Tracing the botanical origins of UK heather honey by relative quantification of plant DNA.

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In silico primer specificity testing of *Calluna vulgaris* marker CV_trnL using primer-BLAST

PrimerBLAST search: nt database; plants (taxid 3193); shows all entries with up to 6 mismatches to primer pair and up to 2 mismatches in last 5 bp at 3' ends.

Summary table

No. mismatches to primers (F; R)	**No. Species and Family.**	**Species (no. isolate matches in database).**
0 ; 0	1 Family: Ericaceae (*Calluna* = 1).	Calluna vulgaris (211)
2 ; 1	9 Family: Ericaceae (*Rhodedendron* = 3, Menziesia = 3, *Empetrum* = 1, *Coremia* = 1, *Daboecia* = 1, *Kalmia* = 1)	Empetrum nigrum (26), Corema album (2), Daboecia cantabrica (2), Kalmia procumbens (1), Rhododendron camtschaticum (4), Menziesia multiflora (1), Menziesia katsumatae (1), Menziesia goyozanensis (1), Rhododendron benhallii (1).

3 ; 1	171 Family: Ericaceae (*Rhododendron* = 165, *Kalmia* = 4, *Menziesia* = 2)	Rhododendron delavayi (25), Rhododendron ferrugineum (6), Rhododendron nivale (1), Rhododendron rupicola (2), Rhododendron phaeochrysum (2), Rhododendron aganniphum (1), Rhododendron arboreum (96), Kalmia procumbens (23), Rhododendron sp. (36), Rhododendron decorum (18), Rhododendron williamsianum (4), Rhododendron mucronulatum (4), Rhododendron sichotense (2), Rhododendron dauricum (1), Rhododendron ledebourii (2), Rhododendron purdomii (1), Rhododendron ambiguum (2), Rhododendron przewalskii (2), Rhododendron stapfianum (1), Rhododendron fallacinum (8), Rhododendron planecostatum (1), Rhododendron crassifolium (5), Rhododendron buxifolium (4), Rhododendron rugosum (5), Rhododendron exuberans (1), Rhododendron lowii (2), Rhododendron suaveolens (5) , Rhododendron stenophyllum (3), Rhododendron cuneifolium (2), Rhododendron praetervisum (2), Rhododendron javanicum (4), Rhododendron orbiculatum (2), Rhododendron borneense (1), Rhododendron acuminatum (1), Rhododendron bagobonum (1), Rhododendron anthopogonoides (1), Rhododendron capitatum (1), Rhododendron thymifolium (1), Rhododendron micranthum (4), Rhododendron calophytum (2), Rhododendron oreodoxa (1), Rhododendron minus (11), Rhododendron carolinianum (4), Rhododendron chapmanii (1), Rhododendron smokianum (2), Rhododendron shanii (1), Rhododendron duclouxii (12), Rhododendron spinuliferum (8), Rhododendron spiciferum (10), Rhododendron scabrifolium (5), Rhododendron mollicomum (1), Rhododendron virgatum (1), Kalmia angustifolia (2), Rhododendron emarginatum (1), Rhododendron himantodes (1), Rhododendron loranthiflorum (1), Rhododendron edanoi (1), Rhododendron konori (1), Rhododendron polyanthemum (1), Rhododendron macgregoriae (1), Rhododendron lochiae (1), Rhododendron laetum (1), Rhododendron aurigeranum (1), Rhododendron retusum (1), Rhododendron zaleucum (1), Rhododendron lutescens (1), Rhododendron christianae (1), Rhododendron xanthostephanum (1), Rhododendron auritum (1), Rhododendron racemosum (2), Rhododendron hirsutum (1), Rhododendron moupinense (1), Rhododendron tomentosum (2), Rhododendron tapetiforme (1), Rhododendron setosum (1), Rhododendron polycladum (1), Rhododendron nitidulum (1), Rhododendron hippophaeoides (1), Rhododendron fastigiatum (2), Rhododendron rubiginosum (1), Rhododendron bracteatum (1), Rhododendron charitopes (1), Rhododendron keysii (1), Rhