupine: uzorci vrste *A. saxatilis* iz Grčke, Albanije, Makedonije i Italije formiraju grupu zajedno s uzorcima vrste *A. moreana* i *A. gionae*; uzorci vrste *A. corymbosa*, *A. petraea* i *A. petraea* subsp. *microcarpa* odvojili su se zajedno s geografski bliskim uzorcima vrste *A. saxatilis* iz Makedonije, Češke, Bugarske, Rumunjske, Srbije, Albanije i srednje Europe; uzorci vrste *A. sinuata* i *A. leucadea* s Jadranskog mora zajedno s nekoliko uzoraka vrste *A. saxatilis* iz Rumunjske i Bugarske tvore treću skupinu,
- pojedinačne vrste roda *Aurinia* nije moguće genetski definirati na temelju analize kloroplastne regije *ndhF*, te dobiveni rezultati nisu u skladu s trenutnom taksonomijom,
- najrasprostranjenija vrsta roda, *A. saxatilis*, je ujedno i genetski najraznolikija vrsta,
- grčki endemi, *A. moreana* i *A. gionae*, su bliski srodnici vrste *A. saxatilis* i najvjerojatnije ne zaslužuju taksonomski status vrste,
- genetska raznolikost vrsta *A. corymbosa* i *A. petraea* ukazuje na potencijalno preživljavanje pleistocenskih klimatskih oscilacija u više nezavisnih mikrorefugija,
- amfi-jadranske vrste *A. leucadea* i *A. sinuata* su ujedno i filogenetski međusobno najsrodnije, te je između njih prisutna izmjena genetskog materijala.

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## PRILOZI

**Prilog 1.** Uzorci istraživanih vrsta roda *Aurinia* i uzorci rodova *Berteroa*, *Galitzkya* i *Fibigia* s podacima i provedenim analizama.

**Prilog 2.** Višestruko sravnjene sekvene *ndhF* regije uzorka roda *Aurinia* (nalazi se na priloženom CD-u)

## Prilog 1

**Tablica 1.** Uzorci istraživanih vrsta roda *Aurinia* i uzorci rodova *Bertero*, *Galitzky* i *Fibigia* s podacima i provedenim analizama.

	ID	Svojta	Broj jedinke	Država	Lokalitet ili GenBank broj	Datum sakupljanja	Umnazanje PCR-om	MP	BI	Mreža haplotipova
1	360	<i>Aurinia corymbosa</i>	2	Makedonija		13.07.2012	+	+	+	+
2	379	<i>Aurinia corymbosa</i>	1	Crna Gora	Prokletije, Visitor, između Vidikovca i Presla.	27.06.2013	+	+	+	+
3		<i>Aurinia corymbosa</i>	2							
4	389	<i>Aurinia corymbosa</i>	1	Crna Gora	Prokletije, Volušnica.	28.06.2013	+	+	+	+
5		<i>Aurinia corymbosa</i>	2							
6	406	<i>Aurinia corymbosa</i>	1	Albanija	Okrug Dibër (Rrethi i Dibrës), planina Korab (Mali i Korabit), 4 km istočno od grada Peshkopi, između sela Bellovë i Zagrad, na evaporitnom grebenu; na otvorenom travnjaku na evaporitu.	20.06.2014	+			
7		<i>Aurinia corymbosa</i>	2							
8	407	<i>Aurinia corymbosa</i>	1	Makedonija	Galičica, stijena uz cestu.	21.06.2014	+			
9		<i>Aurinia corymbosa</i>	2							
10	447	<i>Aurinia corymbosa</i>	1	Grčka	Olympus Mt., from Pronia to Katafigium.	21.06.2015	+	+	+	+
11		<i>Aurinia corymbosa</i>	2							
12	454	<i>Aurinia corymbosa</i>	1	Grčka	Ravine of Stomion from the bridge of Konitsa to Moni Stomion, on the walls of Moni Stomion.	27.06.2015	+	+	+	+
13		<i>Aurinia corymbosa</i>	2							
14	481	<i>Aurinia corymbosa</i>	1	Srbija	Panina Medvednik.	09.07.2015	+	+	+	+
15		<i>Aurinia corymbosa</i>	2							
16	482	<i>Aurinia corymbosa</i>	1	Srbija	Mileševka kanjon, desna strana.	28.07.2015	+			

	ID	Svojta	Broj jedinke	Država	Lokalitet ili GenBank broj	Datum sakupljanja	Umnajanje PCR-om	MP	BI	Mreža haplotipova
17		<i>Aurinia corymbosa</i>	2							
18	483	<i>Aurinia corymbosa</i>	1	Albanija	Planine Prokletije, Ropojana.	27.08.2015	+			
19		<i>Aurinia corymbosa</i>	2							
20	484	<i>Aurinia corymbosa</i>	2	Crna Gora	Planina Durmitor, Crvene stene.	28.08.2015	+	+	+	+
21	452	<i>Aurinia gionae</i>	2	Grčka	<i>Gionae.</i>	25.06.2015	+	+	+	+
22	159	<i>Aurinia leucadea</i>	1	Hrvatska	Mala Palagruža.	24.04.2008	+	+	+	+
23		<i>Aurinia leucadea</i>	2							
24	161	<i>Aurinia leucadea</i>	1	Hrvatska	Jabuka.		+	+	+	+
25		<i>Aurinia leucadea</i>	2							
26	199	<i>Aurinia leucadea</i>	1	Hrvatska	Vis, Stiniva.	11.04.2009	+	+	+	+
27		<i>Aurinia leucadea</i>	2							
28	361	<i>Aurinia leucadea</i>	1	Hrvatska	Pelješac, Bilopolje, okomite stijene oko 200m od crkve i vidikovca.	17.06.2012	+	+	+	+
29		<i>Aurinia leucadea</i>	2							
30	392	<i>Aurinia leucadea</i>	1	Hrvatska	Split, Marjan, prema crkvi sv. Jere.	26.09.2013	+	+	+	+
31		<i>Aurinia leucadea</i>	2							
32	413	<i>Aurinia leucadea</i>	1	Italija	Capo di Leuca, stijene ispod Basilica Santuario "Santa Maria de Finibus Terrae" Santa Maria di Leuca.	28.06.2014	+	+	+	+
33		<i>Aurinia leucadea</i>	2							
34	414	<i>Aurinia leucadea</i>	1	Italija	Castro, stijene iznad grotta Zinzulusa.	29.06.2014	+	+	+	+
35		<i>Aurinia leucadea</i>	2							
36	415	<i>Aurinia leucadea</i>	1	Italija	Između Santa Cesarea terme i Porto Badisco, Torre Minervina.	29.06.2014	+			
37		<i>Aurinia leucadea</i>	2							
38	416	<i>Aurinia leucadea</i>	1	Italija	Gallipoli, Torre dell'Alto-Porto Selvaggio.	29.06.2014	+	+	+	+
39		<i>Aurinia leucadea</i>	2							

	ID	Svojta	Broj jedinke	Država	Lokalitet ili GenBank broj	Datum sakupljanja	Umnajanje PCR-om	MP	BI	Mreža haplotipova
40	421	<i>Aurinia leucadea</i>	1	Hrvatska	Vis, uvala Pritišćina.	24.08.2014	+	+	+	+
41		<i>Aurinia leucadea</i>	2							
42	422	<i>Aurinia leucadea</i>	1	Hrvatska	Istra, Limski kanal, stijene uz cestu od vidikovca prema kanalu.	03.10.2014				
43		<i>Aurinia leucadea</i>	2							
44	423	<i>Aurinia leucadea</i>	1	Hrvatska	Istra, Kožljak, od Zagrada prema kaštelu stari Kožljak, stijene uz put.	05.10.2014	+	+	+	+
45		<i>Aurinia leucadea</i>	2							
46	424	<i>Aurinia leucadea</i>	1	Hrvatska	Istra, Brseč, uz glavnu cestu.	05.10.2014	+			
47		<i>Aurinia leucadea</i>	2							
48	442	<i>Aurinia leucadea</i>	1	Hrvatska	Otok Čiovo, Gospa od Prizidnice.	2014	+	+	+	+
49		<i>Aurinia leucadea</i>	2							
50	470	<i>Aurinia leucadea</i>	2	Hrvatska	Vela Palagruža.	27.05.2016	+	+	+	+
51	472	<i>Aurinia leucadea</i>	1	Hrvatska	Cres, Lubenice.	2016	+	+	+	+
52		<i>Aurinia leucadea</i>	2							
53	490	<i>Aurinia leucadea</i>	1	Hrvatska	Korčula, Pupnatska luka, Doli, jadranska magistrala između Doli.		+	+	+	+
54		<i>Aurinia leucadea</i>	2							
55		<i>Aurinia leucadea</i>	3							
56		<i>Aurinia leucadea</i>	4							
57		<i>Aurinia leucadea</i>	5							
58	149	<i>Aurinia leucadea</i>	1	Hrvatska	Cres, Lubenice.	25.06.2008	+	+	+	+
59	417	<i>Aurinia microcarpa</i>	2	Bosna i Hercegovina	Vlašić, Paklarske stijene.	23.07.2014	+	+	+	+
60	418	<i>Aurinia microcarpa</i>	1	Bosna i Hercegovina	Mostar, Rujiste.	25.07.2014	+			
61		<i>Aurinia petraea</i> subsp. <i>microcarpa</i>	2				+			
62	419	<i>Aurinia petraea</i> subsp. <i>microcarpa</i>	1	Hrvatska	Biokovo.	26.07.2014	+			

	ID	Svojta	Broj jedinke	Država	Lokalitet ili GenBank broj	Datum sakupljanja	Umnazanje PCR-om	MP	BI	Mreža haplotipova
63		<i>Aurinia petraea</i> subsp. <i>microcarpa</i>	2				+			
64	450	<i>Aurinia moreana</i>	1	Grčka	Peloponnese, Vouraikos tjesnac, Portas željeznička postaja.	22.06.2015	+	+	+	+
65		<i>Aurinia moreana</i>	2							
66	363	<i>Aurinia petraea</i>	1	Rumunjska	Banat, Carasova.	09.09.2012	+	+	+	+
67		<i>Aurinia petraea</i>	2							
68	381	<i>Aurinia petraea</i>	1	Slovenija	Modrej, sipari iznad sela.	14.09.2013	+	+	+	+
69		<i>Aurinia petraea</i>	2							
70	382	<i>Aurinia petraea</i>	1	Slovenija	Trnovo ob Soči, put prema Magozdu, kamenjar.	15.09.2013	+	+	+	+
71		<i>Aurinia petraea</i>	2							
72	383	<i>Aurinia petraea</i>	1	Italija	Gemona del Friuli, M. Glemina l.c., iza katedrale put prema vrhu.	15.09.2013	+			
73	401	<i>Aurinia petraea</i>	1	Srbija	Gornjačka klisura, stijena uz cestu.	19.06.2014	+			
74		<i>Aurinia petraea</i>	2							
75	402	<i>Aurinia petraea</i>	6	Srbija	Klisura Resave, stijena uz cestu.	19.06.2014	+			
76		<i>Aurinia petraea</i>	7							
77	403	<i>Aurinia petraea</i>	6	Srbija	Sičevačka klisura.	19.06.2014	+			
78		<i>Aurinia petraea</i>	7							
79	412	<i>Aurinia petraea</i>	6	Albanija	Shengjin, uz cestu neposredno prije ulaza u grad, kod kamenoloma.	26.06.2014	+			
80		<i>Aurinia petraea</i>	7							
81	467	<i>Aurinia petraea</i>	1	Rumunjska	Romania, Caras-Severin, Baile Herculane, Prolaz.	30.06.2016	+	+	+	+
82		<i>Aurinia petraea</i>	2							
83	468	<i>Aurinia petraea</i>	2	Rumunjska	Romania, Caras-Severin, Valea Minisului, između Boozovici i Anina, stijene uz cestu.	30.06.2016	+	+	+	+
84	459	<i>Aurinia petraea</i>	1	Srbija	Đerdapska klisura, Golubac, stijena uz rub ceste.	25.06.2016				

	ID	Svojta	Broj jedinke	Država	Lokalitet ili GenBank broj	Datum sakupljanja	Umnazanje PCR-om	MP	BI	Mreža haplotipova
85		<i>Aurinia petraea</i>	2							
86	173	<i>Aurinia saxatilis</i>	1	Rumunjska	Caras-Severin, Muntii Almajului, 2km od vodopada Bigar (18km od grada Svinita).	04.05.2007	+			
87		<i>Aurinia saxatilis</i>	2							
88	176	<i>Aurinia saxatilis</i>	1	Italija	Abriola, južno od grada Potenza.	07.06.2007	+			
89		<i>Aurinia saxatilis</i>	2							
90	177	<i>Aurinia saxatilis</i>	1	Bugarska	Rebrovo, sjeverno od Sofije, pored rijeke Iskr u blizini ceste prema Svoge.	08.05.2007	+			
91		<i>Aurinia saxatilis</i>	2							
92	178	<i>Aurinia saxatilis</i>	1	Srbija	Stijene pored ceste prema selu Topli do (SI od Pirot).	17.05.2008	+	+	+	+
93		<i>Aurinia saxatilis</i>	2							
94	181	<i>Aurinia saxatilis</i>	1	Grčka	Između Karpanisi i Anatoliki Frangista (6km od Karpenisi), vapnenac.	02.06.2008	+			
95		<i>Aurinia saxatilis</i>	2							
96	182	<i>Aurinia saxatilis</i>	3	Grčka	Krokillo, iznad sela u blizini ceste.	01.06.2008	+			
97		<i>Aurinia saxatilis</i>	5							
98	183	<i>Aurinia saxatilis</i>	1	Slovačka	Sulovske vrchy, Zaskalie, Maninska tiesnava.	27.05.2006	+			
99		<i>Aurinia saxatilis</i>	2							
100	274	<i>Aurinia saxatilis</i>	1	Makedonija	Ohrid.	14.07.2009	+			
101		<i>Aurinia saxatilis</i>	2							
102	359	<i>Aurinia saxatilis</i>	1	Italija	Volturino, 843 metara nadmorske visine.	2011?	+	+	+	+
103		<i>Aurinia saxatilis</i>	2							
104	364	<i>Aurinia saxatilis</i>	1	Grčka	Kefalonia, tjesnac zapadno od mjesta Poros, pukotine u stijenama.	28.04.2012	+	+	+	+
105		<i>Aurinia saxatilis</i>	2							

	ID	Svojta	Broj jedinke	Država	Lokalitet ili GenBank broj	Datum sakupljanja	Umnazanje PCR-om	MP	BI	Mreža haplotipova
106	365	<i>Aurinia saxatilis</i>	1	Grčka	Ithaka, cesta prema samostanu Taxi Achron, pukotine u stijenama.	30.04.2012	+	+	+	+
107		<i>Aurinia saxatilis</i>	2							
108	366	<i>Aurinia saxatilis</i>	1	Albanija	Ura e Lapave	13.07.2012	+			
109		<i>Aurinia saxatilis</i>	2							
110	367	<i>Aurinia saxatilis</i>	1	Srbija	Soko Banja, Soko Grad.	02.06.2011	+			
111		<i>Aurinia saxatilis</i>	2							
112	368	<i>Aurinia saxatilis</i>	1	Makedonija	Crni Drim.	13.07.2012	+	+	+	+
113		<i>Aurinia saxatilis</i>	2							
114	378	<i>Aurinia saxatilis</i>	1	Makedonija	Konjsko.	24.08.2012	+	+	+	+
115		<i>Aurinia saxatilis</i>	2							
116	384	<i>Aurinia saxatilis</i>	1	Albanija	Tepelenë, na zidinama dvorca, okrug Tepelenë (Rrethi i Tepelenës); na brijezu i na zidinama dvorca Tepelenë; na vapnenačkim stijenama.	24.06.2013	+	+	+	+
117		<i>Aurinia saxatilis</i>	2							
118	385	<i>Aurinia saxatilis</i>	1	Albanija	Palermo, okrug Vlorë (Rrethi i Vlorës); poluotok Palermo u blizini sela Qeparo; na vapnenačkim stijenama pored ceste uz more.	25.06.2013	+	+	+	+
119		<i>Aurinia saxatilis</i>	2							
120	386	<i>Aurinia saxatilis</i>	1	Albanija	Vlorë, okrug Vlorë (Rrethi i Vlorës), južno od grada Vlorë, na vapnenačkim liticama pored ceste uz more.	25.06.2013	+	+	+	+
121		<i>Aurinia saxatilis</i>	2							
122	387	<i>Aurinia saxatilis</i>	1	Albanija	Mqedë, okrug Shkodër (Rrethi i Shkodrës), otprilike 1.25 km sjeverno od sela Mqedë, u dolini rijeke "Drin", vapnenačke stijene.	26.06.2013	+	+	+	+

	ID	Svojta	Broj jedinke	Država	Lokalitet ili GenBank broj	Datum sakupljanja	Umnajanje PCR-om	MP	BI	Mreža haplotipova
123		<i>Aurinia saxatilis</i>	2							
124	396	<i>Aurinia saxatilis</i>	1	Italija	Puglia, Taranto, Gravina di Laterza.		+	+	+	+
125		<i>Aurinia saxatilis</i>	2							
126	400	<i>Aurinia saxatilis</i>	1	Mađarska	Komárom-Esztergom county, planina Öreg-kő iznad sela Bajót; na vapnenačkim liticama, 327 m nadmorske visine.	30.05.2014	+	+	+	+
127		<i>Aurinia saxatilis</i>	2							
128	404	<i>Aurinia saxatilis</i>	2	Srbija	stijena uz cestu Niš-Vranje, prije tunela Kržince.	19.06.2014	+	+	+	+
129		<i>Aurinia saxatilis</i>	6							
130	405	<i>Aurinia saxatilis</i>	1	Makedonija	Vrutok, podnožje Šar-planine, stijena uz cestu.	20.06.2014	+	+	+	+
131		<i>Aurinia saxatilis</i>	2							
132	408	<i>Aurinia saxatilis</i>	1	Grčka	zapadno od mjesta Pili, kod mosta, stijene uz cestu.	24.06.2014	+			
133		<i>Aurinia saxatilis</i>	2							
134	410	<i>Aurinia saxatilis</i>	1	Grčka	Sikiá.	25.06.2014	+	+	+	+
135		<i>Aurinia saxatilis</i>	2							
136	411	<i>Aurinia saxatilis</i>	1	Grčka	Kandila.	26.06.2014	+			
137		<i>Aurinia saxatilis</i>	2							
138	425	<i>Aurinia saxatilis</i>	1	Austrija	Niža Austria (Niederösterreich), Wachau: Kanzel, c. 1.2 km sjeverno od grada Dürnstein, Bezirk (okrug): Krems-Land; 315 m nadmorske visine, 15°30'55.9"E, 48°24'20.5".	03.06.2014	+	+	+	+
139		<i>Aurinia saxatilis</i>	2							
140	426	<i>Aurinia saxatilis</i>	1	Makedonija	Bregalnica, brdo iznad Bekirlijske rijeke, laporci.	06.07.2014	+	+	+	+
141		<i>Aurinia saxatilis</i>	2							
142	427	<i>Aurinia saxatilis</i>	1	Makedonija	Demir Kapija.	07.07.2014	+	+	+	+

	ID	Svojta	Broj jedinke	Država	Lokalitet ili GenBank broj	Datum sakupljanja	Umnazanje PCR-om	MP	BI	Mreža haplotipova
143		<i>Aurinia saxatilis</i>	2							
144	428	<i>Aurinia saxatilis</i>	1	Makedonija	Stenje, pješčana obala uz Prespansko jezero.	11.06.2014	+	+	+	+
145		<i>Aurinia saxatilis</i>	2							
146	429	<i>Aurinia saxatilis</i>	1	Češka	Bechyně, stijene uz stari samostan.	09.08.2014	+	+	+	+
147		<i>Aurinia saxatilis</i>	2							
148	430	<i>Aurinia saxatilis</i>	1	Češka	Český Krumlov, vapnenačke stijene ispod dvorca.	22.06.2014	+	+	+	+
149		<i>Aurinia saxatilis</i>	2							
150	433	<i>Aurinia saxatilis</i>	1	Bugarska	istočni Rodopi, Krđali, tvrđava Monck.	26.07.2014	+	+	+	+
151		<i>Aurinia saxatilis</i>	2							
152	434	<i>Aurinia saxatilis</i>	1	Bugarska	Rila, kod sela Pastra.	29.07.2014	+	+	+	+
153		<i>Aurinia saxatilis</i>	2							
154	435	<i>Aurinia saxatilis</i>	1	Bugarska	Beledi Han.	31.07.2014	+	+	+	+
155		<i>Aurinia saxatilis</i>	2							
156	436	<i>Aurinia saxatilis</i>	1	Grčka	Farsala.	07.08.2014	+	+	+	+
157		<i>Aurinia saxatilis</i>	2							
158	437	<i>Aurinia saxatilis</i>	1	Grčka	Mistras.	10.08.2014	+	+	+	+
159		<i>Aurinia saxatilis</i>	2							
160	443	<i>Aurinia saxatilis</i>	1	Austrija	Niža Austrija (Niederösterreich), Waldviertel: Tal der Kleinen Krems u blizini dvorca Burg Hartenstein, 1 km zapad-sjeverozapadno od grada Purkersdorf, Bezirk (okrug): Krems-Land; 500 m nadmorske visine, 15°24'00.2"E, 48°26'50.5".	28.08.2014	+			
161		<i>Aurinia saxatilis</i>	2							
162	444	<i>Aurinia saxatilis</i>	1	Češka	Prague, stijene ispod Vyšehrad dvorca uz Vltavu.	06.04.2015	+	+	+	+
163		<i>Aurinia saxatilis</i>	2							

	ID	Svojta	Broj jedinke	Država	Lokalitet ili GenBank broj	Datum sakupljanja	Umnajanje PCR-om	MP	BI	Mreža haplotipova
164	445	<i>Aurinia saxatilis</i>	1	Poljska	Pieniny planine, u blizini ruševina dvorca Czorsztyn.	30.07.2014	+	+	+	+
165		<i>Aurinia saxatilis</i>	2							
166	448	<i>Aurinia saxatilis</i>	1	Grčka	Olimp, uz cestu za Prioniu.	21.06.2015	+	+	+	+
167		<i>Aurinia saxatilis</i>								
168	449	<i>Aurinia saxatilis</i>	1	Grčka	Poluotok Peloponez, Vouraikos tjesnac, selo Zachlorou.	22.06.2015	+	+	+	+
169		<i>Aurinia saxatilis</i>	2							
170	451	<i>Aurinia saxatilis</i>	1	Grčka	Poluotok Peloponez, Chelmos, Mesorrougi.	23.06.2015	+	+	+	+
171		<i>Aurinia saxatilis</i>	2							
172	453	<i>Aurinia saxatilis</i>	1	Grčka	Meteora, ispod samostana Rousanou/St. Barbara.	27.06.2015	+	+	+	+
173		<i>Aurinia saxatilis</i>	2							
174	455	<i>Aurinia saxatilis</i>	1	Grčka	Planina Timfi, selo Micro Papingo	28.06.2015	+	+	+	+
175		<i>Aurinia saxatilis</i>	2							
176	456	<i>Aurinia saxatilis</i>	2	Grčka	Kozani.	28.06.2015	+	+	+	+
177		<i>Aurinia saxatilis</i>	3							
178	460	<i>Aurinia saxatilis</i>	1	Rumunjska	Romania, Constanta, Podişul Dobrogei, Cheia, Rez. Cheia.	26.06.2016	+	+	+	+
179		<i>Aurinia saxatilis</i>	2							
180	461	<i>Aurinia saxatilis</i>	1	Rumunjska	Romania, Tulcea, istočno od grada Macin, Culmea Pricopanului.	26.06.2016	+	+	+	+
181		<i>Aurinia saxatilis</i>	2							
182	462	<i>Aurinia saxatilis</i>	1	Rumunjska	Romania, Neamt, Bicaz, stijena pored ceste.	27.06.2016	+	+	+	+
183		<i>Aurinia saxatilis</i>	2							
184	463	<i>Aurinia saxatilis</i>	1	Rumunjska	Romania, Neamt, Bicaz-Chei, stijena pored ceste, pored ulaza u park.	27.06.2016	+	+	+	+
185		<i>Aurinia saxatilis</i>	2							
186	464	<i>Aurinia saxatilis</i>	1	Rumunjska	Romania, Cluj, Turda, Cheia Tutului.	28.06.2016	+	+	+	+

	ID	Svojta	Broj jedinke	Država	Lokalitet ili GenBank broj	Datum sakupljanja	Umnajanje PCR-om	MP	BI	Mreža haplotipova
187		<i>Aurinia saxatilis</i>	2							
188	465	<i>Aurinia saxatilis</i>	1	Rumunjska	Romania, Mehenditi, Orsova, Virciorova, stijene uz cestu.	30.06.2016	+	+	+	+
189		<i>Aurinia saxatilis</i>	2							
190	466	<i>Aurinia saxatilis</i>	1	Rumunjska	Romania, Caras-Severin, Toplet, uz cestu i željezničku prugu.	30.06.2016				
191		<i>Aurinia saxatilis</i>	2				+	+	+	+
192	485	<i>Aurinia saxatilis</i>	1	Makedonija	Novo Negovičan, bazalt.	21.04.2008	+	+	+	+
193		<i>Aurinia saxatilis</i>	2							
194	486	<i>Aurinia saxatilis</i>	1	Makedonija	Kanjon Treske.	20.04.2008	+	+	+	+
195		<i>Aurinia saxatilis</i>	2							
196	488	<i>Aurinia saxatilis</i>	1	Bugarska	Između sela Knyazevo i Srem (istočno od grada Toplovgrad), granitne stijene uz cestu u dolini rijeke Tundja.	11.04.2015	+	+	+	+
197		<i>Aurinia saxatilis</i>	2							
198	489	<i>Aurinia saxatilis</i>	1	Slovačka	Bratislava, dvorac Devin.	09. 2017	+	+	+	+
199		<i>Aurinia saxatilis</i>	2							
200	411	<i>Aurinia saxatilis</i>	2	Grčka	Kandila.	26.06.2014				
201	426	<i>Aurinia saxatilis</i>	2	Makedonija	Bregalnica, brdo iznad Bekirlijske reke, laporci.	06.07.2014				
202	492	<i>Aurinia saxatilis</i>	1	Grčka	Chios, planina Pelineo, SI od sela Spartounta, vapnenačke stijene, 955m nadmorske visine.		+	+	+	+
203		<i>Aurinia saxatilis</i>	2							
204		<i>Aurinia saxatilis</i>	3							
205		<i>Aurinia saxatilis</i>	4							
206		<i>Aurinia saxatilis</i>	5							

	ID	Svojta	Broj jedinke	Država	Lokalitet ili GenBank broj	Datum sakupljanja	Umnajanje PCR-om	MP	BI	Mreža haplotipova
207	493	<i>Aurinia saxatilis</i>	1	Grčka	Samos, Oros Kerkis, iznad samostana Evangelistrias(650m), 831m nadmorske visine.		+	+	+	+
208		<i>Aurinia saxatilis</i>	2							
209		<i>Aurinia saxatilis</i>	3							
210		<i>Aurinia saxatilis</i>	7							
211		<i>Aurinia saxatilis</i>	9							
212	494	<i>Aurinia saxatilis</i>	1	Grčka	Samos, Oros Ambelos (planine), planine Lazarou (1025m nadmorske visine), zapadna eksponicija, južno od sela Vourliotes, 942m nadmorske visine		+	+	+	+
213		<i>Aurinia saxatilis</i>	2							
214		<i>Aurinia saxatilis</i>	3							
215		<i>Aurinia saxatilis</i>	4							
216		<i>Aurinia saxatilis</i>	6							
217	265	<i>Aurinia saxatilis</i>	1	Makedonija	Stenje, Prespansko jezero.	11.07.2009	+	+	+	+
218	355	<i>Aurinia sinuata</i>	1	Hrvatska	Kozjak, Malačka.	19.05.2011	+	+	+	+
219		<i>Aurinia sinuata</i>	2							
220	356	<i>Aurinia sinuata</i>	1	Hrvatska	Mosor, stijene iznad Kučina.	24.05.2011	+	+	+	+
221		<i>Aurinia sinuata</i>	2							
222	357	<i>Aurinia sinuata</i>	1	Hrvatska	Knin, Krčić.	05.2011	+	+	+	+
223		<i>Aurinia sinuata</i>	2							
224	369	<i>Aurinia sinuata</i>	1	Hrvatska	Otok Krk, Baška, prema crkvi sv. Ilija.	07.06.2012	+			
225		<i>Aurinia sinuata</i>	2							
226	370	<i>Aurinia sinuata</i>	1	Hrvatska	kanjon Velike Paklenice.	08.06.2012	+	+	+	+
227		<i>Aurinia sinuata</i>	2							
228	371	<i>Aurinia sinuata</i>	1	Hrvatska	Karlobag, prema Baškim Oštarijama.	08.06.2012	+	+	+	+
229		<i>Aurinia sinuata</i>	2							

	ID	Svojta	Broj jedinke	Država	Lokalitet ili GenBank broj	Datum sakupljanja	Umnazanje PCR-om	MP	BI	Mreža haplotipova
230	372	<i>Aurinia sinuata</i>	1	Hrvatska	Otok Rab.	08.06.2012	+	+	+	+
231		<i>Aurinia sinuata</i>	2							
232	373	<i>Aurinia sinuata</i>	1	Hrvatska	Omiš.	09.06.2012	+	+	+	+
233		<i>Aurinia sinuata</i>	2							
234	374	<i>Aurinia sinuata</i>	1	Hrvatska	Živogošće.	09.06.2012	+	+	+	+
235		<i>Aurinia sinuata</i>	2							
236	375	<i>Aurinia sinuata</i>	1	Hrvatska	Krvavica, sjeverno od Makarske, uz obalu mora, uvala Ramova.	16.06.2012	+			
237		<i>Aurinia sinuata</i>	2							
238	376	<i>Aurinia sinuata</i>	1	Hrvatska	Dugi otok, PP Telaščica, Grpaščak, klifovi.	07.07.2012	+	+	+	+
239		<i>Aurinia sinuata</i>	2							
240	388	<i>Aurinia sinuata</i>	1	Hrvatska	Klek, na granici s BiH, uz cestu.	22.06.2013	+	+	+	+
241		<i>Aurinia sinuata</i>	2							
242	398	<i>Aurinia sinuata</i>	1	Hrvatska	Vransko jezero, jugozapadno od Banjevaca, kamenjar uz rub puta kroz makiju crnike, 80m nadmorske visine.	09.06.14.	+	+	+	+
243		<i>Aurinia sinuata</i>	2							
244	399	<i>Aurinia sinuata</i>	1	Hrvatska	Šibenik, brdo Kamenar, rub puta kroz kamenarski travnjak, 180m nadmorske visine.	10.06.14.	+	+	+	+
245		<i>Aurinia sinuata</i>	2							
246	420	<i>Aurinia sinuata</i>	1	Hrvatska	Biokovo.	26.07.2014	+	+	+	+
247		<i>Aurinia sinuata</i>	2				+			
248	439	<i>Aurinia sinuata</i>	1	Hrvatska	PP Telasčica, Dugi otok, Cuška Dumboka.	15.12.2013	+	+	+	+
249		<i>Aurinia sinuata</i>	2							
250	440	<i>Aurinia sinuata</i>	1	Hrvatska	NP Kornati, otok Purara.	16.12.2013	+	+	+	+
251		<i>Aurinia sinuata</i>	2							

	<b>ID</b>	<b>Svojta</b>	<b>Broj jedinke</b>	<b>Država</b>	<b>Lokalitet ili GenBank broj</b>	<b>Datum sakupljanja</b>	<b>Umnazanje PCR-om</b>	<b>MP</b>	<b>BI</b>	<b>Mreža haplotipova</b>
252	441	<i>Aurinia sinuata</i>	1	Hrvatska	Otok Čiovo, Gospa od Prizidnice.	2013	+			
253		<i>Aurinia sinuata</i>	2							
254	446	<i>Aurinia sinuata</i>	1	Hrvatska	Split, južna strana Marjana, iza prvog zavoja ceste koja se penje od glavne ceste; krš, borova šuma i uz cestu.	06.05.2015	+			
255		<i>Aurinia sinuata</i>	2							
256	457	<i>Aurinia sinuata</i>	6	Hrvatska	Abruzzi, Chieti: ruševine srednjovjekovnog grada Gessopallena; 648m nadmorske visine.	30.08.2015	+	+	+	+
257		<i>Aurinia sinuata</i>	7							
258	458	<i>Aurinia sinuata</i>	1	Hrvatska	Puglia, Gargano: brdo na kojem je kapelica "Madonna di Cristo", 2,2 km JI od sela Rignano Garganico; 160m nadmorske visine.	30.08.2015	+	+	+	+
259		<i>Aurinia sinuata</i>	6							
260	469	<i>Aurinia sinuata</i>	1	Hrvatska	Selo Šegote, južno od Senja.	17.04.2016	+	+	+	+
261		<i>Aurinia sinuata</i>	2							
262	471	<i>Aurinia sinuata</i>	1	Hrvatska	Cres, Lubenice.	2016	+	+	+	+
263		<i>Aurinia sinuata</i>	2							
264	473	<i>Aurinia sinuata</i>	1	Hrvatska	Lošinj.	2016	+			
265		<i>Aurinia sinuata</i>	2							
266	474	<i>Aurinia sinuata</i>	1	Hrvatska	Zakosa.	2016	+	+	+	+
267		<i>Aurinia sinuata</i>	2							
268	475	<i>Aurinia sinuata</i>	1	Hrvatska	Križanje Priovac-Tisno.	17.05.2016	+			
269		<i>Aurinia sinuata</i>	2							
270	477	<i>Aurinia sinuata</i>	1	Hrvatska	Između mjesta Lukovo i Sv. Juraj, jadranska magistrala, rub ceste.	26.08.2016	+	+	+	+
271		<i>Aurinia sinuata</i>	2							
272	478	<i>Aurinia sinuata</i>	1	Hrvatska	Dalmacija, Drage, uz obalu mora.	25.09.2016	+			
273		<i>Aurinia sinuata</i>	2							

	<b>ID</b>	<b>Svojta</b>	<b>Broj jedinke</b>	<b>Država</b>	<b>Lokalitet ili GenBank broj</b>	<b>Datum sakupljanja</b>	<b>Umnazanje PCR-om</b>	<b>MP</b>	<b>BI</b>	<b>Mreža haplotipova</b>
274	479	<i>Aurinia sinuata</i>	1	Hrvatska	NP Krka, Oziđana pećina.	25.09.2016	+			
275		<i>Aurinia sinuata</i>	2							
276	480	<i>Aurinia sinuata</i>	1	Hrvatska	Korčula, Babinske lokve.	23.10.2016	+			
277		<i>Aurinia sinuata</i>	2							
278	496	<i>Aurinia sinuata</i>	1							
279		<i>Aurinia sinuata</i>	2							
280		<i>Aurinia sinuata</i>	3							
281		<i>Aurinia sinuata</i>	4							
282	491	<i>Aurinia sinuata</i>	1	Hrvatska	Doli, jadranska magistrala između Doli-Neum, uz cestu.		+	+	+	+
283		<i>Berteroa incana</i>			KF022955			+	+	
284		<i>Berteroa mutabilis</i>			KF022956			+	+	
285		<i>Fibigia clypeata</i>			KF022972			+	+	
286		<i>Galitzkya macrocarpa</i>			KF022982			+	+	
287		<i>Galitzkya potaninii</i>			KF022983			+	+	
288		<i>Auirinia moreana</i>			KF022942					+

# Životopis

## Školovanje:

- 2002.-2010. Osnovna škola Vazmoslava Gržalje, Livade.
- 2011.-2014. Gimnazija i strukovnu školu Jurja Dobrile-GSŠJD, Pazin.
- 2014.-2017. Sveučilišni prvostupnik struke Znanosti o okolišu, Prirodolovno-matematički fakultet, Sveučilište u Zagrebu .

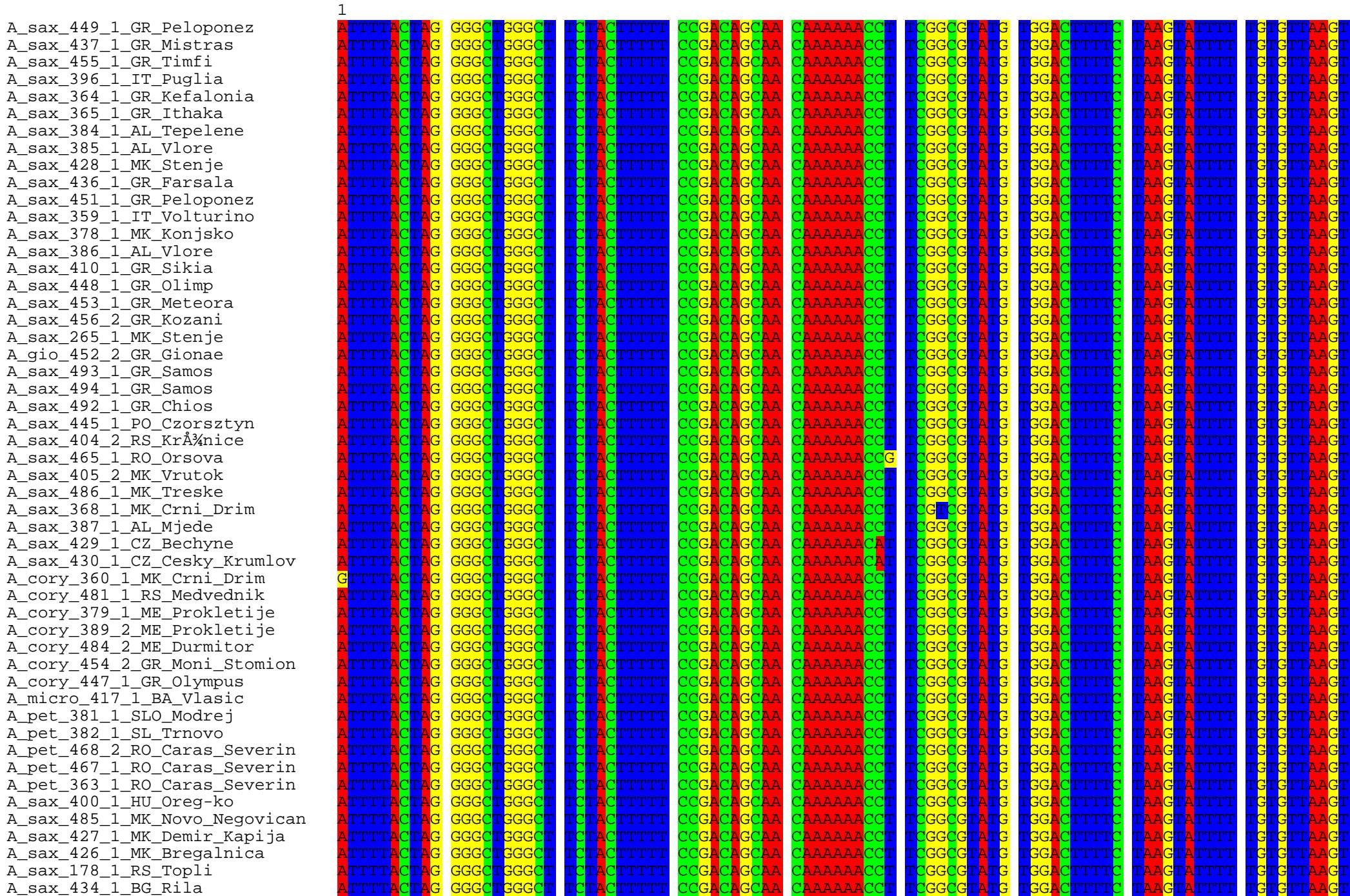
## Ostalo:

- Rujan 2018-u suradnji s neposrednim voditeljem diplomskog rada. sc Ivanom Rešetnik sudjelovao na sedmom Balkanskom Botaničkom Kongresu u Novom Sadu sa izlaganjem postera s preliminarnim rezultatima diplomskog rada.

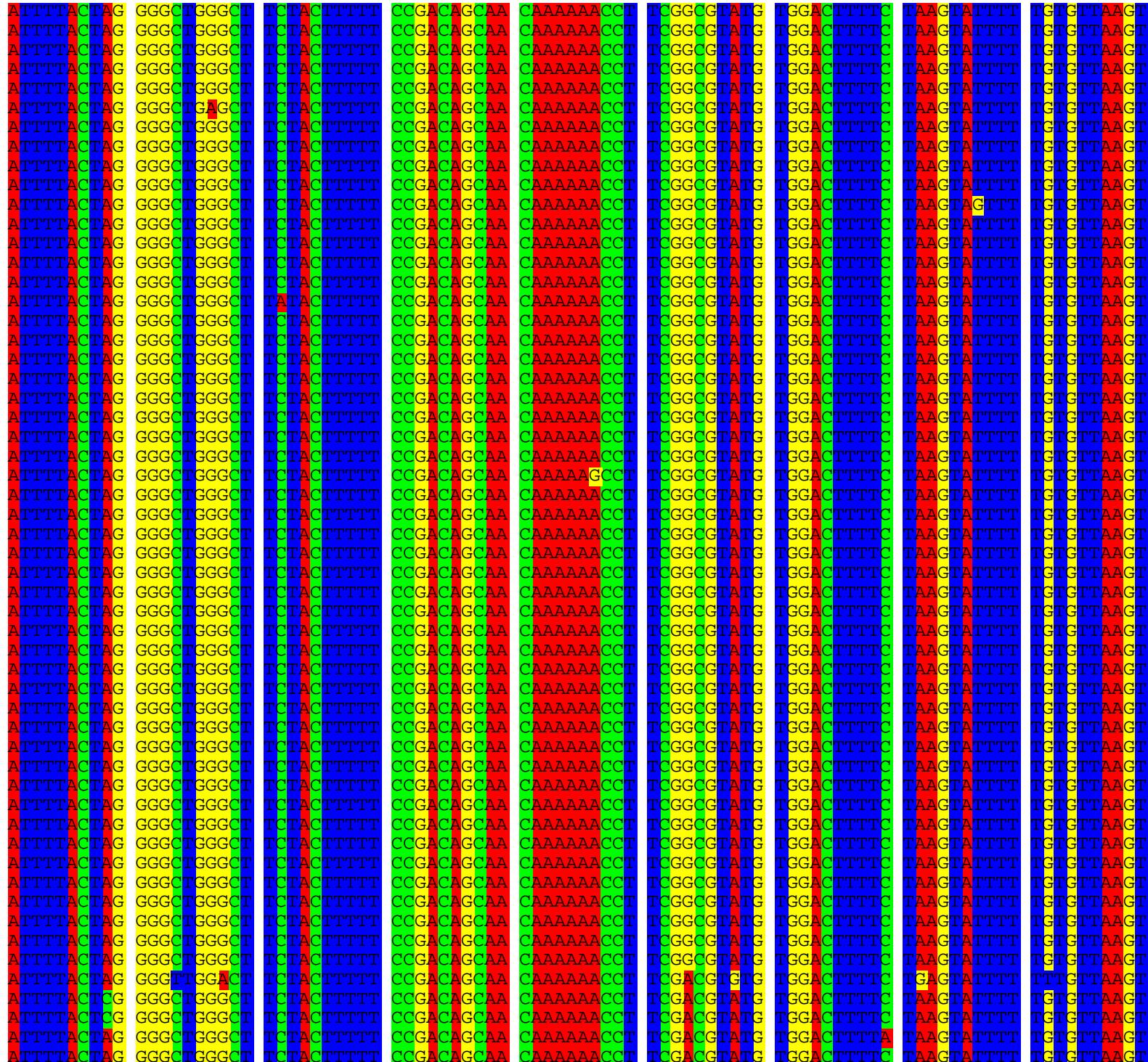
Bartolić P., Liber Z., Bogdanović S., Rešetnik I. 2018. Molecular phylogeny of the genus Aurinia (Brassicaceae) – preliminary report. U: VII Balkan Botanical Congress „Plant Taxonomy and Systematics“. Book of abstracts Novi Sad, Serbia, 61.

- Veljača 2019-Erasmus + stručna praksa na Institutu za Botaniku, Sveučilište u Innsbrucku.

Alignment: E:\Phylogeny\MP\Aurinia\_MP\_06\Aurinia\_ndhF\_jan2019\_06.nex  
Seaview [blocks=10 fontsize=10 A4-landscape] on Sun Sep 08 09:35:44 2019



A\_sax\_435\_1\_BG\_Beledi\_Han  
A\_sax\_425\_1\_AU\_Durnstein  
A\_sax\_444\_1\_CZ\_Prague  
A\_sax\_489\_1\_SK\_Bratislava  
A\_sax\_466\_3\_RO\_Caras\_Severin  
A\_sax\_460\_1\_RO\_Cheia  
A\_sax\_464\_1\_RO\_Cluj  
A\_sax\_488\_1\_BG\_Topolovograd  
A\_sax\_433\_1\_BG\_Krdali  
A\_sax\_461\_1\_RO\_Tulcea  
A\_sax\_462\_1\_RO\_Neamt  
A\_sax\_463\_1\_RO\_Neamt  
A\_leu\_472\_1\_HR\_Cres  
A\_leu\_149\_1\_HR\_Cres  
A\_leu\_442\_1\_HR\_Ciovo  
A\_leu\_423\_1\_HR\_Istra  
A\_leu\_490\_1\_HR\_Korcula  
A\_leu\_361\_1\_HR\_Peljesac  
A\_leu\_421\_1\_HR\_Vis\_Pritiscina  
A\_leu\_161\_1\_HR\_Jabuka  
A\_leu\_199\_1\_HR\_Vis  
A\_leu\_470\_1\_HR\_Palagruza  
A\_leu\_159\_1\_HR\_Palagruza  
A\_leu\_416\_1\_IT\_Porto\_Selvaggio  
A\_leu\_413\_1\_IT\_Capo\_di\_Leuca  
A\_leu\_414\_1\_IT\_Castro  
A\_sin\_457\_6\_IT\_Abruzzi  
A\_sin\_458\_1\_IT\_Gargano  
A\_sin\_357\_1\_HR\_Knin  
A\_sin\_374\_1\_HR\_Zivogosce  
A\_sin\_388\_1\_HR\_Klek  
A\_sin\_355\_1\_HR\_Kozjak  
A\_sin\_371\_1\_HR\_Karlobag  
A\_sin\_474\_1\_HR\_Zakosa  
A\_sin\_477\_1\_HR\_Lukovo  
A\_sin\_469\_1\_HR\_Senj  
A\_sin\_471\_1\_HR\_Cres  
A\_sin\_372\_1\_HR\_Rab  
A\_sin\_370\_1\_HR\_Paklenica  
A\_sin\_399\_1\_HR\_Sibenik  
A\_sin\_356\_1\_HR\_Mosor  
A\_sin\_440\_1\_HR\_Kornati  
A\_leu\_392\_1\_HR\_Split  
A\_sin\_376\_1\_HR\_Dugi\_otok  
A\_sin\_420\_1\_HR\_Biokovo  
A\_sin\_439\_1\_HR\_Dugi\_otok  
A\_sin\_491\_1\_HR\_Doli  
A\_sin\_373\_1\_HR\_Omis  
A\_sin\_398\_1\_HR\_Vransko\_jezero  
A\_mor\_450\_1\_GR\_Peloponnese  
Fibigia\_clypeata\_KF022972  
Berteroia\_incana\_KF022955  
Berteroia\_mutabilis\_KF022956  
Galitzkya\_macrocarpa\_KF022982  
Galitzkya\_potaninii\_KF022983

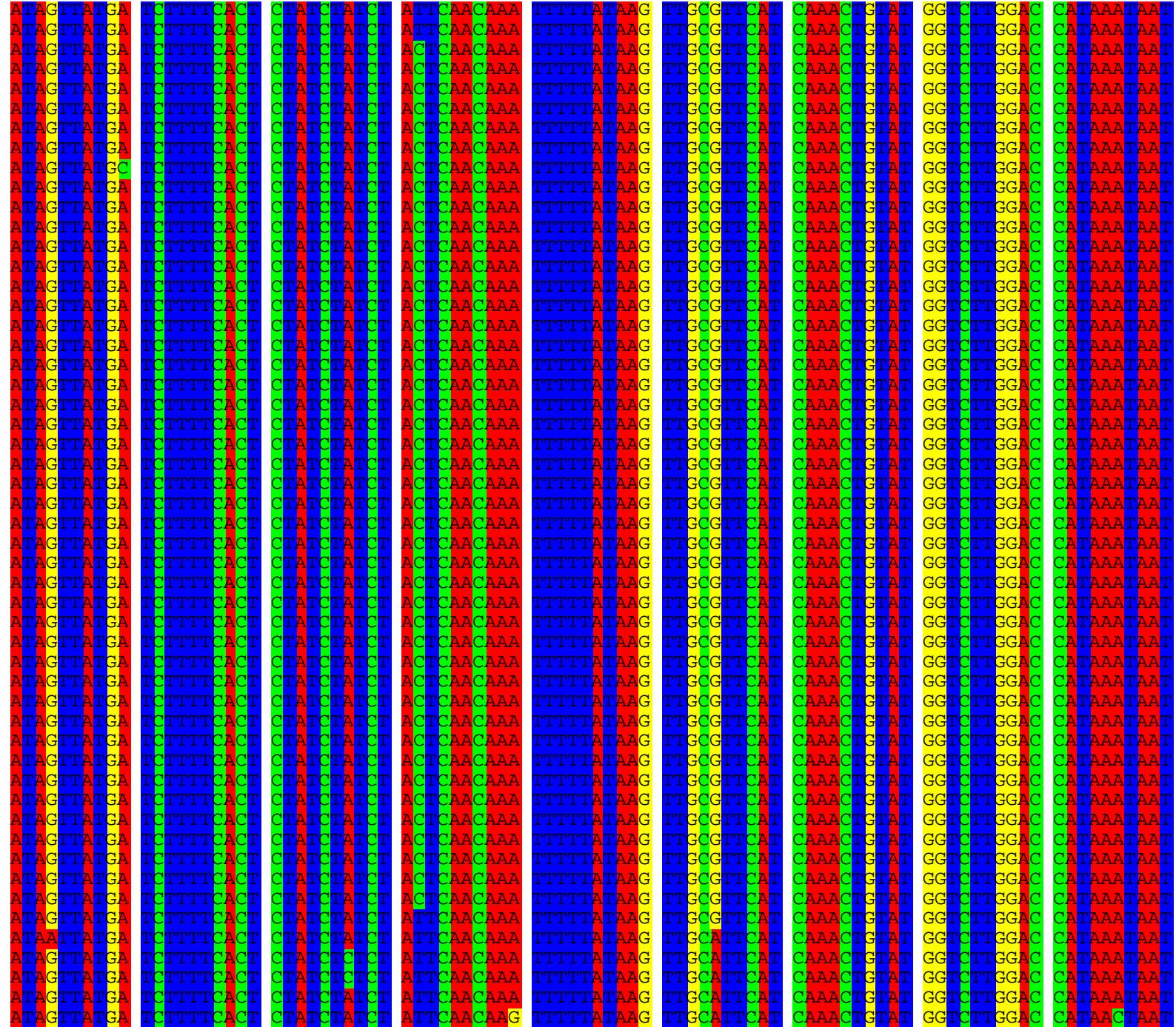


A\_sax\_449\_1\_GR\_Peloponez  
 A\_sax\_437\_1\_GR\_Mistras  
 A\_sax\_455\_1\_GR\_Timfi  
 A\_sax\_396\_1\_IT\_Puglia  
 A\_sax\_364\_1\_GR\_Kefalonia  
 A\_sax\_365\_1\_GR\_Ithaka  
 A\_sax\_384\_1\_AL\_Tepelene  
 A\_sax\_385\_1\_AL\_Vlore  
 A\_sax\_428\_1\_MK\_Stenje  
 A\_sax\_436\_1\_GR\_Farsala  
 A\_sax\_451\_1\_GR\_Peloponez  
 A\_sax\_359\_1\_IT\_Volturino  
 A\_sax\_378\_1\_MK\_Konjsko  
 A\_sax\_386\_1\_AL\_Vlore  
 A\_sax\_410\_1\_GR\_Sikia  
 A\_sax\_448\_1\_GR\_Olimp  
 A\_sax\_453\_1\_GR\_Meteora  
 A\_sax\_456\_2\_GR\_Kozani  
 A\_sax\_265\_1\_MK\_Stenje  
 A\_gio\_452\_2\_GR\_Gionae  
 A\_sax\_493\_1\_GR\_Samos  
 A\_sax\_494\_1\_GR\_Samos  
 A\_sax\_492\_1\_GR\_Chios  
 A\_sax\_445\_1\_PO\_Czorsztyn  
 A\_sax\_404\_2\_RS\_KrA%nice  
 A\_sax\_465\_1\_RO\_Orsova  
 A\_sax\_405\_2\_MK\_Vrutok  
 A\_sax\_486\_1\_MK\_Treske  
 A\_sax\_368\_1\_MK\_Crni\_Drim  
 A\_sax\_387\_1\_AL\_Mjede  
 A\_sax\_429\_1\_CZ\_Bechyne  
 A\_sax\_430\_1\_CZ\_Cesky\_Krumlov  
 A\_cory\_360\_1\_MK\_Crni\_Drim  
 A\_cory\_481\_1\_RS\_Medvednik  
 A\_cory\_379\_1\_ME\_Prokletije  
 A\_cory\_389\_2\_ME\_Prokletije  
 A\_cory\_484\_2\_ME\_Durmitor  
 A\_cory\_454\_2\_GR\_Moni\_Stomion  
 A\_cory\_447\_1\_GR\_Olympus  
 A\_micro\_417\_1\_BA\_Vlasic  
 A\_pet\_381\_1\_SLO\_Modrej  
 A\_pet\_382\_1\_SL\_Trnovo  
 A\_pet\_468\_2\_RO\_Caras\_Severin  
 A\_pet\_467\_1\_RO\_Caras\_Severin  
 A\_pet\_363\_1\_RO\_Caras\_Severin  
 A\_sax\_400\_1\_HU\_Oreg-ko  
 A\_sax\_485\_1\_MK\_Novo\_Negovican  
 A\_sax\_427\_1\_MK\_Demir\_Kapija  
 A\_sax\_426\_1\_MK\_Bregalnica  
 A\_sax\_178\_1\_RS\_Toplji  
 A\_sax\_434\_1\_BG\_Rila  
 A\_sax\_435\_1\_BG\_Beledi\_Han  
 A\_sax\_425\_1\_AU\_Durnstein  
 A\_sax\_444\_1\_CZ\_Prague

The sequence logo displays the frequency of each nucleotide (A, T, C, G) at each position across 91 DNA sequences. The sequences are color-coded by country/region: GR (red), MK (blue), IT (green), CZ (yellow), RS (purple), BA (pink), AU (orange), HU (light blue), and ME (grey).

The logo shows a strong bias towards A at the first position and T at the second position, with varying patterns for other positions depending on the source. The third position shows a mix of T and C, while the fourth position shows a mix of A and T. The fifth position shows a mix of C and T, and the sixth position shows a mix of A and C.

A\_sax\_489\_1\_SK\_Bratislava  
 A\_sax\_466\_3\_RO\_Caras\_Severin  
 A\_sax\_460\_1\_RO\_Cheia  
 A\_sax\_464\_1\_RO\_Cluj  
 A\_sax\_488\_1\_BG\_Topolovograd  
 A\_sax\_433\_1\_BG\_Krdali  
 A\_sax\_461\_1\_RO\_Tulcea  
 A\_sax\_462\_1\_RO\_Neamt  
 A\_sax\_463\_1\_RO\_Neamt  
 A\_leu\_472\_1\_HR\_Cres  
 A\_leu\_149\_1\_HR\_Cres  
 A\_leu\_442\_1\_HR\_Ciovo  
 A\_leu\_423\_1\_HR\_Istra  
 A\_leu\_490\_1\_HR\_Korcula  
 A\_leu\_361\_1\_HR\_Peljesac  
 A\_leu\_421\_1\_HR\_Vis\_Pritiscina  
 A\_leu\_161\_1\_HR\_Jabuka  
 A\_leu\_199\_1\_HR\_Vis  
 A\_leu\_470\_1\_HR\_Palagruza  
 A\_leu\_159\_1\_HR\_Palagruza  
 A\_leu\_416\_1\_IT\_Porto\_Selvaggio  
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 A\_leu\_414\_1\_IT\_Castro  
 A\_sin\_457\_6\_IT\_Abruzzi  
 A\_sin\_458\_1\_IT\_Gargano  
 A\_sin\_357\_1\_HR\_Knin  
 A\_sin\_374\_1\_HR\_Zivogosce  
 A\_sin\_388\_1\_HR\_Klek  
 A\_sin\_355\_1\_HR\_Kozjak  
 A\_sin\_371\_1\_HR\_Karlobag  
 A\_sin\_474\_1\_HR\_Zakosa  
 A\_sin\_477\_1\_HR\_Lukovo  
 A\_sin\_469\_1\_HR\_Senj  
 A\_sin\_471\_1\_HR\_Cres  
 A\_sin\_372\_1\_HR\_Rab  
 A\_sin\_370\_1\_HR\_Paklenica  
 A\_sin\_399\_1\_HR\_Sibenik  
 A\_sin\_356\_1\_HR\_Mosor  
 A\_sin\_440\_1\_HR\_Kornati  
 A\_leu\_392\_1\_HR\_Split  
 A\_sin\_376\_1\_HR\_Dugi\_otok  
 A\_sin\_420\_1\_HR\_Biokovo  
 A\_sin\_439\_1\_HR\_Dugi\_otok  
 A\_sin\_491\_1\_HR\_Doli  
 A\_sin\_373\_1\_HR\_Omis  
 A\_sin\_398\_1\_HR\_Vransko\_jezero  
 A\_mor\_450\_1\_GR\_Peloponnese  
 Fibigia\_clypeata\_KF022972  
 Berteroia\_incana\_KF022955  
 Berteroia\_mutabilis\_KF022956  
 Galitzkya\_macrocarpa\_KF022982  
 Galitzkya\_potaninii\_KF022983



A_sax_449_1_GR_Peloponez	GAA	TTT	TCT	TTG	GAG	TTT	GG	C	T	A	T	T	T	T	A	T	T	G		TTG	GGG	ATTTT	AGTT	TGATT	
A_sax_437_1_GR_Mistras	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_455_1_GR_Timfi	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_396_1_IT_Puglia	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_364_1_GR_Kefalonia	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_365_1_GR_Ithaka	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_384_1_AL_Tepelene	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_385_1_AL_Vlore	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_428_1_MK_Stenje	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_436_1_GR_Farsala	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_451_1_GR_Peloponez	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_359_1_IT_Volturino	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_378_1_MK_Konjsko	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_386_1_AL_Vlore	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_410_1_GR_Sikia	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_448_1_GR_Olimp	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_453_1_GR_Meteora	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_456_2_GR_Kozani	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_265_1_MK_Stenje	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_gio_452_2_GR_Gionae	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_493_1_GR_Samos	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_494_1_GR_Samos	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_492_1_GR_Chios	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_445_1_PO_Czorsztyn	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_404_2_RS_KrA%nice	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_465_1_RO_Orsova	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_405_2_MK_Vrutok	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_486_1_MK_Treske	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_368_1_MK_Crni_Drim	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_387_1_AL_Mjede	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_429_1_CZ_Bechyne	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_430_1_CZ_Cesky_Krumlov	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_cory_360_1_MK_Crni_Drim	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_cory_481_1_RS_Medvednik	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_cory_379_1_ME_Prokletije	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_cory_389_2_ME_Prokletije	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_cory_484_2_ME_Durmitor	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_cory_454_2_GR_Moni_Stomion	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_cory_447_1_GR_Olympus	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_micro_417_1_BA_Vlastic	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_pet_381_1_SLO_Modrej	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_pet_382_1_SL_Trnovo	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_pet_468_2_RO_Caras_Severin	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_pet_467_1_RO_Caras_Severin	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_pet_363_1_RO_Caras_Severin	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_400_1_HU_Oreg-ko	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_485_1_MK_Novo_Negovician	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_427_1_MK_Demir_Kapija	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_426_1_MK_Bregalnica	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_178_1_RS_Toplji	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_434_1_BG_Rila	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_435_1_BG_Beledi_Han	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_425_1_AU_Durnstein	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG
A_sax_444_1_CZ_Prague	GA	AT	TT	TT	TT	TT	GG	G	T	A	C	T	T	T	A	T	T	A	T	GT	CA	ATTTA	ATT	ACA	ACTG

A\_sax\_489\_1\_SK\_Bratislava  
A\_sax\_466\_3\_RO\_Caras\_Severin  
A\_sax\_460\_1\_RO\_Cheia  
A\_sax\_464\_1\_RO\_Cluj  
A\_sax\_488\_1\_BG\_Topolovograd  
A\_sax\_433\_1\_BG\_Krdali  
A\_sax\_461\_1\_RO\_Tulcea  
A\_sax\_462\_1\_RO\_Neamt  
A\_sax\_463\_1\_RO\_Neamt  
A\_leu\_472\_1\_HR\_Cres  
A\_leu\_149\_1\_HR\_Cres  
A\_leu\_442\_1\_HR\_Ciovo  
A\_leu\_423\_1\_HR\_Istra  
A\_leu\_490\_1\_HR\_Korcula  
A\_leu\_361\_1\_HR\_Peljesac  
A\_leu\_421\_1\_HR\_Vis\_Pritiscina  
A\_leu\_161\_1\_HR\_Jabuka  
A\_leu\_199\_1\_HR\_Vis  
A\_leu\_470\_1\_HR\_Palagruza  
A\_leu\_159\_1\_HR\_Palagruza  
A\_leu\_416\_1\_IT\_Porto\_Selvaggio  
A\_leu\_413\_1\_IT\_Capo\_di\_Leuca  
A\_leu\_414\_1\_IT\_Castro  
A\_sin\_457\_6\_IT\_Abruzzi  
A\_sin\_458\_1\_IT\_Gargano  
A\_sin\_357\_1\_HR\_Knin  
A\_sin\_374\_1\_HR\_Zivogosce  
A\_sin\_388\_1\_HR\_Klek  
A\_sin\_355\_1\_HR\_Kozjak  
A\_sin\_371\_1\_HR\_Karlobag  
A\_sin\_474\_1\_HR\_Zakosa  
A\_sin\_477\_1\_HR\_Lukovo  
A\_sin\_469\_1\_HR\_Senj  
A\_sin\_471\_1\_HR\_Cres  
A\_sin\_372\_1\_HR\_Rab  
A\_sin\_370\_1\_HR\_Paklenica  
A\_sin\_399\_1\_HR\_Sibenik  
A\_sin\_356\_1\_HR\_Mosor  
A\_sin\_440\_1\_HR\_Kornati  
A\_leu\_392\_1\_HR\_Split  
A\_sin\_376\_1\_HR\_Dugi\_otok  
A\_sin\_420\_1\_HR\_Biokovo  
A\_sin\_439\_1\_HR\_Dugi\_otok  
A\_sin\_491\_1\_HR\_Doli  
A\_sin\_373\_1\_HR\_Omis  
A\_sin\_398\_1\_HR\_Vransko\_jezero  
A\_mor\_450\_1\_GR\_Peloponnes  
Fibigia\_clypeata\_KF022972  
Berteroia\_incana\_KF022955  
Berteroia\_mutabilis\_KF022956  
Galitzkya\_macrocarpa\_KF022982  
Galitzkya\_potaninii\_KF022983

The sequence logo displays the probability of each nucleotide (A, T, C, G) at each position across the 30 DNA sequences. The positions are numbered 1 to 16. The color scheme indicates the presence of each nucleotide: blue for A, green for T, red for C, yellow for G, and black for positions where all four are present. The logo reveals a highly conserved sequence motif: TTGAGTTTGG, followed by a variable region of 10 positions (labeled 4 through 13), and ending with TT.

Position	A (Blue)	T (Green)	C (Red)	G (Yellow)
1	0.0	1.0	0.0	0.0
2	0.0	1.0	0.0	0.0
3	0.0	1.0	0.0	0.0
4	0.0	0.0	1.0	1.0
5	0.0	0.0	1.0	1.0
6	0.0	0.0	1.0	1.0
7	0.0	0.0	1.0	1.0
8	0.0	0.0	1.0	1.0
9	0.0	0.0	1.0	1.0
10	0.0	0.0	1.0	1.0
11	0.0	0.0	1.0	1.0
12	0.0	0.0	1.0	1.0
13	0.0	0.0	1.0	1.0
14	0.0	0.0	1.0	1.0
15	0.0	0.0	1.0	1.0
16	0.0	0.0	1.0	1.0

A_sax_449_1_GR_Peloponez	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_437_1_GR_Mistras	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_455_1_GR_Timfi	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_396_1_IT_Puglia	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_364_1_GR_Kefalonia	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_365_1_GR_Ithaka	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_384_1_AL_Tepelene	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_385_1_AL_Vlore	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_428_1_MK_Stenje	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_436_1_GR_Farsala	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_451_1_GR_Peloponez	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_359_1_IT_Volturino	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_378_1_MK_Konjsko	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_386_1_AL_Vlore	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_410_1_GR_Sikia	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_448_1_GR_Olimp	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_453_1_GR_Meteora	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_456_2_GR_Kozani	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_265_1_MK_Stenje	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_gio_452_2_GR_Gionae	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_493_1_GR_Samos	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_494_1_GR_Samos	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_492_1_GR_Chios	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_445_1_PO_Czorsztyn	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_404_2_RS_Kr%C4%8Dnice	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_465_1_RO_Orsova	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_405_2_MK_Vrutok	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_486_1_MK_Treske	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_368_1_MK_Crni_Drim	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_387_1_AL_Mjede	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_429_1_CZ_Bechyne	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_430_1_CZ_Cesky_Krumlov	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_cory_360_1_MK_Crni_Drim	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_cory_481_1_RS_Medvednik	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_cory_379_1_ME_Prokletije	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_cory_389_2_ME_Prokletije	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_cory_484_2_ME_Durmitor	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_cory_454_2_GR_Moni_Stomion	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_cory_447_1_GR_Olympus	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_micro_417_1_BA_Vlastic	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_pet_381_1_SLO_Modrej	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_pet_382_1_SL_Trnovo	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_pet_468_2_RO_Caras_Severin	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_pet_467_1_RO_Caras_Severin	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_pet_363_1_RO_Caras_Severin	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_400_1_HU_Oreg_ko	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_485_1_MK_Novo_Negovican	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_427_1_MK_Demir_Kapija	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_426_1_MK_Bregalnica	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_178_1_RS_Topli	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_434_1_BG_Rila	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_435_1_BG_Beledi_Han	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_425_1_AU_Durnstein	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT
A_sax_444_1_CZ_Prague	TATAGTGACA	ATTATAATGTC	TCATGATCAA	GGATATCTGA	GGTTTTTTGC	TTATATGGGT	TTTTTTAATA	CCTCAATGTT	AGGATTAGTT

A_sax_489_1_SK_Bratislava	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sax_466_3_RO_Caras_Severin	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sax_460_1_RO_Cheia	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sax_464_1_RO_Cluj	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sax_488_1_BG_Topolovograd	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sax_433_1_BG_Krdali	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sax_461_1_RO_Tulcea	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sax_462_1_RO_Neamt	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sax_463_1_RO_Neamt	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_leu_472_1_HR_Cres	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_leu_149_1_HR_Cres	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_leu_442_1_HR_Ciovo	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_leu_423_1_HR_Istra	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_leu_490_1_HR_Korcula	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_leu_361_1_HR_Peljesac	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_leu_421_1_HR_Vis_Pritiscina	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_leu_161_1_HR_Jabuka	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_leu_199_1_HR_Vis	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_leu_470_1_HR_Palagruza	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_leu_159_1_HR_Palagruza	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_leu_416_1_IT_Porto_Selvaggio	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_leu_413_1_IT_Capo_di_Leuca	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_leu_414_1_IT_Castro	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_457_6_IT_Abruzzi	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_458_1_IT_Gargano	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_357_1_HR_Knin	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_374_1_HR_Zivogosce	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_388_1_HR_Klek	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_355_1_HR_Kozjak	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_371_1_HR_Karlobag	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_474_1_HR_Zakosa	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_477_1_HR_Lukovo	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_469_1_HR_Senj	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_471_1_HR_Cres	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_372_1_HR_Rab	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_370_1_HR_Paklenica	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_399_1_HR_Sibenik	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_356_1_HR_Mosor	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_440_1_HR_Kornati	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_leu_392_1_HR_Split	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_376_1_HR_Dugi_otok	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_420_1_HR_Biokovo	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_439_1_HR_Dugi_otok	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_491_1_HR_Doli	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_373_1_HR_Omis	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_sin_398_1_HR_Vransko_jezero	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
A_mor_450_1_GR_Peloponnes	Fibigia_clypeata_KF022972	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
Berteroia_incana_KF022955	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
Berteroia_mutabilis_KF022956	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
Galitzkya_macrocarpa_KF022982	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT
Galitzkya_potaninii_KF022983	TATAGTGACA	ATTATATGTC	TCAATGATCAA	GGATATCTGA	GGTTTTTGC	TTATATGGGT	TTTTTTAATA	CTTCAATGTT	AGGATTAGTT

A_sax_449_1_GR_Peloponez	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_437_1_GR_Mistras	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_455_1_GR_Timfi	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_396_1_IT_Puglia	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_364_1_GR_Kefalonia	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_365_1_GR_Ithaka	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_384_1_AL_Tepelene	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_385_1_AL_Vlore	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_428_1_MK_Stenje	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_436_1_GR_Farsala	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_451_1_GR_Peloponez	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_359_1_IT_Volturino	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_378_1_MK_Konjsko	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_386_1_AL_Vlore	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_410_1_GR_Sikia	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_448_1_GR_Olimp	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_453_1_GR_Meteora	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_456_2_GR_Kozani	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_265_1_MK_Stenje	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_gio_452_2_GR_Gionae	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_493_1_GR_Samos	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_494_1_GR_Samos	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_492_1_GR_Chios	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_445_1_PO_Czorsztyn	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_404_2_RS_KrA%nice	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_465_1_RO_Orsova	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_405_2_MK_Vrutok	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_486_1_MK_Treske	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_368_1_MK_Crni_Drim	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_387_1_AL_Mjede	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_429_1_CZ_Bechyne	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_430_1_CZ_Cesky_Krumlov	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_cory_360_1_MK_Crni_Drim	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_cory_481_1_RS_Medvednik	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_cory_379_1_ME_Prokletije	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_cory_389_2_ME_Prokletije	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_cory_484_2_ME_Durmitor	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_cory_454_2_GR_Moni_Stomion	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_cory_447_1_GR_Olympus	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_micro_417_1_BA_Vlasic	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_pet_381_1_SLO_Modrej	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_pet_382_1_SL_Trnovo	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_pet_468_2_RO_Caras_Severin	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_pet_467_1_RO_Caras_Severin	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_pet_363_1_RO_Caras_Severin	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_400_1_HU_Oreg-ko	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_485_1_MK_Novo_Negovican	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_427_1_MK_Demir_Kapija	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_426_1_MK_Bregalnica	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_178_1_RS_Toplji	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_434_1_BG_Rila	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_435_1_BG_Beledi_Han	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_425_1_AU_Durnstein	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT
A_sax_444_1_CZ_Prague	ACTAGTTCAA	ATTTGATCCA	AGTTTATTTT	TTTGGAAT	TAGTTGGAAT	GTTTCTGTAT	TTATTAAATAG	GTTTTGGTT	CACACGACCT

A\_sax\_489\_1\_SK\_Bratislava  
A\_sax\_466\_3\_RO\_Caras\_Severin  
A\_sax\_460\_1\_RO\_Cheia  
A\_sax\_464\_1\_RO\_Cluj  
A\_sax\_488\_1\_BG\_Topolovograd  
A\_sax\_433\_1\_BG\_Krdali  
A\_sax\_461\_1\_RO\_Tulcea  
A\_sax\_462\_1\_RO\_Neamt  
A\_sax\_463\_1\_RO\_Neamt  
A\_leu\_472\_1\_HR\_Cres  
A\_leu\_149\_1\_HR\_Cres  
A\_leu\_442\_1\_HR\_Ciovo  
A\_leu\_423\_1\_HR\_Istra  
A\_leu\_490\_1\_HR\_Korcula  
A\_leu\_361\_1\_HR\_Peljesac  
A\_leu\_421\_1\_HR\_Vis\_Pritiscina  
A\_leu\_161\_1\_HR\_Jabuka  
A\_leu\_199\_1\_HR\_Vis  
A\_leu\_470\_1\_HR\_Palagruza  
A\_leu\_159\_1\_HR\_Palagruza  
A\_leu\_416\_1\_IT\_Porto\_Selvaggio  
A\_leu\_413\_1\_IT\_Capo\_di\_Leuca  
A\_leu\_414\_1\_IT\_Castro  
A\_sin\_457\_6\_IT\_Abruzzi  
A\_sin\_458\_1\_IT\_Gargano  
A\_sin\_357\_1\_HR\_Knin  
A\_sin\_374\_1\_HR\_Zivogosce  
A\_sin\_388\_1\_HR\_Klek  
A\_sin\_355\_1\_HR\_Kozjak  
A\_sin\_371\_1\_HR\_Karlobag  
A\_sin\_474\_1\_HR\_Zakosa  
A\_sin\_477\_1\_HR\_Lukovo  
A\_sin\_469\_1\_HR\_Senj  
A\_sin\_471\_1\_HR\_Cres  
A\_sin\_372\_1\_HR\_Rab  
A\_sin\_370\_1\_HR\_Paklenica  
A\_sin\_399\_1\_HR\_Sibenik  
A\_sin\_356\_1\_HR\_Mosor  
A\_sin\_440\_1\_HR\_Kornati  
A\_leu\_392\_1\_HR\_Split  
A\_sin\_376\_1\_HR\_Dugi\_otok  
A\_sin\_420\_1\_HR\_Biokovo  
A\_sin\_439\_1\_HR\_Dugi\_otok  
A\_sin\_491\_1\_HR\_Doli  
A\_sin\_373\_1\_HR\_Omis  
A\_sin\_398\_1\_HR\_Vransko\_jezero  
A\_mor\_450\_1\_GR\_Peloponnesee  
Fibigia\_clypeata\_KF022972  
Berteroia\_incana\_KF022955  
Berteroia\_mutabilis\_KF022956  
Galitzkya\_macrocarpa\_KF022982  
Galitzkya\_potaninii\_KF022983

The sequence logo displays the frequency of four nucleotides (A, T, C, G) at each position of the sequence. The x-axis represents the sequence positions, and the y-axis represents the nucleotide probability. The colors indicate the likelihood of each nucleotide at a given position: A (green), T (red), C (blue), and G (yellow).

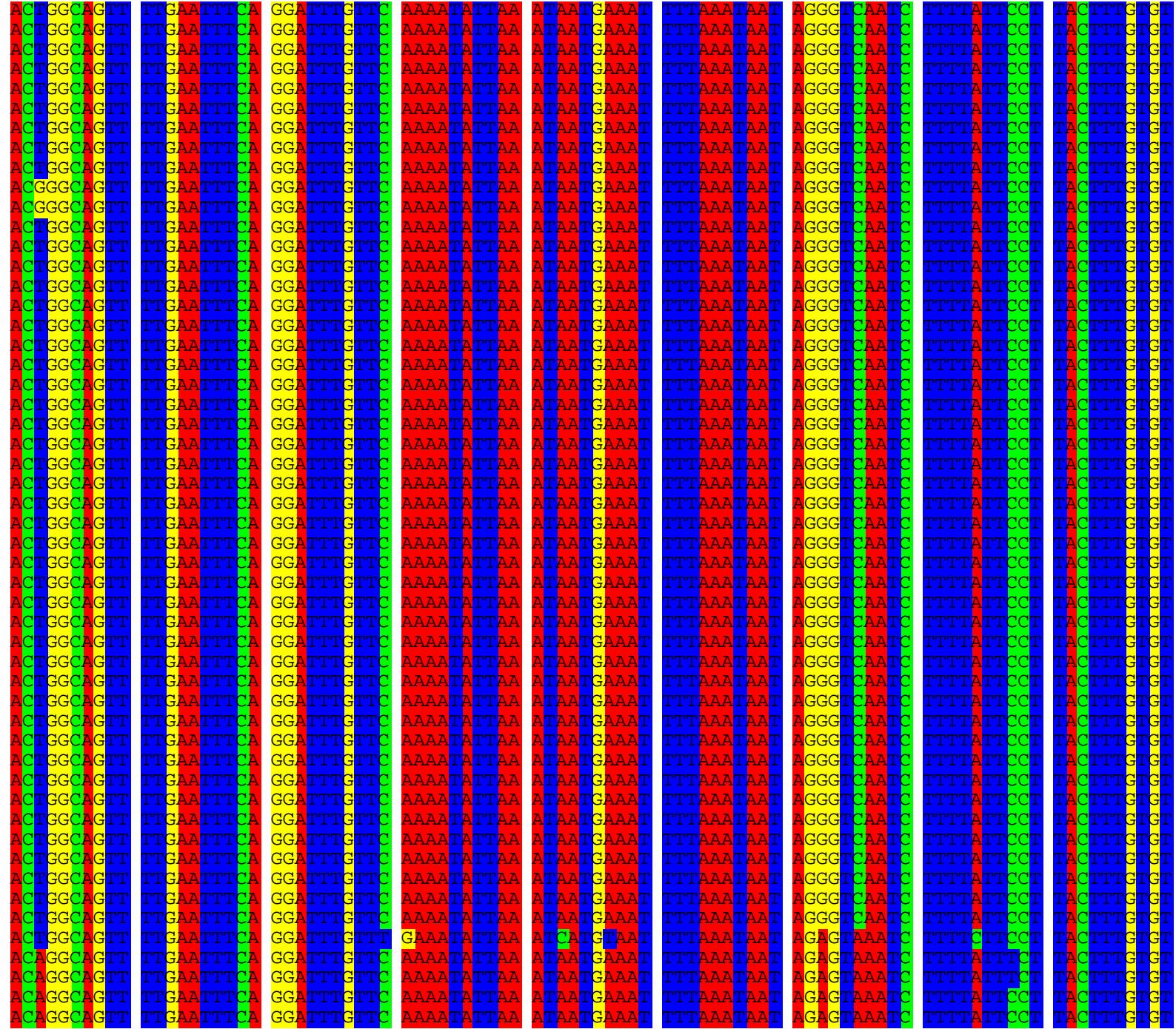
Position	A	T	C	G
1	0.25	0.25	0.25	0.25
2	0.25	0.25	0.25	0.25
3	0.25	0.25	0.25	0.25
4	0.25	0.25	0.25	0.25
5	0.25	0.25	0.25	0.25
6	0.25	0.25	0.25	0.25
7	0.25	0.25	0.25	0.25
8	0.25	0.25	0.25	0.25
9	0.25	0.25	0.25	0.25
10	0.25	0.25	0.25	0.25
11	0.25	0.25	0.25	0.25
12	0.25	0.25	0.25	0.25
13	0.25	0.25	0.25	0.25
14	0.25	0.25	0.25	0.25
15	0.25	0.25	0.25	0.25
16	0.25	0.25	0.25	0.25
17	0.25	0.25	0.25	0.25
18	0.25	0.25	0.25	0.25
19	0.25	0.25	0.25	0.25
20	0.25	0.25	0.25	0.25

A_sax_449_1_GR_Peloponez	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_437_1_GR_Mistras	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_455_1_GR_Timfi	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_396_1_IT_Puglia	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_364_1_GR_Kefalonia	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_365_1_GR_Ithaka	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_384_1_AL_Tepelene	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_385_1_AL_Vlore	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_428_1_MK_Stenje	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_436_1_GR_Farsala	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_451_1_GR_Peloponez	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_359_1_IT_Volturino	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_378_1_MK_Konjsko	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_386_1_AL_Vlore	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_410_1_GR_Sikia	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_448_1_GR_Olimp	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_453_1_GR_Meteora	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_456_2_GR_Kozani	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_265_1_MK_Stenje	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_gio_452_2_GR_Gionae	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_493_1_GR_Samos	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_494_1_GR_Samos	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_492_1_GR_Chios	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_445_1_PO_Czorsztyn	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_404_2_RS_Kra%nice	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_465_1_RO_Orsova	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_405_2_MK_Vrutok	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_486_1_MK_Treske	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_368_1_MK_Crni_Drim	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_387_1_AL_Mjede	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_429_1_CZ_Bechyne	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_430_1_CZ_Cesky_Krumlov	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_cory_360_1_MK_Crni_Drim	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_cory_481_1_RS_Medvednik	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_cory_379_1_ME_Prokletije	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_cory_389_2_ME_Prokletije	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_cory_484_2_ME_Durmitor	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_cory_454_2_GR_Moni_Stomion	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_cory_447_1_GR_Olympus	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_micro_417_1_BA_Vlasic	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_pet_381_1_SLO_Modrej	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_pet_382_1_SL_Trnovo	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_pet_468_2_RO_Caras_Severin	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_pet_467_1_RO_Caras_Severin	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_pet_363_1_RO_Caras_Severin	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_400_1_HU_Oreg-ko	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_485_1_MK_Novo_Negovican	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_427_1_MK_Demir_Kapija	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_426_1_MK_Bregalnica	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_178_1_RS_Toplji	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_434_1_BG_Rila	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_435_1_BG_Beledi_Han	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_425_1_AU_Durnstein	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA
A_sax_444_1_CZ_Prague	ATTGCAGCGGA	ATGCTTGTC	AAAAGCTTTT	GTAAC	TAA	GTAAGGGGA	TTT	TGGTTT	TTAAT	AGGAA	TTTTAGGTCT	TTTTTGATA

A_sax_489_1_SK_Bratislava	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTTAGGTCT	TTTTTGATATA
A_sax_466_3_RO_Caras_Severin	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sax_460_1_RO_Cheia	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sax_464_1_RO_Cluj	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sax_488_1_BG_Topolovograd	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sax_433_1_BG_Krdali	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sax_461_1_RO_Tulcea	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	CTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sax_462_1_RO_Neamt	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sax_463_1_RO_Neamt	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_leu_472_1_HR_Cres	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_leu_149_1_HR_Cres	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_leu_442_1_HR_Ciovo	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_leu_423_1_HR_Istra	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_leu_490_1_HR_Korcula	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_leu_361_1_HR_Peljesac	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_leu_421_1_HR_Vis_Pritiscina	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_leu_161_1_HR_Jabuka	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_leu_199_1_HR_Vis	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_leu_470_1_HR_Palagruza	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_leu_159_1_HR_Palagruza	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_leu_416_1_IT_Porto_Selvaggio	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_leu_413_1_IT_Capo_di_Leuca	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_leu_414_1_IT_Castro	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_457_6_IT_Abruzzi	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_458_1_IT_Gargano	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_357_1_HR_Knin	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_374_1_HR_Zivogosce	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_388_1_HR_Klek	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_355_1_HR_Kozjak	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_371_1_HR_Karlobag	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_474_1_HR_Zakosa	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_477_1_HR_Lukovo	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_469_1_HR_Senj	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_471_1_HR_Cres	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_372_1_HR_Rab	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_370_1_HR_Paklenica	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_399_1_HR_Sibenik	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_356_1_HR_Mosor	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_440_1_HR_Kornati	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_leu_392_1_HR_Split	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_376_1_HR_Dugi_otok	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_420_1_HR_Biokovo	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_439_1_HR_Dugi_otok	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_491_1_HR_Doli	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_373_1_HR_Omis	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_sin_398_1_HR_Vransko_jezero	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
A_mor_450_1_GR_Peloponnese	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
Fibigia_clypeata_KF022972	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
Berteroia_incana_KF022955	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
Berteroia_mutabilis_KF022956	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
Galitzkya_macrocarpa_KF022982	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GTGTAAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA
Galitzkya_potaninii_KF022983	ATTGCAGCGA	ATGCTTGTCA	AAAAGCTTTT	GTAACATAATC	GGGGTAGGGGA	TTTTGGTTTA	TTATTAAGGAA	TTTTAGGTCT	TTTTTGATATA

A_sax_449_1_GR_Peloponez	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	TAC
A_sax_437_1_GR_Mistras	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_455_1_GR_Timfi	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_396_1_IT_Puglia	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_364_1_GR_Kefalonia	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_365_1_GR_Ithaka	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_384_1_AL_Tepelene	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_385_1_AL_Vlore	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_428_1_MK_Stenje	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_436_1_GR_Farsala	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_451_1_GR_Peloponez	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_359_1_IT_Volturino	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_378_1_MK_Konjsko	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_386_1_AL_Vlore	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_410_1_GR_Sikia	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_448_1_GR_Olimp	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_453_1_GR_Meteora	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_456_2_GR_Kozani	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_265_1_MK_Stenje	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_gio_452_2_GR_Gionae	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_493_1_GR_Samos	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_494_1_GR_Samos	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_492_1_GR_Chios	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_445_1_PO_Czorsztyn	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_404_2_RS_Kr%C4%9Bnice	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_465_1_RO_Orsova	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_405_2_MK_Vrutok	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_486_1_MK_Treske	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_368_1_MK_Crni_Drim	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_387_1_AL_Mjede	ACTGGCAGTT	TTGAATTC	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_429_1_CZ_Bechyne	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_430_1_CZ_Cesky_Krumlov	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_cory_360_1_MK_Crni_Drim	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_cory_481_1_RS_Medvednik	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_cory_379_1_ME_Prokletije	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_cory_389_2_ME_Prokletije	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_cory_484_2_ME_Durmitor	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_cory_454_2_GR_Moni_Stomion	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_cory_447_1_GR_Olympus	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_micro_417_1_BA_Vlasic	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_pet_381_1_SLO_Modrej	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_pet_382_1_SL_Trnovo	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_pet_468_2_RO_Caras_Severin	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_pet_467_1_RO_Caras_Severin	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_pet_363_1_RO_Caras_Severin	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_400_1_HU_Oreg-ko	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_485_1_MK_Novo_Negovican	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_427_1_MK_Demir_Kapija	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_426_1_MK_Bregalnica	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_178_1_RS_Toplji	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_434_1_BG_Rila	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_435_1_BG_Beledi_Han	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G
A_sax_425_1_AU_Durnstein	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	T
A_sax_444_1_CZ_Prague	ACTGGCAGTT	TTGAATTGCA	GGATTGTT	AAAAATTA	ATAATGAA	TTTAAAT	AGGGTC	TTTTATTC	G

A\_sax\_489\_1\_SK\_Bratislava  
A\_sax\_466\_3\_RO\_Caras\_Severin  
A\_sax\_460\_1\_RO\_Cheia  
A\_sax\_464\_1\_RO\_Cluj  
A\_sax\_488\_1\_BG\_Topolovograd  
A\_sax\_433\_1\_BG\_Krdali  
A\_sax\_461\_1\_RO\_Tulcea  
A\_sax\_462\_1\_RO\_Neamt  
A\_sax\_463\_1\_RO\_Neamt  
A\_leu\_472\_1\_HR\_Cres  
A\_leu\_149\_1\_HR\_Cres  
A\_leu\_442\_1\_HR\_Ciovo  
A\_leu\_423\_1\_HR\_Istra  
A\_leu\_490\_1\_HR\_Korcula  
A\_leu\_361\_1\_HR\_Peljesac  
A\_leu\_421\_1\_HR\_Vis\_Pritiscina  
A\_leu\_161\_1\_HR\_Jabuka  
A\_leu\_199\_1\_HR\_Vis  
A\_leu\_470\_1\_HR\_Palagruza  
A\_leu\_159\_1\_HR\_Palagruza  
A\_leu\_416\_1\_IT\_Porto\_Selvaggio  
A\_leu\_413\_1\_IT\_Capo\_di\_Leuca  
A\_leu\_414\_1\_IT\_Castro  
A\_sin\_457\_6\_IT\_Abruzzi  
A\_sin\_458\_1\_IT\_Gargano  
A\_sin\_357\_1\_HR\_Knin  
A\_sin\_374\_1\_HR\_Zivogosce  
A\_sin\_388\_1\_HR\_Klek  
A\_sin\_355\_1\_HR\_Kozjak  
A\_sin\_371\_1\_HR\_Karlobag  
A\_sin\_474\_1\_HR\_Zakosa  
A\_sin\_477\_1\_HR\_Lukovo  
A\_sin\_469\_1\_HR\_Senj  
A\_sin\_471\_1\_HR\_Cres  
A\_sin\_372\_1\_HR\_Rab  
A\_sin\_370\_1\_HR\_Paklenica  
A\_sin\_399\_1\_HR\_Sibenik  
A\_sin\_356\_1\_HR\_Mosor  
A\_sin\_440\_1\_HR\_Kornati  
A\_leu\_392\_1\_HR\_Split  
A\_sin\_376\_1\_HR\_Dugi\_otok  
A\_sin\_420\_1\_HR\_Biokovo  
A\_sin\_439\_1\_HR\_Dugi\_otok  
A\_sin\_491\_1\_HR\_Doli  
A\_sin\_373\_1\_HR\_Omis  
A\_sin\_398\_1\_HR\_Vransko\_jezero  
A\_mor\_450\_1\_GR\_Peloponnes  
Fibigia\_clypeata\_KF022972  
Berteroia\_incana\_KF022955  
Berteroia\_mutabilis\_KF022956  
Galitzkya\_macrocarpa\_KF022982  
Galitzkya\_potaninii\_KF022983

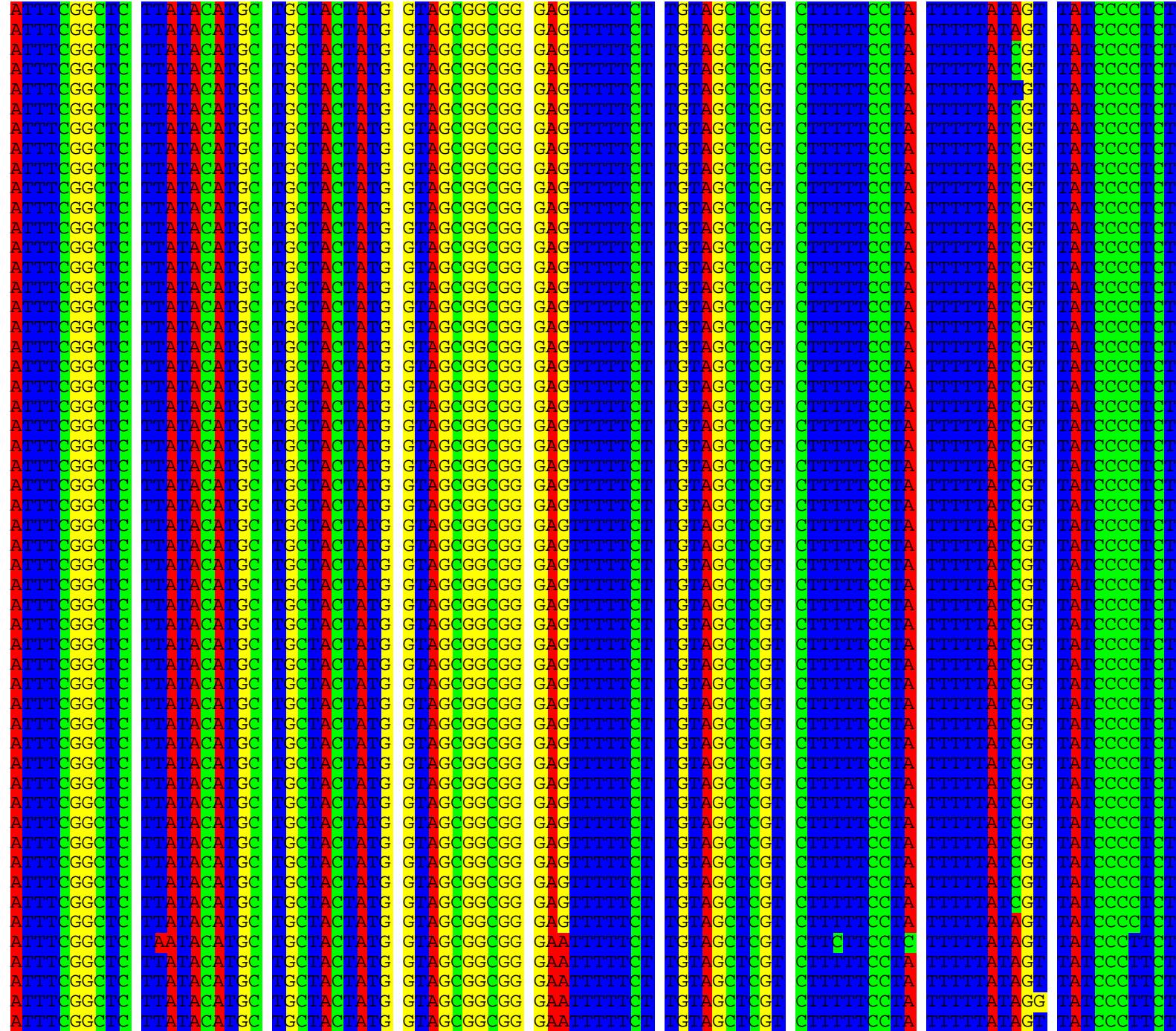


A_sax_449_1_GR_Peloponez	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_437_1_GR_Mistras	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_455_1_GR_Timfi	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_396_1_IT_Puglia	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_364_1_GR_Kefalonia	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_365_1_GR_Ithaka	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_384_1_AL_Tepelene	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_385_1_AL_Vlore	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_428_1_MK_Stenje	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_436_1_GR_Farsala	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_451_1_GR_Peloponez	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_359_1_IT_Volturino	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_378_1_MK_Konjsko	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_386_1_AL_Vlore	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_410_1_GR_Sikia	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_448_1_GR_Olimp	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_453_1_GR_Meteora	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_456_2_GR_Kozani	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_265_1_MK_Stenje	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_gio_452_2_GR_Gionae	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_493_1_GR_Samos	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_494_1_GR_Samos	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_492_1_GR_Chios	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_445_1_PO_Czorsztyn	GCATTTCTAT	TATTTGTTGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_404_2_RS_Kr%C3%A1nice	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_465_1_RO_Orsova	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_405_2_MK_Vrutok	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_486_1_MK_Treske	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_368_1_MK_Crni_Drim	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_387_1_AL_Mjede	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_429_1_CZ_Bechyne	GCATTTCTAT	TATTTGTTGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_430_1_CZ_Cesky_Krumlov	GCATTTCTAT	TATTTGTTGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_cory_360_1_MK_Crni_Drim	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_cory_481_1_RS_Medvednik	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_cory_379_1_ME_Prokletije	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_cory_389_2_ME_Prokletije	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_cory_484_2_ME_Durmitor	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_cory_454_2_GR_Moni_Stomion	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_cory_447_1_GR_Olympus	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_micro_417_1_BA_Vlasic	GCATTTCTAT	TATTTGTTGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_pet_381_1_SLO_Modrej	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_pet_382_1_SL_Trnovo	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_pet_468_2_RO_Caras_Severin	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_pet_467_1_RO_Caras_Severin	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_pet_363_1_RO_Caras_Severin	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_400_1_HU_Oreg-ko	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_485_1_MK_Novo_Negovican	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_427_1_MK_Demir_Kapija	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_426_1_MK_Bregalnica	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_178_1_RS_Toplji	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_434_1_BG_Rila	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_435_1_BG_Beledi_Han	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_425_1_AU_Durnstein	GCATTTCTAT	TATTTGTCGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_444_1_CZ_Prague	GCATTTCTAT	TATTTGTTGG	TCCTATTGCT	AAATCTGCAC	AATTTCCTCT	TCACTGATGG	TTACCTGATG	CCATGGAGGG	CCCTACTCCG

A_sax_489_1_SK_Bratislava	GCATTTCTAT	TATTTCGGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_466_3_RO_Caras_Severin	GCATTTCTAT	TATTTCGGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_460_1_RO_Cheia	GCATTTCTAT	TATTTCGGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_464_1_RO_Cluj	GCATTTCTAT	TATTTCGGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_488_1_BG_Topolovograd	GCATTTCTAT	TATTTCGGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_433_1_BG_Krdali	GCATTTCTAT	TATTTCGGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_461_1_RO_Tulcea	GCATTTCTAT	TATTTCGGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_462_1_RO_Neamt	GCATTTCTAT	TATTTCGGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sax_463_1_RO_Neamt	GCATTTCTAT	TATTTCGGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_leu_472_1_HR_Cres	GCATTTCTAT	TATTTCGGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_leu_149_1_HR_Cres	GCATTTCTAT	TATTTCGGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_leu_442_1_HR_Ciovo	GCATTTCTAT	TATTTCGGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_leu_423_1_HR_Istra	GCATTTCTAT	TATTTCGGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_leu_490_1_HR_Korcula	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_leu_361_1_HR_Peljesac	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_leu_421_1_HR_Vis_Pritiscina	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_leu_161_1_HR_Jabuka	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_leu_199_1_HR_Vis	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_leu_470_1_HR_Palagruza	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_leu_159_1_HR_Palagruza	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_leu_416_1_IT_Porto_Selvaggio	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_leu_413_1_IT_Capo_di_Leuca	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_leu_414_1_IT_Castro	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_457_6_IT_Abruzzi	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_458_1_IT_Gargano	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_357_1_HR_Knin	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_374_1_HR_Zivogosce	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_388_1_HR_Klek	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_355_1_HR_Kozjak	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_371_1_HR_Karlobag	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_474_1_HR_Zakosa	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_477_1_HR_Lukovo	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_469_1_HR_Senj	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_471_1_HR_Cres	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_372_1_HR_Rab	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_370_1_HR_Paklenica	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_399_1_HR_Sibenik	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_356_1_HR_Mosor	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_440_1_HR_Kornati	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_leu_392_1_HR_Split	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_376_1_HR_Dugi_otok	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_420_1_HR_Biokovo	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_439_1_HR_Dugi_otok	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_491_1_HR_Doli	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_373_1_HR_Omis	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_sin_398_1_HR_Vransko_jezero	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
A_mor_450_1_GR_Peloponnese	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
Fibigia_clypeata_KF022972	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
Berteroia_incana_KF022955	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
Berteroia_mutabilis_KF022956	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
Galitzkya_macrocarpa_KF022982	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG
Galitzkya_potaninii_KF022983	GCATTTCTAT	TATTTCAGG	TCCATTGCT	AAATCTGAC	AATTTCCTCT	TCAATGATGG	TTAACCTGATG	CCATGGAGGG	CCCTACTCCG

A_sax_449_1_GR_Peloponez	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_437_1_GR_Mistras	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_455_1_GR_Timfi	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_396_1_IT_Puglia	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_364_1_GR_Kefalonia	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_365_1_GR_Ithaka	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_384_1_AL_Tepelene	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_385_1_AL_Vlore	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_428_1_MK_Stenje	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_436_1_GR_Farsala	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_451_1_GR_Peloponez	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_359_1_IT_Volturino	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_378_1_MK_Konjsko	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_386_1_AL_Vlore	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_410_1_GR_Sikia	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_448_1_GR_Olimp	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_453_1_GR_Meteora	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_456_2_GR_Kozani	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_265_1_MK_Stenje	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_gio_452_2_GR_Gionae	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_493_1_GR_Samos	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_494_1_GR_Samos	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_492_1_GR_Chios	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_445_1_PO_Czorsztyn	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_404_2_RS_Krä%nice	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_465_1_RO_Orsova	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_405_2_MK_Vrutok	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_486_1_MK_Treske	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_368_1_MK_Crni_Drim	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_387_1_AL_Mjede	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_429_1_CZ_Bechyne	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_430_1_CZ_Cesky_Krumlov	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_cory_360_1_MK_Crni_Drim	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_cory_481_1_RS_Medvednik	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_cory_379_1_ME_Prokletije	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_cory_389_2_ME_Prokletije	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_cory_484_2_ME_Durmitor	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_cory_454_2_GR_Moni_Stomion	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_cory_447_1_GR_Olympus	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_micro_417_1_BA_Vlasic	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_pet_381_1_SLO_Modrej	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_pet_382_1_SL_Trnovo	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_pet_468_2_RO_Caras_Severin	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_pet_467_1_RO_Caras_Severin	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_pet_363_1_RO_Caras_Severin	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_400_1_HU_Oreg-ko	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_485_1_MK_Novo_Negovican	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_427_1_MK_Demir_Kapija	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_426_1_MK_Bregalnica	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_178_1_RS_Toplji	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_434_1_BG_Rila	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_435_1_BG_Beledi_Han	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_425_1_AU_Durnstein	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT
A_sax_444_1_CZ_Prague	ATTTCGGTC	TTATACATGC	TGCTACTATG	GTAGGGGG	GAGTTTTCT	TGTAGCTCGT	CTTTTCTCTA	TTTTTATAGT	TATCCCCCTCT

A\_sax\_489\_1\_SK\_Bratislava  
A\_sax\_466\_3\_RO\_Caras\_Severin  
A\_sax\_460\_1\_RO\_Cheia  
A\_sax\_464\_1\_RO\_Cluj  
A\_sax\_488\_1\_BG\_Topolovograd  
A\_sax\_433\_1\_BG\_Krdali  
A\_sax\_461\_1\_RO\_Tulcea  
A\_sax\_462\_1\_RO\_Neamt  
A\_sax\_463\_1\_RO\_Neamt  
A\_leu\_472\_1\_HR\_Cres  
A\_leu\_149\_1\_HR\_Cres  
A\_leu\_442\_1\_HR\_Ciovo  
A\_leu\_423\_1\_HR\_Istra  
A\_leu\_490\_1\_HR\_Korcula  
A\_leu\_361\_1\_HR\_Peljesac  
A\_leu\_421\_1\_HR\_Vis\_Pritiscina  
A\_leu\_161\_1\_HR\_Jabuka  
A\_leu\_199\_1\_HR\_Vis  
A\_leu\_470\_1\_HR\_Palagruza  
A\_leu\_159\_1\_HR\_Palagruza  
A\_leu\_416\_1\_IT\_Porto\_Selvaggio  
A\_leu\_413\_1\_IT\_Capo\_di\_Leuca  
A\_leu\_414\_1\_IT\_Castro  
A\_sin\_457\_6\_IT\_Abruzzi  
A\_sin\_458\_1\_IT\_Gargano  
A\_sin\_357\_1\_HR\_Knin  
A\_sin\_374\_1\_HR\_Zivogosce  
A\_sin\_388\_1\_HR\_Klek  
A\_sin\_355\_1\_HR\_Kozjak  
A\_sin\_371\_1\_HR\_Karlobag  
A\_sin\_474\_1\_HR\_Zakosa  
A\_sin\_477\_1\_HR\_Lukovo  
A\_sin\_469\_1\_HR\_Senj  
A\_sin\_471\_1\_HR\_Cres  
A\_sin\_372\_1\_HR\_Rab  
A\_sin\_370\_1\_HR\_Paklenica  
A\_sin\_399\_1\_HR\_Sibenik  
A\_sin\_356\_1\_HR\_Mosor  
A\_sin\_440\_1\_HR\_Kornati  
A\_leu\_392\_1\_HR\_Split  
A\_sin\_376\_1\_HR\_Dugi\_otok  
A\_sin\_420\_1\_HR\_Biokovo  
A\_sin\_439\_1\_HR\_Dugi\_otok  
A\_sin\_491\_1\_HR\_Doli  
A\_sin\_373\_1\_HR\_Omis  
A\_sin\_398\_1\_HR\_Vransko\_jezero  
A\_mor\_450\_1\_GR\_Peloponnesee  
Fibigia\_clypeata\_KF022972  
Berteroia\_incana\_KF022955  
Berteroia\_mutabilis\_KF022956  
Galitzkya\_macrocarpa\_KF022982  
Galitzkya\_potaninii\_KF022983



A_sax_449_1_GR_Peloponez	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_437_1_GR_Mistras	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_455_1_GR_Timfi	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_396_1_IT_Puglia	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_364_1_GR_Kefalonia	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_365_1_GR_Ithaka	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_384_1_AL_Tepelene	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_385_1_AL_Vlore	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_428_1_MK_Stenje	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_436_1_GR_Farsala	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_451_1_GR_Peloponez	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_359_1_IT_Volturino	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_378_1_MK_Konjsko	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_386_1_AL_Vlore	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_410_1_GR_Sikia	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_448_1_GR_Olimp	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_453_1_GR_Meteora	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_456_2_GR_Kozani	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_265_1_MK_Stenje	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_gio_452_2_GR_Gionae	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_493_1_GR_Samos	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_494_1_GR_Samos	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_492_1_GR_Chios	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_445_1_PO_Czorsztyn	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_404_2_RS_KrA%nice	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACGGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_465_1_RO_Orsova	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_405_2_MK_Vrutok	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_486_1_MK_Treske	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_368_1_MK_Crni_Drim	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_387_1_AL_Mjede	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_429_1_CZ_Bechyne	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_430_1_CZ_Cesky_Krumlov	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_cory_360_1_MK_Crni_Drim	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_cory_481_1_RS_Medvednik	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_cory_379_1_ME_Prokletije	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_cory_389_2_ME_Prokletije	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_cory_484_2_ME_Durmitor	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_cory_454_2_GR_Moni_Stomion	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_cory_447_1_GR_Olympus	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_micro_417_1_BA_Vlasic	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_pet_381_1_SLO_Modrej	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_pet_382_1_SL_Trnovo	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_pet_468_2_RO_Caras_Severin	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_pet_467_1_RO_Caras_Severin	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_pet_363_1_RO_Caras_Severin	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_400_1_HU_Oreg-ko	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_485_1_MK_Novo_Negovican	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_427_1_MK_Demir_Kapija	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_426_1_MK_Bregalnica	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_178_1_RS_Toplji	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_434_1_BG_Rila	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_435_1_BG_Beledi_Han	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_425_1_AU_Durnstein	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA
A_sax_444_1_CZ_Prague	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	ATTGCTCAAC	AAGCATTAA	GAGAGGTTTA

A_sax_489_1_SK_Bratislava	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sax_466_3_RO_Caras_Severin	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sax_460_1_RO_Cheia	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sax_464_1_RO_Cluj	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sax_488_1_BG_Topolovograd	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sax_433_1_BG_Krdali	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sax_461_1_RO_Tulcea	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sax_462_1_RO_Neamt	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sax_463_1_RO_Neamt	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_leu_472_1_HR_Cres	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_leu_149_1_HR_Cres	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_leu_442_1_HR_Ciovo	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_leu_423_1_HR_Istra	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_leu_490_1_HR_Korcula	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_leu_361_1_HR_Peljesac	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_leu_421_1_HR_Vis_Pritiscina	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_leu_161_1_HR_Jabuka	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_leu_199_1_HR_Vis	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_leu_470_1_HR_Palagruza	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_leu_159_1_HR_Palagruza	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_leu_416_1_IT_Porto_Selvaggio	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_leu_413_1_IT_Capo_di_Leuca	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_leu_414_1_IT_Castro	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_457_6_IT_Abruzzi	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_458_1_IT_Gargano	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_357_1_HR_Knin	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_374_1_HR_Zivogosce	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_388_1_HR_Klek	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_355_1_HR_Kozjak	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_371_1_HR_Karlobag	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_474_1_HR_Zakosa	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_477_1_HR_Lukovo	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_469_1_HR_Senj	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_471_1_HR_Cres	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_372_1_HR_Rab	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_370_1_HR_Paklenica	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_399_1_HR_Sibenik	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_356_1_HR_Mosor	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_440_1_HR_Kornati	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_leu_392_1_HR_Split	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_376_1_HR_Dugi_otok	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_420_1_HR_Biokovo	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_439_1_HR_Dugi_otok	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_491_1_HR_Doli	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_373_1_HR_Omis	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_sin_398_1_HR_Vransko_jezero	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
A_mor_450_1_GR_Peloponnes	ATAACGTATA	TAATATCTGT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
Fibigia_clypeata_KF022972	ATAACGTATA	TAATATCTTT	GGTAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTAGCT	CTTGCTCAAA	AAGACATTAA	GAGAGGTTTA
Berteroia_incana_KF022955	ATAACGTATA	TAATATCTTT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
Berteroia_mutabilis_KF022956	ATAACGTATA	TAATATCTTT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
Galitzkya_macrocarpa_KF022982	ATAACGTATA	TAATATCTTT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA
Galitzkya_potaninii_KF022983	ATAACGTATA	TAATATCTTT	GATAGGTATA	ATAACAGTAC	TCTTAGGGGC	CACTTAGCT	CTTGCTCAAC	AAGACATTAA	GAGAGGTTTA

A_sax_449_1_GR_Peloponez	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_437_1_GR_Mistras	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_455_1_GR_Timfi	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTG	GATTACCAT
A_sax_396_1_IT_Puglia	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_364_1_GR_Kefalonia	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_365_1_GR_Ithaka	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_384_1_AL_Tepelene	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_385_1_AL_Vlore	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_428_1_MK_Stenje	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_436_1_GR_Farsala	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTG	GATTACCAT
A_sax_451_1_GR_Peloponez	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_359_1_IT_Volturino	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_378_1_MK_Konjsko	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_386_1_AL_Vlore	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_410_1_GR_Sikia	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_448_1_GR_Olimp	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_453_1_GR_Meteora	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_456_2_GR_Kozani	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_265_1_MK_Stenje	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_gio_452_2_GR_Gionae	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_493_1_GR_Samos	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_494_1_GR_Samos	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_492_1_GR_Chios	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_445_1_PO_Czorsztyn	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_404_2_RS_Kr%C4%8Dnice	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_465_1_RO_Orsova	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_405_2_MK_Vrutok	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_486_1_MK_Treske	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_368_1_MK_Crni_Drim	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_387_1_AL_Mjede	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_429_1_CZ_Bechyne	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_430_1_CZ_Cesky_Krumlov	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_cory_360_1_MK_Crni_Drim	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_cory_481_1_RS_Medvednik	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_cory_379_1_ME_Prokletije	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_cory_389_2_ME_Prokletije	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_cory_484_2_ME_Durmitor	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_cory_454_2_GR_Moni_Stomion	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_cory_447_1_GR_Olympus	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_micro_417_1_BA_Vlasic	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_pet_381_1_SLO_Modrej	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_pet_382_1_SL_Trnovo	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_pet_468_2_RO_Caras_Severin	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_pet_467_1_RO_Caras_Severin	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_pet_363_1_RO_Caras_Severin	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_400_1_HU_Oreg-ko	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_485_1_MK_Novo_Negovican	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_427_1_MK_Demir_Kapija	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_426_1_MK_Bregalnica	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_178_1_RS_Toplji	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_434_1_BG_Rila	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_435_1_BG_Beledi_Han	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_425_1_AU_Durnstein	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT
A_sax_444_1_CZ_Prague	GCCTATTGTTA	CAATGTCCTCA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTTCATTT	GATTACCAT

A_sax_489_1_SK_Bratislava	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sax_466_3_RO_Caras_Severin	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sax_460_1_RO_Cheia	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sax_464_1_RO_Cluj	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sax_488_1_BG_Topolovograd	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sax_433_1_BG_Krdali	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sax_461_1_RO_Tulcea	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sax_462_1_RO_Neamt	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sax_463_1_RO_Neamt	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_leu_472_1_HR_Cres	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_leu_149_1_HR_Cres	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_leu_442_1_HR_Ciovo	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_leu_423_1_HR_Istra	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_leu_490_1_HR_Korcula	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_leu_361_1_HR_Peljesac	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_leu_421_1_HR_Vis_Pritiscina	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_leu_161_1_HR_Jabuka	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_leu_199_1_HR_Vis	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_leu_470_1_HR_Palagruza	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_leu_159_1_HR_Palagruza	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_leu_416_1_IT_Porto_Selvaggio	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_leu_413_1_IT_Capo_di_Leuca	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_leu_414_1_IT_Castro	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_457_6_IT_Abruzzi	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_458_1_IT_Gargano	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_357_1_HR_Knin	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_374_1_HR_Zivogosce	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_388_1_HR_Klek	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_355_1_HR_Kozjak	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_371_1_HR_Karlobag	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_474_1_HR_Zakosa	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_477_1_HR_Lukovo	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_469_1_HR_Senj	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_471_1_HR_Cres	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_372_1_HR_Rab	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_370_1_HR_Paklenica	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_399_1_HR_Sibenik	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_356_1_HR_Mosor	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_440_1_HR_Kornati	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_leu_392_1_HR_Split	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_376_1_HR_Dugi_otok	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_420_1_HR_Biokovo	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_439_1_HR_Dugi_otok	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_491_1_HR_Doli	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_373_1_HR_Omis	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_sin_398_1_HR_Vransko_jezero	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
A_mor_450_1_GR_Peloponnes	GCCTATTCTA	CAATGCTCTA	ACTGGGTTAT	ATGATGTTAG	CTCTAGGTAT	GGGGCTTAT	CGATCTGCTT	TATTCATTT	GATTACCAT
Fibigia_clypeata_KF022972	GCCTATTCTA	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNATTT	GATTACCAT
Berteroia_incana_KF022955	GCCTATTCTA	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNATTT	GATTACCAT
Berteroia_mutabilis_KF022956	GCCTATTCTA	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNATTT	GATTACCAT
Galitzkya_macrocarpa_KF022982	GCCTATTCTA	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNATTT	GATTACCAT
Galitzkya_potaninii_KF022983	GCCTATTCTA	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNNNN	NNNNNNNATTT	GATTACCAT

A_sax_449_1_GR_Peloponez	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_437_1_GR_Mistras	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_455_1_GR_Timfi	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_396_1_IT_Puglia	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_364_1_GR_Kefalonia	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_365_1_GR_Ithaka	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_384_1_AL_Tepelene	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_385_1_AL_Vlore	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_428_1_MK_Stenje	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_436_1_GR_Farsala	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_451_1_GR_Peloponez	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_359_1_IT_Volturino	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_378_1_MK_Konjsko	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_386_1_AL_Vlore	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_410_1_GR_Sikia	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_448_1_GR_Olimp	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_453_1_GR_Meteora	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_456_2_GR_Kozani	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_265_1_MK_Stenje	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_gio_452_2_GR_Gionae	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_493_1_GR_Samos	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_494_1_GR_Samos	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_492_1_GR_Chios	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_445_1_PO_Czorsztyn	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_404_2_RS_Kra%nice	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_465_1_RO_Orsova	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_405_2_MK_Vrutok	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_486_1_MK_Treske	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_368_1_MK_Crni_Drim	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_387_1_AL_Mjede	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_429_1_CZ_Bechyne	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_430_1_CZ_Cesky_Krumlov	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_cory_360_1_MK_Crni_Drim	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_cory_481_1_RS_Medvednik	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_cory_379_1_ME_Prokletije	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_cory_389_2_ME_Prokletije	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_cory_484_2_ME_Durmitor	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_cory_454_2_GR_Moni_Stomion	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_cory_447_1_GR_Olympus	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_micro_417_1_BA_Vlastic	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_pet_381_1_SLO_Modrej	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_pet_382_1_SL_Trnovo	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_pet_468_2_RO_Caras_Severin	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_pet_467_1_RO_Caras_Severin	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_pet_363_1_RO_Caras_Severin	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_400_1_HU_Oreg_ko	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_485_1_MK_Novo_Negovican	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_427_1_MK_Demir_Kapija	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_426_1_MK_Bregalnica	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_178_1_RS_Topli	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_434_1_BG_Rila	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_435_1_BG_Beledi_Han	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_425_1_AU_Durnstein	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG
A_sax_444_1_CZ_Prague	GCTTATT <del>C</del> GA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCA <del>T</del> TC	AATGGAA <del>G</del> CT	GTAGTTGGAT	ATTCTCCC <del>G</del> A	TAAAAGTCAG

A_sax_489_1_SK_Bratislava	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sax_466_3_RO_Caras_Severin	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sax_460_1_RO_Cheia	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sax_464_1_RO_Cluj	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sax_488_1_BG_Topolovograd	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sax_433_1_BG_Krdali	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sax_461_1_RO_Tulcea	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sax_462_1_RO_Neamt	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sax_463_1_RO_Neamt	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_leu_472_1_HR_Cres	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_leu_149_1_HR_Cres	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_leu_442_1_HR_Ciovo	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_leu_423_1_HR_Istra	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGAGCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_leu_490_1_HR_Korcula	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_leu_361_1_HR_Peljesac	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_leu_421_1_HR_Vis_Pritiscina	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_leu_161_1_HR_Jabuka	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_leu_199_1_HR_Vis	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_leu_470_1_HR_Palagruza	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_leu_159_1_HR_Palagruza	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_leu_416_1_IT_Porto_Selvaggio	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_leu_413_1_IT_Capo_di_Leuca	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_leu_414_1_IT_Castro	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_457_6_IT_Abruzzi	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_458_1_IT_Gargano	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_357_1_HR_Knin	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_374_1_HR_Zivogosce	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_388_1_HR_Klek	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_355_1_HR_Kozjak	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_371_1_HR_Karlobag	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_474_1_HR_Zakosa	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_477_1_HR_Lukovo	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_469_1_HR_Senj	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_471_1_HR_Cres	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_372_1_HR_Rab	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_370_1_HR_Paklenica	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_399_1_HR_Sibenik	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_356_1_HR_Mosor	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_440_1_HR_Kornati	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_leu_392_1_HR_Split	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_376_1_HR_Dugi_otok	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_420_1_HR_Biokovo	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_439_1_HR_Dugi_otok	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_491_1_HR_Doli	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_373_1_HR_Omis	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_sin_398_1_HR_Vransko_jezero	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
A_mor_450_1_GR_Peloponnes	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
Fibigia_clypeata_KF022972	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
Berteroia_incana_KF022955	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
Berteroia_mutabilis_KF022956	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
Galitzkya_macrocarpa_KF022982	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG
Galitzkya_potaninii_KF022983	GCTTATTCTGA	AAGCGTTGTT	GTTTTTAGGA	TCTGGATCCA	TTATTCAATT	AAAGGAAGCT	GTAGTTGGAT	ATTCTCCCGA	AAAAAGTCAG

A_sax_449_1_GR_Peloponez	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAT	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_437_1_GR_Mistras	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_455_1_GR_Timfi	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_396_1_IT_Puglia	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_364_1_GR_Kefalonia	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_365_1_GR_Ithaka	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_384_1_AL_Tepelene	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_385_1_AL_Vlore	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_428_1_MK_Stenje	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_436_1_GR_Farsala	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_451_1_GR_Peloponez	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_359_1_IT_Volturino	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_378_1_MK_Konjsko	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_386_1_AL_Vlore	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_410_1_GR_Sikia	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_448_1_GR_Olimp	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_453_1_GR_Meteora	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_456_2_GR_Kozani	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_265_1_MK_Stenje	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_gio_452_2_GR_Gionae	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_493_1_GR_Samos	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_494_1_GR_Samos	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_492_1_GR_Chios	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_445_1_PO_Czorsztyn	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_404_2_RS_KrA%nice	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_465_1_RO_Orsova	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_405_2_MK_Vrutok	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_486_1_MK_Treske	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_368_1_MK_Crni_Drim	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_387_1_AL_Mjede	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_429_1_CZ_Bechyne	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_430_1_CZ_Cesky_Krumlov	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_cory_360_1_MK_Crni_Drim	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_cory_481_1_RS_Medvednik	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_cory_379_1_ME_Prokletije	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_cory_389_2_ME_Prokletije	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_cory_484_2_ME_Durmitor	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_cory_454_2_GR_Moni_Stomion	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_cory_447_1_GR_Olympus	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_micro_417_1_BA_Vlasic	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_pet_381_1_SLO_Modrej	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_pet_382_1_SL_Trnovo	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_pet_468_2_RO_Caras_Severin	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_pet_467_1_RO_Caras_Severin	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_pet_363_1_RO_Caras_Severin	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_400_1_HU_Oreg-ko	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_485_1_MK_Novo_Negovican	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_427_1_MK_Demir_Kapija	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_426_1_MK_Bregalnica	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_178_1_RS_Toplji	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_434_1_BG_Rila	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_435_1_BG_Beledi_Han	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_425_1_AU_Durnstein	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC
A_sax_444_1_CZ_Prague	AATATGATTG	TTATGGGTGG	TTTGACAAAAA	CATGCGCCGA	TTACAAAAAAAC	GGCC	TTTTTA	GAGGAACAC	TTTCTCTTTC	TGGTATTCC

A\_sax\_489\_1\_SK\_Bratislava  
 A\_sax\_466\_3\_RO\_Caras\_Severin  
 A\_sax\_460\_1\_RO\_Cheia  
 A\_sax\_464\_1\_RO\_Cluj  
 A\_sax\_488\_1\_BG\_Topolovograd  
 A\_sax\_433\_1\_BG\_Krdali  
 A\_sax\_461\_1\_RO\_Tulcea  
 A\_sax\_462\_1\_RO\_Neamt  
 A\_sax\_463\_1\_RO\_Neamt  
 A\_leu\_472\_1\_HR\_Cres  
 A\_leu\_149\_1\_HR\_Cres  
 A\_leu\_442\_1\_HR\_Ciovo  
 A\_leu\_423\_1\_HR\_Istra  
 A\_leu\_490\_1\_HR\_Korcula  
 A\_leu\_361\_1\_HR\_Peljesac  
 A\_leu\_421\_1\_HR\_Vis\_Pritiscina  
 A\_leu\_161\_1\_HR\_Jabuka  
 A\_leu\_199\_1\_HR\_Vis  
 A\_leu\_470\_1\_HR\_Palagruza  
 A\_leu\_159\_1\_HR\_Palagruza  
 A\_leu\_416\_1\_IT\_Porto\_Selvaggio  
 A\_leu\_413\_1\_IT\_Capo\_di\_Leuca  
 A\_leu\_414\_1\_IT\_Castro  
 A\_sin\_457\_6\_IT\_Abruzzi  
 A\_sin\_458\_1\_IT\_Gargano  
 A\_sin\_357\_1\_HR\_Knin  
 A\_sin\_374\_1\_HR\_Zivogosce  
 A\_sin\_388\_1\_HR\_Klek  
 A\_sin\_355\_1\_HR\_Kozjak  
 A\_sin\_371\_1\_HR\_Karlobag  
 A\_sin\_474\_1\_HR\_Zakosa  
 A\_sin\_477\_1\_HR\_Lukovo  
 A\_sin\_469\_1\_HR\_Senj  
 A\_sin\_471\_1\_HR\_Cres  
 A\_sin\_372\_1\_HR\_Rab  
 A\_sin\_370\_1\_HR\_Paklenica  
 A\_sin\_399\_1\_HR\_Sibenik  
 A\_sin\_356\_1\_HR\_Mosor  
 A\_sin\_440\_1\_HR\_Kornati  
 A\_leu\_392\_1\_HR\_Split  
 A\_sin\_376\_1\_HR\_Dugi\_otock  
 A\_sin\_420\_1\_HR\_Biokovo  
 A\_sin\_439\_1\_HR\_Dugi\_otock  
 A\_sin\_491\_1\_HR\_Doli  
 A\_sin\_373\_1\_HR\_Omis  
 A\_sin\_398\_1\_HR\_Vransko\_jezero  
 A\_mor\_450\_1\_GR\_Peloponnese  
 Fibigia\_clypeata\_KF022972  
 Berteroia\_incana\_KF022955  
 Berteroia\_mutabilis\_KF022956  
 Galitzkya\_macrocarpa\_KF022982  
 Galitzkya\_potaninii\_KF022983



A_sax_449_1_GR_Peloponez	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_437_1_GR_Mistras	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_455_1_GR_Timfi	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_396_1_IT_Puglia	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_364_1_GR_Kefalonia	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_365_1_GR_Ithaka	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_384_1_AL_Tepelene	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_385_1_AL_Vlore	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_428_1_MK_Stenje	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_436_1_GR_Farsala	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_451_1_GR_Peloponez	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_359_1_IT_Volturino	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_378_1_MK_Konjsko	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_386_1_AL_Vlore	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_410_1_GR_Sikia	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_448_1_GR_Olimp	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_453_1_GR_Meteora	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_456_2_GR_Kozani	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_265_1_MK_Stenje	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_gio_452_2_GR_Gionae	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_493_1_GR_Samos	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_494_1_GR_Samos	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_492_1_GR_Chios	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_445_1_PO_Czorsztyn	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_404_2_RS_Kra%nice	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_465_1_RO_Orsova	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_405_2_MK_Vrutok	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_486_1_MK_Treske	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_368_1_MK_Crni_Drim	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_387_1_AL_Mjede	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_429_1_CZ_Bechyne	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_430_1_CZ_Cesky_Krumlov	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_cory_360_1_MK_Crni_Drim	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_cory_481_1_RS_Medvednik	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_cory_379_1_ME_Prokletije	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_cory_389_2_ME_Prokletije	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_cory_484_2_ME_Durmitor	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_cory_454_2_GR_Moni_Stomion	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_cory_447_1_GR_Olympus	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_micro_417_1_BA_Vlasic	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_pet_381_1_SLO_Modrej	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_pet_382_1_SL_Trnovo	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_pet_468_2_RO_Caras_Severin	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_pet_467_1_RO_Caras_Severin	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_pet_363_1_RO_Caras_Severin	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_400_1_HU_Oreg-ko	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_485_1_MK_Novo_Negovican	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_427_1_MK_Demir_Kapija	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_426_1_MK_Bregalnica	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_178_1_RS_Toplji	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_434_1_BG_Rila	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_435_1_BG_Beledi_Han	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_425_1_AU_Durnstein	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG
A_sax_444_1_CZ_Prague	CCCCCTTGCGTT	GTTTGTGGTC	TAAAGATGAA	ATTCTTAATG	ATAGTTTTTT	GTTTTCGCCA	ATTTTTCGCAA	TAATAGCTTG	TTCAACGGCG

A\_sax\_489\_1\_SK\_Bratislava  
A\_sax\_466\_3\_RO\_Caras\_Severin  
A\_sax\_460\_1\_RO\_Cheia  
A\_sax\_464\_1\_RO\_Cluj  
A\_sax\_488\_1\_BG\_Topolovograd  
A\_sax\_433\_1\_BG\_Krdali  
A\_sax\_461\_1\_RO\_Tulcea  
A\_sax\_462\_1\_RO\_Neamt  
A\_sax\_463\_1\_RO\_Neamt  
A\_leu\_472\_1\_HR\_Cres  
A\_leu\_149\_1\_HR\_Cres  
A\_leu\_442\_1\_HR\_Ciovo  
A\_leu\_423\_1\_HR\_Istra  
A\_leu\_490\_1\_HR\_Korcula  
A\_leu\_361\_1\_HR\_Peljesac  
A\_leu\_421\_1\_HR\_Vis\_Pritiscina  
A\_leu\_161\_1\_HR\_Jabuka  
A\_leu\_199\_1\_HR\_Vis  
A\_leu\_470\_1\_HR\_Palagruza  
A\_leu\_159\_1\_HR\_Palagruza  
A\_leu\_416\_1\_IT\_Porto\_Selvaggio  
A\_leu\_413\_1\_IT\_Capo\_di\_Leuca  
A\_leu\_414\_1\_IT\_Castro  
A\_sin\_457\_6\_IT\_Abruzzi  
A\_sin\_458\_1\_IT\_Gargano  
A\_sin\_357\_1\_HR\_Knin  
A\_sin\_374\_1\_HR\_Zivogosce  
A\_sin\_388\_1\_HR\_Klek  
A\_sin\_355\_1\_HR\_Kozjak  
A\_sin\_371\_1\_HR\_Karlobag  
A\_sin\_474\_1\_HR\_Zakosa  
A\_sin\_477\_1\_HR\_Lukovo  
A\_sin\_469\_1\_HR\_Senj  
A\_sin\_471\_1\_HR\_Cres  
A\_sin\_372\_1\_HR\_Rab  
A\_sin\_370\_1\_HR\_Paklenica  
A\_sin\_399\_1\_HR\_Sibenik  
A\_sin\_356\_1\_HR\_Mosor  
A\_sin\_440\_1\_HR\_Kornati  
A\_leu\_392\_1\_HR\_Split  
A\_sin\_376\_1\_HR\_Dugi\_otok  
A\_sin\_420\_1\_HR\_Biokovo  
A\_sin\_439\_1\_HR\_Dugi\_otok  
A\_sin\_491\_1\_HR\_Doli  
A\_sin\_373\_1\_HR\_Omis  
A\_sin\_398\_1\_HR\_Vransko\_jezero  
A\_mor\_450\_1\_GR\_Peloponnes  
Fibigia\_clypeata\_KF022972  
Berteroia\_incana\_KF022955  
Berteroia\_mutabilis\_KF022956  
Galitzkya\_macrocarpa\_KF022982  
Galitzkya\_potaninii\_KF022983

The sequence logo displays the probability of each nucleotide (A, T, C, G) occurring at each position in the sequence. The x-axis represents the four nucleotides (A, T, C, G) and the y-axis represents the position of the sequence. The color intensity indicates the frequency of each nucleotide at each position.

Position	A	T	C	G
1	0.15	0.85	0.0	0.0
2	0.15	0.85	0.0	0.0
3	0.15	0.85	0.0	0.0
4	0.15	0.85	0.0	0.0
5	0.15	0.85	0.0	0.0
6	0.15	0.85	0.0	0.0
7	0.15	0.85	0.0	0.0
8	0.15	0.85	0.0	0.0
9	0.15	0.85	0.0	0.0
10	0.15	0.85	0.0	0.0
11	0.15	0.85	0.0	0.0
12	0.15	0.85	0.0	0.0
13	0.15	0.85	0.0	0.0
14	0.15	0.85	0.0	0.0
15	0.15	0.85	0.0	0.0
16	0.15	0.85	0.0	0.0
17	0.15	0.85	0.0	0.0
18	0.15	0.85	0.0	0.0
19	0.15	0.85	0.0	0.0
20	0.15	0.85	0.0	0.0
21	0.15	0.85	0.0	0.0
22	0.15	0.85	0.0	0.0
23	0.15	0.85	0.0	0.0
24	0.15	0.85	0.0	0.0
25	0.15	0.85	0.0	0.0
26	0.15	0.85	0.0	0.0
27	0.15	0.85	0.0	0.0
28	0.15	0.85	0.0	0.0
29	0.15	0.85	0.0	0.0
30	0.15	0.85	0.0	0.0
31	0.15	0.85	0.0	0.0
32	0.15	0.85	0.0	0.0
33	0.15	0.85	0.0	0.0
34	0.15	0.85	0.0	0.0
35	0.15	0.85	0.0	0.0
36	0.15	0.85	0.0	0.0
37	0.15	0.85	0.0	0.0
38	0.15	0.85	0.0	0.0
39	0.15	0.85	0.0	0.0
40	0.15	0.85	0.0	0.0
41	0.15	0.85	0.0	0.0
42	0.15	0.85	0.0	0.0
43	0.15	0.85	0.0	0.0
44	0.15	0.85	0.0	0.0
45	0.15	0.85	0.0	0.0

1261

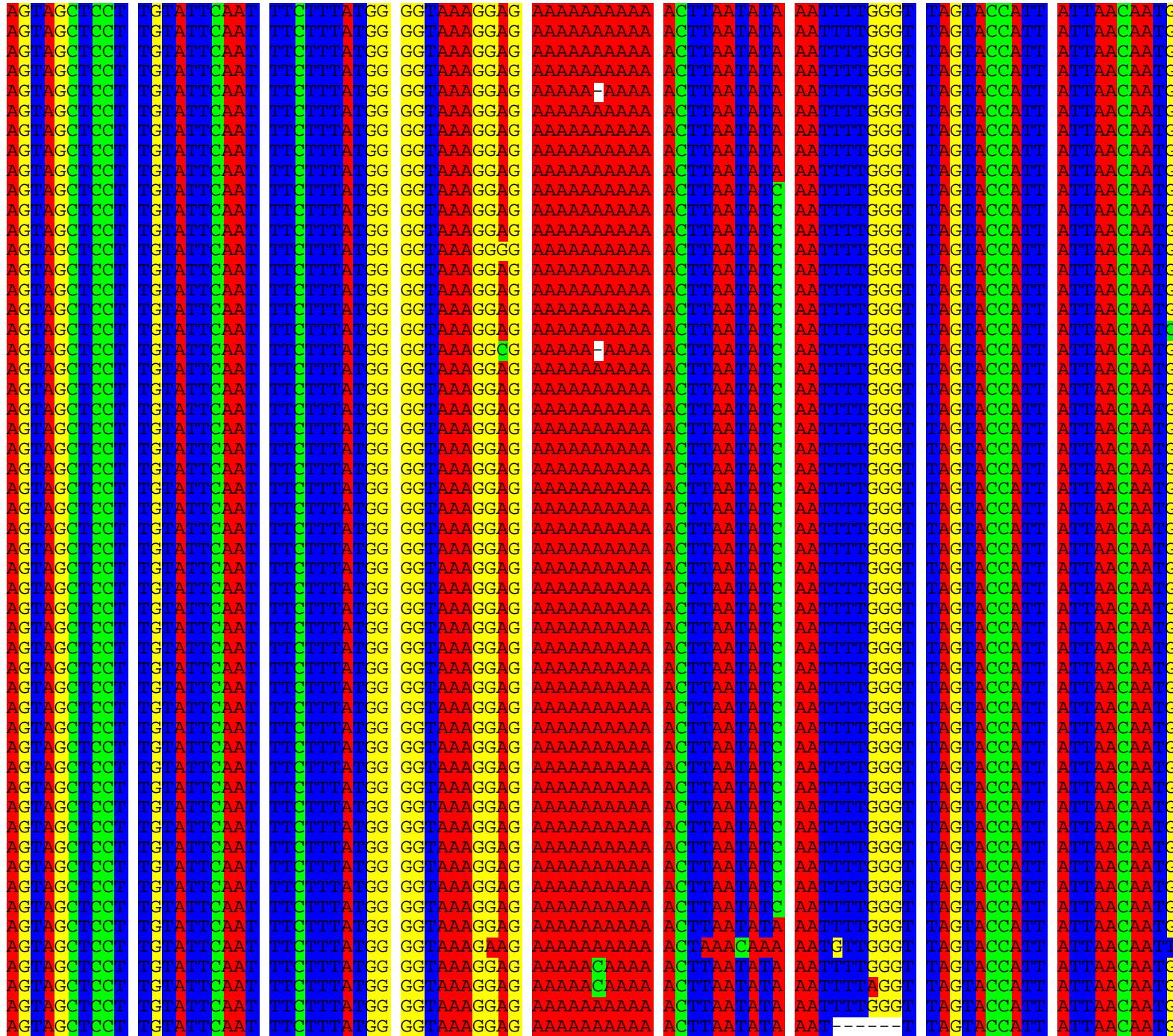
A_sax_449_1_GR_Peloponez	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_437_1_GR_Mistras	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_455_1_GR_Timfi	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_396_1_IT_Puglia	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_364_1_GR_Kefalonia	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_365_1_GR_Ithaka	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_384_1_AL_Tepelene	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_385_1_AL_Vlore	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_428_1_MK_Stenje	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_436_1_GR_Farsala	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_451_1_GR_Peloponez	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_359_1_IT_Volturino	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_378_1_MK_Konjsko	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_386_1_AL_Vlore	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_410_1_GR_Sikia	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_448_1_GR_Olimp	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_453_1_GR_Meteora	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_456_2_GR_Kozani	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_265_1_MK_Stenje	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_gio_452_2_GR_Gionae	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_493_1_GR_Samos	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_494_1_GR_Samos	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_492_1_GR_Chios	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_445_1_PO_Czorsztyn	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_404_2_RS_KrA%nice	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_465_1_RO_Orsova	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_405_2_MK_Vrutok	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_486_1_MK_Treske	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_368_1_MK_Crni_Drim	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_387_1_AL_Mjede	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_429_1_CZ_Bechyne	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_430_1_CZ_Cesky_Krumlov	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_cory_360_1_MK_Crni_Drim	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_cory_481_1_RS_Medvednik	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_cory_379_1_ME_Prokletije	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_cory_389_2_ME_Prokletije	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_cory_484_2_ME_Durmitor	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_cory_454_2_GR_Moni_Stomion	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_cory_447_1_GR_Olympus	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_micro_417_1_BA_Vlasic	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_pet_381_1_SLO_Modrej	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_pet_382_1_SL_Trnovo	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_pet_468_2_RO_Caras_Severin	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_pet_467_1_RO_Caras_Severin	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_pet_363_1_RO_Caras_Severin	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_400_1_HU_Oreg-ko	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_485_1_MK_Novo_Negovican	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_427_1_MK_Demir_Kapija	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_426_1_MK_Bregalnica	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_178_1_RS_Toplji	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_434_1_BG_Rila	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_435_1_BG_Beledi_Han	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_425_1_AU_Durnstein	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_444_1_CZ_Prague	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA

A_sax_489_1_SK_Bratislava	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_466_3_RO_Caras_Severin	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_460_1_RO_Cheia	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_464_1_RO_Cluj	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_488_1_BG_Topolovograd	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_433_1_BG_Krdali	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_461_1_RO_Tulcea	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_462_1_RO_Neamt	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sax_463_1_RO_Neamt	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_leu_472_1_HR_Cres	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_leu_149_1_HR_Cres	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_leu_442_1_HR_Ciovo	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTGA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_leu_423_1_HR_Istra	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_leu_490_1_HR_Korcula	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_leu_361_1_HR_Peljesac	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_leu_421_1_HR_Vis_Pritiscina	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_leu_161_1_HR_Jabuka	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_leu_199_1_HR_Vis	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_leu_470_1_HR_Palagruza	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_leu_159_1_HR_Palagruza	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_leu_416_1_IT_Porto_Selvaggio	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_leu_413_1_IT_Capo_di_Leuca	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTTC	TAAATTACAG	TGGAAAAAAA
A_leu_414_1_IT_Castro	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTTC	TAAATTACAG	TGGAAAAAAA
A_sin_457_6_IT_Abruzzi	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTATAG	TGGAAAAAAA
A_sin_458_1_IT_Gargano	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_357_1_HR_Knin	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_374_1_HR_Zivogosce	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_388_1_HR_Klek	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_355_1_HR_Kozjak	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_371_1_HR_Karlobag	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_474_1_HR_Zakosa	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_477_1_HR_Lukovo	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_469_1_HR_Senj	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_471_1_HR_Cres	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_372_1_HR_Rab	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_370_1_HR_Paklenica	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_399_1_HR_Sibenik	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_356_1_HR_Mosor	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_440_1_HR_Kornati	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_leu_392_1_HR_Split	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_376_1_HR_Dugi_otok	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_420_1_HR_Biokovo	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_439_1_HR_Dugi_otok	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_491_1_HR_Doli	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_373_1_HR_Omis	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_sin_398_1_HR_Vransko_jezero	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
A_mor_450_1_GR_Peloponnes	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
Fibigia_clypeata_KF022972	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
Berteroia_incana_KF022955	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
Berteroia_mutabilis_KF022956	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
Galitzkya_macrocarpa_KF022982	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA
Galitzkya_potaninii_KF022983	GGATTAACCG	CATTTATAT	GTTTCTGATT	TATTTACTTA	CTTTGAAGG	GCATTTAAC	ACTTATTTA	TAAATTACAG	TGGAAAAAAA

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A_sax_449_1_GR_Peloponez	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_437_1_GR_Mistras	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_455_1_GR_Timfi	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_396_1_IT_Puglia	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_364_1_GR_Kefalonia	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_365_1_GR_Ithaka	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_384_1_AL_Tepelene	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_385_1_AL_Vlore	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_428_1_MK_Stenje	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_436_1_GR_Farsala	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_451_1_GR_Peloponez	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_359_1_IT_Volturino	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_378_1_MK_Konjsko	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_386_1_AL_Vlore	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_410_1_GR_Sikia	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_448_1_GR_Olimp	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_453_1_GR_Meteora	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_456_2_GR_Kozani	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_265_1_MK_Stenje	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_gio_452_2_GR_Gionae	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_493_1_GR_Samos	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_494_1_GR_Samos	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_492_1_GR_Chios	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_445_1_PO_Czorsztyn	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_404_2_RS_KrA%nice	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_465_1_RO_Orsova	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_405_2_MK_Vrutok	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_486_1_MK_Treske	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_368_1_MK_Crni_Drim	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_387_1_AL_Mjede	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_429_1_CZ_Bechyne	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_430_1_CZ_Cesky_Krumlov	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_cory_360_1_MK_Crni_Drim	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_cory_481_1_RS_Medvednik	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_cory_379_1_ME_Prokletije	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_cory_389_2_ME_Prokletije	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
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A_cory_454_2_GR_Moni_Stomion	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_cory_447_1_GR_Olympus	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_micro_417_1_BA_Vlasic	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_pet_381_1_SLO_Modrej	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_pet_382_1_SL_Trnovo	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_pet_468_2_RO_Caras_Severin	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_pet_467_1_RO_Caras_Severin	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_pet_363_1_RO_Caras_Severin	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_400_1_HU_Oreg-ko	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_485_1_MK_Novo_Negovican	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_427_1_MK_Demir_Kapija	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_426_1_MK_Bregalnica	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_178_1_RS_Toplji	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_434_1_BG_Rila	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_435_1_BG_Beledi_Han	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_425_1_AU_Durnstein	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG
A_sax_444_1_CZ_Prague	AGTAGCTCCT	TGTATTCAAT	TTCTTTATGG	GGTAAAGGAG	AAAAAAA	ACTTAATATA	AATTTGGGT	TAGTACCAT	ATTAACAATG

A\_sax\_489\_1\_SK\_Bratislava  
A\_sax\_466\_3\_RO\_Caras\_Severin  
A\_sax\_460\_1\_RO\_Cheia  
A\_sax\_464\_1\_RO\_Cluj  
A\_sax\_488\_1\_BG\_Topolovograd  
A\_sax\_433\_1\_BG\_Krdali  
A\_sax\_461\_1\_RO\_Tulcea  
A\_sax\_462\_1\_RO\_Neamt  
A\_sax\_463\_1\_RO\_Neamt  
A\_leu\_472\_1\_HR\_Cres  
A\_leu\_149\_1\_HR\_Cres  
A\_leu\_442\_1\_HR\_Ciovo  
A\_leu\_423\_1\_HR\_Istra  
A\_leu\_490\_1\_HR\_Korcula  
A\_leu\_361\_1\_HR\_Peljesac  
A\_leu\_421\_1\_HR\_Vis\_Pritiscina  
A\_leu\_161\_1\_HR\_Jabuka  
A\_leu\_199\_1\_HR\_Vis  
A\_leu\_470\_1\_HR\_Palagruza  
A\_leu\_159\_1\_HR\_Palagruza  
A\_leu\_416\_1\_IT\_Porto\_Selvaggio  
A\_leu\_413\_1\_IT\_Capo\_di\_Leuca  
A\_leu\_414\_1\_IT\_Castro  
A\_sin\_457\_6\_IT\_Abruzzi  
A\_sin\_458\_1\_IT\_Gargano  
A\_sin\_357\_1\_HR\_Knin  
A\_sin\_374\_1\_HR\_Zivogosce  
A\_sin\_388\_1\_HR\_Klek  
A\_sin\_355\_1\_HR\_Kozjak  
A\_sin\_371\_1\_HR\_Karlobag  
A\_sin\_474\_1\_HR\_Zakosa  
A\_sin\_477\_1\_HR\_Lukovo  
A\_sin\_469\_1\_HR\_Senj  
A\_sin\_471\_1\_HR\_Cres  
A\_sin\_372\_1\_HR\_Rab  
A\_sin\_370\_1\_HR\_Paklenica  
A\_sin\_399\_1\_HR\_Sibenik  
A\_sin\_356\_1\_HR\_Mosor  
A\_sin\_440\_1\_HR\_Kornati  
A\_leu\_392\_1\_HR\_Split  
A\_sin\_376\_1\_HR\_Dugi\_otok  
A\_sin\_420\_1\_HR\_Biokovo  
A\_sin\_439\_1\_HR\_Dugi\_otok  
A\_sin\_491\_1\_HR\_Doli  
A\_sin\_373\_1\_HR\_Omis  
A\_sin\_398\_1\_HR\_Vransko\_jezero  
A\_mor\_450\_1\_GR\_Peloponnes  
Fibigia\_clypeata\_KF022972  
Berteroia\_incana\_KF022955  
Berteroia\_mutabilis\_KF022956  
Galitzkya\_macrocarpa\_KF022982  
Galitzkya\_potaninii\_KF022983



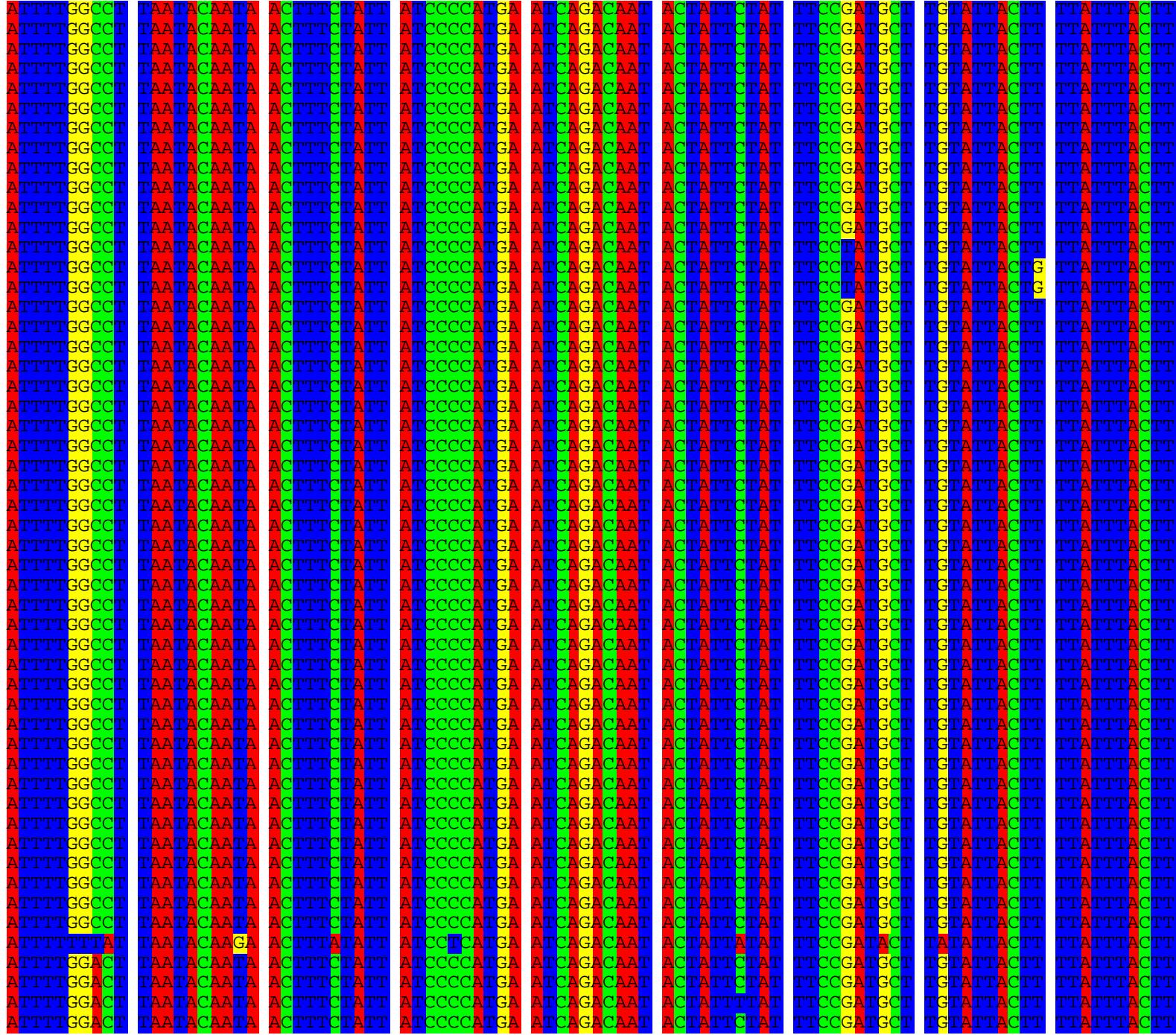
A_sax_449_1_GR_Peloponez	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_437_1_GR_Mistras	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_455_1_GR_Timfi	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_396_1_IT_Puglia	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_364_1_GR_Kefalonia	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_365_1_GR_Ithaka	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_384_1_AL_Tepelene	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_385_1_AL_Vlore	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_428_1_MK_Stenje	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_436_1_GR_Farsala	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_451_1_GR_Peloponez	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_359_1_IT_Volturino	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
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A_sax_410_1_GR_Sikia	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_448_1_GR_Olimp	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_453_1_GR_Meteora	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_456_2_GR_Kozani	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_265_1_MK_Stenje	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_gio_452_2_GR_Gionae	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_493_1_GR_Samos	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_494_1_GR_Samos	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_492_1_GR_Chios	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_445_1_PO_Czorsztyn	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_404_2_RS_KrA%nice	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_465_1_RO_Orsova	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_405_2_MK_Vrutok	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAACCA	AACTTTATT	ACTGTTGAAA
A_sax_486_1_MK_Treske	AATAATAGGA	AAAGAACTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_sax_368_1_MK_Crni_Drim	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_sax_387_1_AL_Mjede	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_sax_429_1_CZ_Bechyne	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_sax_430_1_CZ_Cesky_Krumlov	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_cory_360_1_MK_Crni_Drim	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_cory_481_1_RS_Medvednik	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_cory_379_1_ME_Prokletije	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_cory_389_2_ME_Prokletije	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_cory_484_2_ME_Durmitor	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_cory_454_2_GR_Moni_Stomion	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_cory_447_1_GR_Olympus	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_micro_417_1_BA_Vlasic	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_pet_381_1_SLO_Modrej	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_pet_382_1_SL_Trnovo	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_pet_468_2_RO_Caras_Severin	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_pet_467_1_RO_Caras_Severin	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_pet_363_1_RO_Caras_Severin	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_sax_400_1_HU_Oreg-ko	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_sax_485_1_MK_Novo_Negovican	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_sax_427_1_MK_Demir_Kapija	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_sax_426_1_MK_Bregalnica	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_sax_178_1_RS_Toplji	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_sax_434_1_BG_Rila	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_sax_435_1_BG_Beledi_Han	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_sax_425_1_AU_Durnstein	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA
A_sax_444_1_CZ_Prague	AATAATAGGA	AAAGAGCTTC	TTTTT-TT	TCAAAAAAAC	ATATAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTATT	ACTGTTGAAA

A_sax_489_1_SK_Bratislava	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sax_466_3_RO_Caras_Severin	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sax_460_1_RO_Cheia	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sax_464_1_RO_Cluj	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sax_488_1_BG_Topolovograd	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sax_433_1_BG_Krdali	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sax_461_1_RO_Tulcea	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sax_462_1_RO_Neamt	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sax_463_1_RO_Neamt	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_leu_472_1_HR_Cres	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_leu_149_1_HR_Cres	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_leu_442_1_HR_Ciovo	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_leu_423_1_HR_Istra	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_leu_490_1_HR_Korcula	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_leu_361_1_HR_Peljesac	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_leu_421_1_HR_Vis_Pritiscina	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_leu_161_1_HR_Jabuka	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_leu_199_1_HR_Vis	AAATAATAGGA	AAAGAGCTTC	TTTTTTTTTT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA	
A_leu_470_1_HR_Palagruza	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_leu_159_1_HR_Palagruza	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
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A_leu_414_1_IT_Castro	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sin_457_6_IT_Abruzzi	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
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A_sin_357_1_HR_Knin	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sin_374_1_HR_Zivogosce	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sin_388_1_HR_Klek	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sin_355_1_HR_Kozjak	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sin_371_1_HR_Karlobag	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sin_474_1_HR_Zakosa	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sin_477_1_HR_Lukovo	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
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A_sin_370_1_HR_Paklenica	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sin_399_1_HR_Sibenik	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
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A_leu_392_1_HR_Split	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sin_376_1_HR_Dugi_otok	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_sin_420_1_HR_Biokovo	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
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A_sin_491_1_HR_Doli	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
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A_sin_398_1_HR_Vransko_jezero	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
A_mor_450_1_GR_Peloponnes	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
Fibigia_clypeata_KF022972	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	GCAAGAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
Berteroia_incana_KF022955	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
Berteroia_mutabilis_KF022956	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
Galitzkya_macrocarpa_KF022982	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA
Galitzkya_potaninii_KF022983	AAATAATAGGA	AAAGAGCTTC	TTTTTT	-TT	TCAAAAAAAC	ATATAAAAATT	AGTAATAATG	TAAGAAATCA	AACTTTTATT	ACTGTTGAAA

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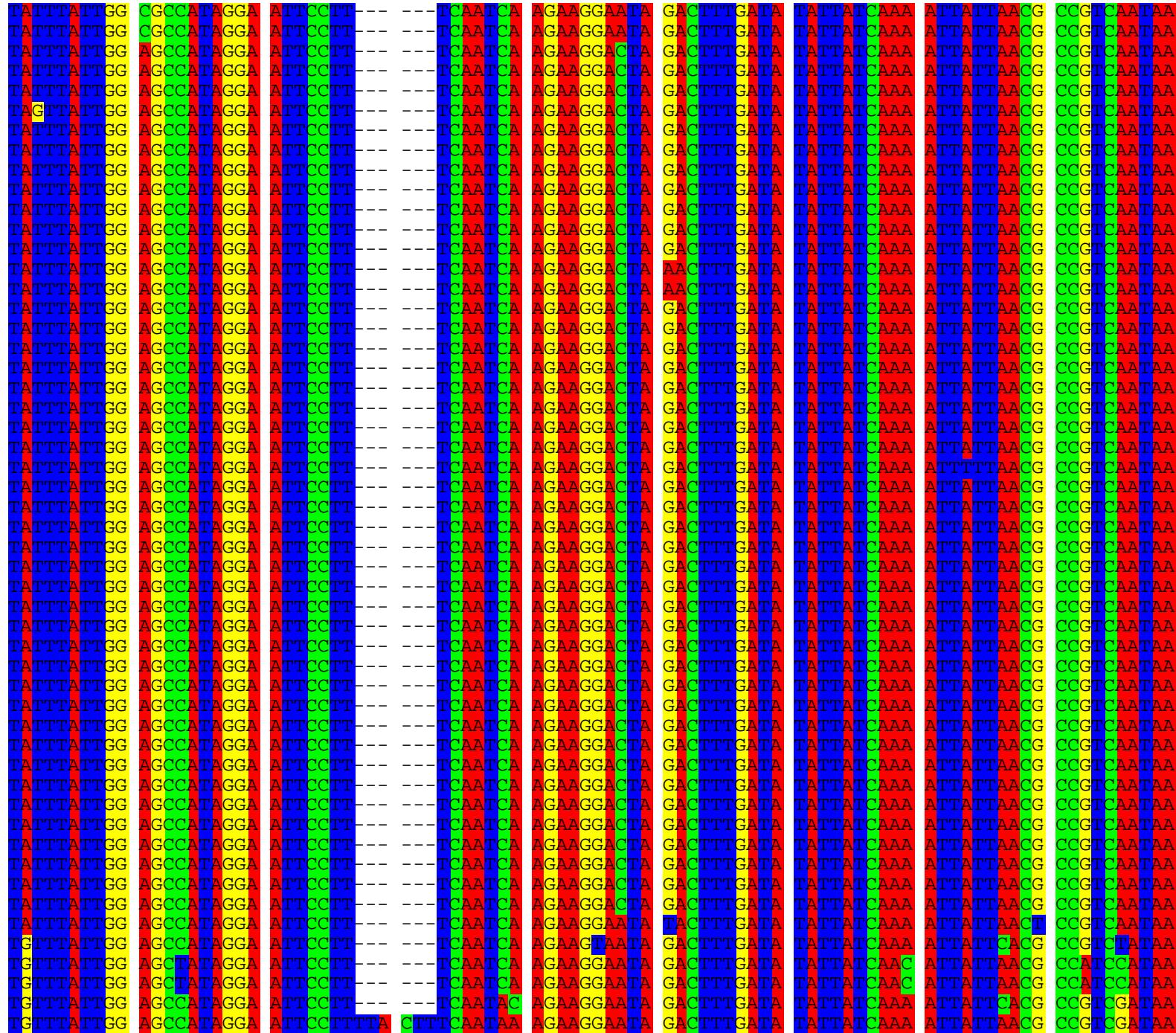
A_sax_449_1_GR_Peloponez	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_437_1_GR_Mistras	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_455_1_GR_Timfi	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_396_1_IT_Puglia	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_364_1_GR_Kefalonia	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_365_1_GR_Ithaka	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_384_1_AL_Tepelene	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_385_1_AL_Vlore	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_428_1_MK_Stenje	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_436_1_GR_Farsala	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_451_1_GR_Peloponez	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_359_1_IT_Volturino	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_378_1_MK_Konjsko	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_386_1_AL_Vlore	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_410_1_GR_Sikia	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_448_1_GR_Olimp	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_453_1_GR_Meteora	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_456_2_GR_Kozani	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_265_1_MK_Stenje	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_gio_452_2_GR_Gionae	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_493_1_GR_Samos	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_494_1_GR_Samos	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_492_1_GR_Chios	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_445_1_PO_Czorsztyn	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_404_2_RS_Kra%nice	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_465_1_RO_Orsova	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_405_2_MK_Vrutok	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_486_1_MK_Treske	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_368_1_MK_Crni_Drim	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_387_1_AL_Mjede	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_429_1_CZ_Bechyne	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_430_1_CZ_Cesky_Krumlov	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_cory_360_1_MK_Crni_Drim	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_cory_481_1_RS_Medvednik	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_cory_379_1_ME_Prokletije	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_cory_389_2_ME_Prokletije	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_cory_484_2_ME_Durmitor	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_cory_454_2_GR_Moni_Stomion	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_cory_447_1_GR_Olympus	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_micro_417_1_BA_Vlasic	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_pet_381_1_SLO_Modrej	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_pet_382_1_SL_Trnovo	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_pet_468_2_RO_Caras_Severin	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_pet_467_1_RO_Caras_Severin	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_pet_363_1_RO_Caras_Severin	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_400_1_HU_Oreg-ko	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_485_1_MK_Novo_Negovican	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_427_1_MK_Demir_Kapija	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_426_1_MK_Bregalnica	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_178_1_RS_Toplji	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_434_1_BG_Rila	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_435_1_BG_Beledi_Han	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_425_1_AU_Durnstein	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT
A_sax_444_1_CZ_Prague	ATTTGGCCCT	TAATACAATA	ACTTTCTATT	ATCCCCATGA	ATCAGACAAT	ACTATTCTAT	TTCCGATGCT	TGTATTACTT	TTATTTACTT

A\_sax\_489\_1\_SK\_Bratislava  
A\_sax\_466\_3\_RO\_Caras\_Severin  
A\_sax\_460\_1\_RO\_Cheia  
A\_sax\_464\_1\_RO\_Cluj  
A\_sax\_488\_1\_BG\_Topolovograd  
A\_sax\_433\_1\_BG\_Krdali  
A\_sax\_461\_1\_RO\_Tulcea  
A\_sax\_462\_1\_RO\_Neamt  
A\_sax\_463\_1\_RO\_Neamt  
A\_leu\_472\_1\_HR\_Cres  
A\_leu\_149\_1\_HR\_Cres  
A\_leu\_442\_1\_HR\_Ciovo  
A\_leu\_423\_1\_HR\_Istra  
A\_leu\_490\_1\_HR\_Korcula  
A\_leu\_361\_1\_HR\_Peljesac  
A\_leu\_421\_1\_HR\_Vis\_Pritiscina  
A\_leu\_161\_1\_HR\_Jabuka  
A\_leu\_199\_1\_HR\_Vis  
A\_leu\_470\_1\_HR\_Palagruza  
A\_leu\_159\_1\_HR\_Palagruza  
A\_leu\_416\_1\_IT\_Porto\_Selvaggio  
A\_leu\_413\_1\_IT\_Capo\_di\_Leuca  
A\_leu\_414\_1\_IT\_Castro  
A\_sin\_457\_6\_IT\_Abruzzi  
A\_sin\_458\_1\_IT\_Gargano  
A\_sin\_357\_1\_HR\_Knin  
A\_sin\_374\_1\_HR\_Zivogosce  
A\_sin\_388\_1\_HR\_Klek  
A\_sin\_355\_1\_HR\_Kozjak  
A\_sin\_371\_1\_HR\_Karlobag  
A\_sin\_474\_1\_HR\_Zakosa  
A\_sin\_477\_1\_HR\_Lukovo  
A\_sin\_469\_1\_HR\_Senj  
A\_sin\_471\_1\_HR\_Cres  
A\_sin\_372\_1\_HR\_Rab  
A\_sin\_370\_1\_HR\_Paklenica  
A\_sin\_399\_1\_HR\_Sibenik  
A\_sin\_356\_1\_HR\_Mosor  
A\_sin\_440\_1\_HR\_Kornati  
A\_leu\_392\_1\_HR\_Split  
A\_sin\_376\_1\_HR\_Dugi\_otok  
A\_sin\_420\_1\_HR\_Biokovo  
A\_sin\_439\_1\_HR\_Dugi\_otok  
A\_sin\_491\_1\_HR\_Doli  
A\_sin\_373\_1\_HR\_Omis  
A\_sin\_398\_1\_HR\_Vransko\_jezero  
A\_mor\_450\_1\_GR\_Peloponnese  
Fibigia\_clypeata\_KF022972  
Berteroia\_incana\_KF022955  
Berteroia\_mutabilis\_KF022956  
Galitzkya\_macrocarpa\_KF022982  
Galitzkya\_potaninii\_KF022983



A_sax_449_1_GR_Peloponez	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	TACCTT	GATA	TATTA	CAAA	ATTATTAACT	CCGTCATAAA
A_sax_437_1_GR_Mistras	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_455_1_GR_Timfi	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_396_1_IT_Puglia	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_364_1_GR_Kefalonia	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_365_1_GR_Ithaka	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_384_1_AL_Tepelene	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_385_1_AL_Vlore	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_428_1_MK_Stenje	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_436_1_GR_Farsala	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_451_1_GR_Peloponez	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_359_1_IT_Volturino	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_378_1_MK_Konjsko	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_386_1_AL_Vlore	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_410_1_GR_Sikia	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_448_1_GR_Olimp	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_453_1_GR_Meteora	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_456_2_GR_Kozani	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_265_1_MK_Stenje	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_gio_452_2_GR_Gionae	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_493_1_GR_Samos	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_494_1_GR_Samos	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_492_1_GR_Chios	TATTTATTGG	AGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_445_1_PO_Czorsztyn	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_404_2_RS_KrÅnice	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_465_1_RO_Orsova	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_405_2_MK_Vrutok	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_486_1_MK_Treske	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_368_1_MK_Crni_Drim	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_387_1_AL_Mjede	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_429_1_CZ_Bechyne	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_430_1_CZ_Cesky_Krumlov	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_cory_360_1_MK_Crni_Drim	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_cory_481_1_RS_Medvednik	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_cory_379_1_ME_Prokletije	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_cory_389_2_ME_Prokletije	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_cory_484_2_ME_Durmitor	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_cory_454_2_GR_Moni_Stomion	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_cory_447_1_GR_Olympus	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_micro_417_1_BA_Vlasic	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_pet_381_1_SLO_Modrej	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_pet_382_1_SL_Trnovo	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_pet_468_2_RO_Caras_Severin	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_pet_467_1_RO_Caras_Severin	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_pet_363_1_RO_Caras_Severin	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_400_1_HU_Oreg-ko	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_485_1_MK_Novo_Negovician	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_427_1_MK_Demir_Kapija	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_426_1_MK_Bregalnica	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_178_1_RS_Toplji	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_434_1_BG_Rila	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_435_1_BG_Beledi_Han	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_425_1_AU_Durnstein	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA
A_sax_444_1_CZ_Praque	TATTTATTGG	CGCCATAGGA	ATTCTT	-	TCAATCA	AGAAGGAATA	GACTTT	GATA	TATTA	CAAA	ATTATTAAACG	CCGTCATAAA

A\_sax\_489\_1\_SK\_Bratislava  
 A\_sax\_466\_3\_RO\_Caras\_Severin  
 A\_sax\_460\_1\_RO\_Cheia  
 A\_sax\_464\_1\_RO\_Cluj  
 A\_sax\_488\_1\_BG\_Topolovograd  
 A\_sax\_433\_1\_BG\_Krdali  
 A\_sax\_461\_1\_RO\_Tulcea  
 A\_sax\_462\_1\_RO\_Neamt  
 A\_sax\_463\_1\_RO\_Neamt  
 A\_leu\_472\_1\_HR\_Cres  
 A\_leu\_149\_1\_HR\_Cres  
 A\_leu\_442\_1\_HR\_Ciovo  
 A\_leu\_423\_1\_HR\_Istra  
 A\_leu\_490\_1\_HR\_Korcula  
 A\_leu\_361\_1\_HR\_Peljesac  
 A\_leu\_421\_1\_HR\_Vis\_Pritiscina  
 A\_leu\_161\_1\_HR\_Jabuka  
 A\_leu\_199\_1\_HR\_Vis  
 A\_leu\_470\_1\_HR\_Palagruza  
 A\_leu\_159\_1\_HR\_Palagruza  
 A\_leu\_416\_1\_IT\_Porto\_Selvaggio  
 A\_leu\_413\_1\_IT\_Capo\_di\_Leuca  
 A\_leu\_414\_1\_IT\_Castro  
 A\_sin\_457\_6\_IT\_Abruzzi  
 A\_sin\_458\_1\_IT\_Gargano  
 A\_sin\_357\_1\_HR\_Knin  
 A\_sin\_374\_1\_HR\_Zivogosce  
 A\_sin\_388\_1\_HR\_Klek  
 A\_sin\_355\_1\_HR\_Kozjak  
 A\_sin\_371\_1\_HR\_Karlobag  
 A\_sin\_474\_1\_HR\_Zakosa  
 A\_sin\_477\_1\_HR\_Lukovo  
 A\_sin\_469\_1\_HR\_Senj  
 A\_sin\_471\_1\_HR\_Cres  
 A\_sin\_372\_1\_HR\_Rab  
 A\_sin\_370\_1\_HR\_Paklenica  
 A\_sin\_399\_1\_HR\_Sibenik  
 A\_sin\_356\_1\_HR\_Mosor  
 A\_sin\_440\_1\_HR\_Kornati  
 A\_leu\_392\_1\_HR\_Split  
 A\_sin\_376\_1\_HR\_Dugi\_otok  
 A\_sin\_420\_1\_HR\_Biokovo  
 A\_sin\_439\_1\_HR\_Dugi\_otok  
 A\_sin\_491\_1\_HR\_Doli  
 A\_sin\_373\_1\_HR\_Omis  
 A\_sin\_398\_1\_HR\_Vransko\_jezero  
 A\_mor\_450\_1\_GR\_Peloponnes  
 Fibigia\_clypeata\_KF022972  
 Berteroia\_incana\_KF022955  
 Berteroia\_mutabilis\_KF022956  
 Galitzkya\_macrocarpa\_KF022982  
 Galitzkya\_potaninii\_KF022983



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A_sax_449_1_GR_Peloponez	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_437_1_GR_Mistras	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_455_1_GR_Timfi	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_396_1_IT_Puglia	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_364_1_GR_Kefalonia	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_365_1_GR_Ithaka	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_384_1_AL_Tepelene	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_385_1_AL_Vlore	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_428_1_MK_Stenje	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_436_1_GR_Farsala	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_451_1_GR_Peloponez	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_359_1_IT_Volturino	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_378_1_MK_Konjsko	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_386_1_AL_Vlore	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_410_1_GR_Sikia	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_448_1_GR_Olimp	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_453_1_GR_Meteora	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_456_2_GR_Kozani	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_265_1_MK_Stenje	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_gio_452_2_GR_Gionae	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_493_1_GR_Samos	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_494_1_GR_Samos	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_492_1_GR_Chios	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	AAGCATAGCT	TTGTTTGGAA
A_sax_445_1_PO_Czorsztyn	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_sax_404_2_RS_KrA%nice	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCATT	CAGTATAGCT	TTGTTTGGAA
A_sax_465_1_RO_Orsova	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_sax_405_2_MK_Vrutok	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	GAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_sax_486_1_MK_Treske	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	GAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_sax_368_1_MK_Crni_Drim	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	GAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_sax_387_1_AL_Mjede	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	GAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_sax_429_1_CZ_Bechyne	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	GAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_sax_430_1_CZ_Cesky_Krumlov	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_cory_360_1_MK_Crni_Drim	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_cory_481_1_RS_Medvednik	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_cory_379_1_ME_Prokletije	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_cory_389_2_ME_Prokletije	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_cory_484_2_ME_Durmitor	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_cory_454_2_GR_Moni_Stomion	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_cory_447_1_GR_Olympus	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_micro_417_1_BA_Vlasic	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_pet_381_1_SLO_Modrej	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_pet_382_1_SL_Trnovo	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_pet_468_2_RO_Caras_Severin	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_pet_467_1_RO_Caras_Severin	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_pet_363_1_RO_Caras_Severin	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_sax_400_1_HU_Oreg-ko	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_sax_485_1_MK_Novo_Negovican	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_sax_427_1_MK_Demir_Kapija	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_sax_426_1_MK_Bregalnica	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_sax_178_1_RS_Toplji	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_sax_434_1_BG_Rila	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_sax_435_1_BG_Beledi_Han	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_sax_425_1_AU_Durnstein	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA
A_sax_444_1_CZ_Prague	ACCTTTTGCA	TAAAAATTCA	CAAAATTTG	TAGATTGGTA	TGAATTTTT	AGAAATGCAA	CTTTTCAGT	CAGTATAGCT	TTGTTTGGAA

A\_sax\_489\_1\_SK\_Bratislava  
A\_sax\_466\_3\_RO\_Caras\_Severin  
A\_sax\_460\_1\_RO\_Cheia  
A\_sax\_464\_1\_RO\_Cluj  
A\_sax\_488\_1\_BG\_Topolovograd  
A\_sax\_433\_1\_BG\_Krdali  
A\_sax\_461\_1\_RO\_Tulcea  
A\_sax\_462\_1\_RO\_Neamt  
A\_sax\_463\_1\_RO\_Neamt  
A\_leu\_472\_1\_HR\_Cres  
A\_leu\_149\_1\_HR\_Cres  
A\_leu\_442\_1\_HR\_Ciovo  
A\_leu\_423\_1\_HR\_Istra  
A\_leu\_490\_1\_HR\_Korcula  
A\_leu\_361\_1\_HR\_Peljesac  
A\_leu\_421\_1\_HR\_Vis\_Pritiscina  
A\_leu\_161\_1\_HR\_Jabuka  
A\_leu\_199\_1\_HR\_Vis  
A\_leu\_470\_1\_HR\_Palagruza  
A\_leu\_159\_1\_HR\_Palagruza  
A\_leu\_416\_1\_IT\_Porto\_Selvaggio  
A\_leu\_413\_1\_IT\_Capo\_di\_Leuca  
A\_leu\_414\_1\_IT\_Castro  
A\_sin\_457\_6\_IT\_Abruzzi  
A\_sin\_458\_1\_IT\_Gargano  
A\_sin\_357\_1\_HR\_Knin  
A\_sin\_374\_1\_HR\_Zivogosce  
A\_sin\_388\_1\_HR\_Klek  
A\_sin\_355\_1\_HR\_Kozjak  
A\_sin\_371\_1\_HR\_Karlobag  
A\_sin\_474\_1\_HR\_Zakosa  
A\_sin\_477\_1\_HR\_Lukovo  
A\_sin\_469\_1\_HR\_Senj  
A\_sin\_471\_1\_HR\_Cres  
A\_sin\_372\_1\_HR\_Rab  
A\_sin\_370\_1\_HR\_Paklenica  
A\_sin\_399\_1\_HR\_Sibenik  
A\_sin\_356\_1\_HR\_Mosor  
A\_sin\_440\_1\_HR\_Kornati  
A\_leu\_392\_1\_HR\_Split  
A\_sin\_376\_1\_HR\_Dugi\_otok  
A\_sin\_420\_1\_HR\_Biokovo  
A\_sin\_439\_1\_HR\_Dugi\_otok  
A\_sin\_491\_1\_HR\_Doli  
A\_sin\_373\_1\_HR\_Omis  
A\_sin\_398\_1\_HR\_Vransko\_jezero  
A\_mor\_450\_1\_GR\_Peloponnes  
Fibigia\_clypeata\_KF022972  
Berteroia\_incana\_KF022955  
Berteroia\_mutabilis\_KF022956  
Galitzkya\_macrocarpa\_KF022982  
Galitzkya\_potaninii\_KF022983

The sequence logo visualization displays the frequency of each nucleotide (A, T, C, G) at every position across 20 DNA sequences. The x-axis represents positions 1 through 10, and the y-axis represents the four nucleotides. The height of each colored bar indicates the probability of that nucleotide at that position. A legend on the right shows the color coding: A (blue), T (red), C (green), and G (yellow).

Sequence Logo Data:

Position	A	T	C	G
1	0.2	0.2	0.2	0.4
2	0.2	0.2	0.2	0.4
3	0.2	0.2	0.2	0.4
4	0.2	0.2	0.2	0.4
5	0.2	0.2	0.2	0.4
6	0.2	0.2	0.2	0.4
7	0.2	0.2	0.2	0.4
8	0.2	0.2	0.2	0.4
9	0.2	0.2	0.2	0.4
10	0.2	0.2	0.2	0.4

1801

A_sax_449_1_GR_Peloponez	TATTTATAGC	ATACGT	TTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_437_1_GR_Mistras	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_455_1_GR_Timfi	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_396_1_IT_Puglia	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_364_1_GR_Kefalonia	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_365_1_GR_Ithaka	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_384_1_AL_Tepelene	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_385_1_AL_Vlore	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_428_1_MK_Stenje	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_436_1_GR_Farsala	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_451_1_GR_Peloponez	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_359_1_IT_Volturino	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_378_1_MK_Konjsko	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_386_1_AL_Vlore	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_410_1_GR_Sikia	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_448_1_GR_Olimp	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_453_1_GR_Meteora	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_456_2_GR_Kozani	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_265_1_MK_Stenje	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_gio_452_2_GR_Gionae	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_493_1_GR_Samos	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_494_1_GR_Samos	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_492_1_GR_Chios	TATTTATAGC	ATACTG	TTTA	TATAAGCC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_445_1_PO_Czorsztyn	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	ATA
A_sax_404_2_RS_KrÅ%nice	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_465_1_RO_Orsova	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_405_2_MK_Vrutok	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_486_1_MK_Treske	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_368_1_MK_Crni_Drim	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_387_1_AL_Mjede	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_429_1_CZ_Bechyne	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_430_1_CZ_Cesky_Krumlov	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_cory_360_1_MK_Crni_Drim	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_cory_481_1_RS_Medvednik	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_cory_379_1_ME_Prokletije	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_cory_389_2_ME_Prokletije	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_cory_484_2_ME_Durmitor	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_cory_454_2_GR_Moni_Stomion	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_cory_447_1_GR_Olympus	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_micro_417_1_BA_Vlasic	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_pet_381_1_SLO_Modrej	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_pet_382_1_SL_Trnovo	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_pet_468_2_RO_Caras_Severin	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_pet_467_1_RO_Caras_Severin	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_pet_363_1_RO_Caras_Severin	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_400_1_HU_Oreg-ko	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_485_1_MK_Novo_Negovician	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_427_1_MK_Demir_Kapija	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_426_1_MK_Bregalnica	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_178_1_RS_Toplji	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_434_1_BG_Rila	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_435_1_BG_Beledi_Han	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_425_1_AU_Durnstein	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--
A_sax_444_1_CZ_Prague	TATTTATAGC	ATACTG	TTTA	TATAAAAC	TT	TTTATT	CATC	TTTATTAA	TTAA	CTTAC	TTAATT	CATT	TCAAAAATTG	AGTTAT	--

A\_sax\_489\_1\_SK\_Bratislava  
A\_sax\_466\_3\_RO\_Caras\_Severin  
A\_sax\_460\_1\_RO\_Cheia  
A\_sax\_464\_1\_RO\_Cluj  
A\_sax\_488\_1\_BG\_Topolovograd  
A\_sax\_433\_1\_BG\_Krdali  
A\_sax\_461\_1\_RO\_Tulcea  
A\_sax\_462\_1\_RO\_Neamt  
A\_sax\_463\_1\_RO\_Neamt  
A\_leu\_472\_1\_HR\_Cres  
A\_leu\_149\_1\_HR\_Cres  
A\_leu\_442\_1\_HR\_Ciov  
A\_leu\_423\_1\_HR\_Istra  
A\_leu\_490\_1\_HR\_Korcula  
A\_leu\_361\_1\_HR\_Peljesac  
A\_leu\_421\_1\_HR\_Vis\_Pritiscina  
A\_leu\_161\_1\_HR\_Jabuka  
A\_leu\_199\_1\_HR\_Vis  
A\_leu\_470\_1\_HR\_Palagruza  
A\_leu\_159\_1\_HR\_Palagruza  
A\_leu\_416\_1\_IT\_Porto\_Selvaggia  
A\_leu\_413\_1\_IT\_Capo\_di\_Leuca  
A\_leu\_414\_1\_IT\_Castro  
A\_sin\_457\_6\_IT\_Abruzzi  
A\_sin\_458\_1\_IT\_Gargano  
A\_sin\_357\_1\_HR\_Knin  
A\_sin\_374\_1\_HR\_Zivogosce  
A\_sin\_388\_1\_HR\_Klek  
A\_sin\_355\_1\_HR\_Kozjak  
A\_sin\_371\_1\_HR\_Karlobag  
A\_sin\_474\_1\_HR\_Zakosa  
A\_sin\_477\_1\_HR\_Lukovo  
A\_sin\_469\_1\_HR\_Senj  
A\_sin\_471\_1\_HR\_Cres  
A\_sin\_372\_1\_HR\_Rab  
A\_sin\_370\_1\_HR\_Paklenica  
A\_sin\_399\_1\_HR\_Sibenik  
A\_sin\_356\_1\_HR\_Mosor  
A\_sin\_440\_1\_HR\_Kornati  
A\_leu\_392\_1\_HR\_Split  
A\_sin\_376\_1\_HR\_Dugi\_otok  
A\_sin\_420\_1\_HR\_Biokovo  
A\_sin\_439\_1\_HR\_Dugi\_otok  
A\_sin\_491\_1\_HR\_Doli  
A\_sin\_373\_1\_HR\_Omis  
A\_sin\_398\_1\_HR\_Vransko\_jezero  
A\_mor\_450\_1\_GR\_Peloponnese  
Fibigia\_clypeata\_KF022972  
Berteroia\_incana\_KF022955  
Berteroia\_mutabilis\_KF022956  
Galitzkya\_macrocarpa\_KF022982  
Galitzkya\_potaninii\_KF022983

A_sax_449_1_GR_Peloponez	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_437_1_GR_Mistras	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_455_1_GR_Timfi	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_396_1_IT_Puglia	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_364_1_GR_Kefalonia	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_365_1_GR_Ithaka	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_384_1_AL_Tepelene	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_385_1_AL_Vlore	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_428_1_MK_Stenje	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_436_1_GR_Farsala	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_451_1_GR_Peloponez	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_359_1_IT_Volturino	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_378_1_MK_Konjsko	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_386_1_AL_Vlore	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_410_1_GR_Sikia	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_448_1_GR_Olimp	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_453_1_GR_Meteora	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_456_2_GR_Kozani	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_265_1_MK_Stenje	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_gio_452_2_GR_Gionae	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_493_1_GR_Samos	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_494_1_GR_Samos	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_492_1_GR_Chios	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_445_1_PO_Czorsztyn	AAAAGAATT	GTTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_404_2_RS_KrÅ%nice	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_465_1_RO_Orsova	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_405_2_MK_Vrutok	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_486_1_MK_Treske	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_368_1_MK_Crni_Drim	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_387_1_AL_Mjede	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_429_1_CZ_Bechyne	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_430_1_CZ_Cesky_Krumlov	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_cory_360_1_MK_Crni_Drim	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_cory_481_1_RS_Medvednik	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_cory_379_1_ME_Prokletije	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_cory_389_2_ME_Prokletije	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_cory_484_2_ME_Durmitor	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_cory_454_2_GR_Moni_Stomion	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_cory_447_1_GR_Olympus	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_micro_417_1_BA_Vlasic	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_pet_381_1_SLO_Modrej	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_pet_382_1_SL_Trnovo	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_pet_468_2_RO_Caras_Severin	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_pet_467_1_RO_Caras_Severin	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_pet_363_1_RO_Caras_Severin	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_400_1_HU_Oreg-ko	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_485_1_MK_Novo_Negovican	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_427_1_MK_Demir_Kapija	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_426_1_MK_Bregalnica	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_178_1_RS_Toplji	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_434_1_BG_Rila	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_435_1_BG_Beledi_Han	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_425_1_AU_Durnstein	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA
A_sax_444_1_CZ_Prague	AAAAGAATT	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAATCGGGT	TACATAGATA	CTTTTTTTAA	AACATATTTA

A_sax_489_1_SK_Bratislava	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGG	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sax_466_3_RO_Caras_Severin	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sax_460_1_RO_Cheia	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sax_464_1_RO_Cluj	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sax_488_1_BG_Topolovograd	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sax_433_1_BG_Krdali	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sax_461_1_RO_Tulcea	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sax_462_1_RO_Neamt	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sax_463_1_RO_Neamt	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_leu_472_1_HR_Cres	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_leu_149_1_HR_Cres	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_leu_442_1_HR_Ciovo	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_leu_423_1_HR_Istra	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_leu_490_1_HR_Korcula	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_leu_361_1_HR_Peljesac	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_leu_421_1_HR_Vis_Pritiscina	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_leu_161_1_HR_Jabuka	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_leu_199_1_HR_Vis	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_leu_470_1_HR_Palagruza	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AATATATTAA
A_leu_159_1_HR_Palagruza	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AATATATTAA
A_leu_416_1_IT_Porto_Selvaggio	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_leu_413_1_IT_Capo_di_Leuca	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_leu_414_1_IT_Castro	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_457_6_IT_Abruzzi	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_458_1_IT_Gargano	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_357_1_HR_Knin	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_374_1_HR_Zivogosce	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_388_1_HR_Klek	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_355_1_HR_Kozjak	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_371_1_HR_Karlobag	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_474_1_HR_Zakosa	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_477_1_HR_Lukovo	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_469_1_HR_Senj	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_471_1_HR_Cres	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_372_1_HR_Rab	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_370_1_HR_Paklenica	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AAAAAATTAA
A_sin_399_1_HR_Sibenik	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_356_1_HR_Mosor	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_440_1_HR_Kornati	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_leu_392_1_HR_Split	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_376_1_HR_Dugi_otok	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_420_1_HR_Biokovo	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_439_1_HR_Dugi_otok	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_491_1_HR_Doli	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_373_1_HR_Omis	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_sin_398_1_HR_Vransko_jezero	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
A_mor_450_1_GR_Peloponnese	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
Fibigia_clypeata_KF022972	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
Berteroia_incana_KF022955	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
Berteroia_mutabilis_KF022956	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
Galitzkya_macrocarpa_KF022982	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA
Galitzkya_potaninii_KF022983	AAAAGAATTG	GGTGGGAAAA	ACTAATAAAAT	TTTGTATATA	ATTGGTCATA	TAACTGGT	TACATAGATA	C	TTTTTTAAA	AACATATTAA

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A_sax_449_1_GR_Peloponez	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_437_1_GR_Mistras	ACTGAAAAATA	TAAGAGGATT	AGCC
A_sax_455_1_GR_Timfi	ACTGAAAAATA	TAAGAGGATT	AGCC
A_sax_396_1_IT_Puglia	ACTGAAAAATA	TAAGAGGATT	AGCC
A_sax_364_1_GR_Kefalonia	ACTGAAAAATA	TAAGAGGATT	AGCC
A_sax_365_1_GR_Ithaka	ACTGAAAAATA	TAAGAGGATT	AGCC
A_sax_384_1_AL_Tepelene	ACTGAAAAATA	TAAGAGGATT	AGCC
A_sax_385_1_AL_Vlore	ACTGAAAAATA	TAAGAGGATT	AGCC
A_sax_428_1_MK_Stenje	ACTGAAAAATA	TAAGAGGATT	AGCC
A_sax_436_1_GR_Farsala	ACTGAAAAATA	TAAGAGGATT	AGCC
A_sax_451_1_GR_Peloponez	ACTGAAAAATA	TAAGAGGATT	AGCC
A_sax_359_1_IT_Volturino	ACTGAAAAATA	TAAGAGGATT	AGCC
A_sax_378_1_MK_Konjsko	ACTGAAAAATA	TAAGAGGATT	AGCC
A_sax_386_1_AL_Vlore	ACTGAAAAATA	TAAGAGGATT	AGCC
A_sax_410_1_GR_Sikia	ACTGAAAAATA	TAAGAGGATT	AGCC
A_sax_448_1_GR_Olimp	ACTGAAAAATA	TAAGAGGATT	AGCC
A_sax_453_1_GR_Meteora	ACTGAAAAATA	TAAGAGGATT	AGCC
A_sax_456_2_GR_Kozani	ACTGAAAAATA	TAAGAGGATT	AGCC
A_sax_265_1_MK_Stenje	ACTGAAAAATA	TAAGAGGATT	AGCC
A_gio_452_2_GR_Gionae	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_493_1_GR_Samos	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_494_1_GR_Samos	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_492_1_GR_Chios	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_445_1_PO_Czorsztyn	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_404_2_RS_KrÅ¾nice	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_465_1_RO_Orsova	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_405_2_MK_Vrutok	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_486_1_MK_Treske	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_368_1_MK_Crni_Drim	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_387_1_AL_Mjede	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_429_1_CZ_Bechyne	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_430_1_CZ_Cesky_Krumlov	ACTGAAAAATA	TAAGAGGATT	AGCA
A_cory_360_1_MK_Crni_Drim	ACTGAAAAATA	TAAGAGGATT	AGCA
A_cory_481_1_RS_Medvednik	ACTGAAAAATA	TAAGAGGATT	AGCA
A_cory_379_1_ME_Prokletije	ACTGAAAAATA	TAAGAGGATT	AGCA
A_cory_389_2_ME_Prokletije	ACTGAAAAATA	TAAGAGGATT	AGCA
A_cory_484_2_ME_Durmitor	ACTGAAAAATA	TAAGAGGATT	AGCA
A_cory_454_2_GR_Moni_Stomion	ACTGAAAAATA	TAAGAGGATT	AGCA
A_cory_447_1_GR_Olympus	ACTGAAAAATA	TAAGAGGATT	AGCA
A_micro_417_1_BA_Vlasic	ACTGAAAAATA	TAAGAGGATT	AGCA
A_pet_381_1_SLO_Modrej	ACTGAAAAATA	TAAGAGGATT	AGCA
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A_pet_468_2_RO_Caras_Severin	ACTGAAAAATA	TAAGAGGATT	AGCA
A_pet_467_1_RO_Caras_Severin	ACTGAAAAATA	TAAGAGGATT	AGCA
A_pet_363_1_RO_Caras_Severin	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_400_1_HU_Oreg-ko	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_485_1_MK_Novo_Negovican	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_427_1_MK_Demir_Kapija	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_426_1_MK_Bregalnica	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_178_1_RS_Toplji	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_434_1_BG_Rila	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_435_1_BG_Beledi_Han	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_425_1_AU_Durnstein	ACTGAAAAATA	TAAGAGGATT	AGCA
A_sax_444_1_CZ_Prague	ACTGAAAAATA	TAAGAGGATT	AGCA

A\_sax\_489\_1\_SK\_Bratislava  
A\_sax\_466\_3\_RO\_Caras\_Severin  
A\_sax\_460\_1\_RO\_Cheia  
A\_sax\_464\_1\_RO\_Cluj  
A\_sax\_488\_1\_BG\_Topolovograd  
A\_sax\_433\_1\_BG\_Krdali  
A\_sax\_461\_1\_RO\_Tulcea  
A\_sax\_462\_1\_RO\_Neamt  
A\_sax\_463\_1\_RO\_Neamt  
A\_leu\_472\_1\_HR\_Cres  
A\_leu\_149\_1\_HR\_Cres  
A\_leu\_442\_1\_HR\_Ciovo  
A\_leu\_423\_1\_HR\_Istra  
A\_leu\_490\_1\_HR\_Korcula  
A\_leu\_361\_1\_HR\_Peljesac  
A\_leu\_421\_1\_HR\_Vis\_Pritiscina  
A\_leu\_161\_1\_HR\_Jabuka  
A\_leu\_199\_1\_HR\_Vis  
A\_leu\_470\_1\_HR\_Palagruza  
A\_leu\_159\_1\_HR\_Palagruza  
A\_leu\_416\_1\_IT\_Porto\_Selvaggio  
A\_leu\_413\_1\_IT\_Capo\_di\_Leuca  
A\_leu\_414\_1\_IT\_Castro  
A\_sin\_457\_6\_IT\_Abruzzi  
A\_sin\_458\_1\_IT\_Gargano  
A\_sin\_357\_1\_HR\_Knin  
A\_sin\_374\_1\_HR\_Zivogosce  
A\_sin\_388\_1\_HR\_Klek  
A\_sin\_355\_1\_HR\_Kozjak  
A\_sin\_371\_1\_HR\_Karlobag  
A\_sin\_474\_1\_HR\_Zakosa  
A\_sin\_477\_1\_HR\_Lukovo  
A\_sin\_469\_1\_HR\_Senj  
A\_sin\_471\_1\_HR\_Cres  
A\_sin\_372\_1\_HR\_Rab  
A\_sin\_370\_1\_HR\_Paklenica  
A\_sin\_399\_1\_HR\_Sibenik  
A\_sin\_356\_1\_HR\_Mosor  
A\_sin\_440\_1\_HR\_Kornati  
A\_leu\_392\_1\_HR\_Split  
A\_sin\_376\_1\_HR\_Dugi\_otok  
A\_sin\_420\_1\_HR\_Biokovo  
A\_sin\_439\_1\_HR\_Dugi\_otok  
A\_sin\_491\_1\_HR\_Doli  
A\_sin\_373\_1\_HR\_Omis  
A\_sin\_398\_1\_HR\_Vransko\_jezero  
A\_mor\_450\_1\_GR\_Peloponnese  
Fibigia\_clypeata\_KF022972  
Berteroia\_incana\_KF022955  
Berteroia\_mutabilis\_KF022956  
Galitzkya\_macrocarpa\_KF022982  
Galitzkya\_potaninii\_KF022983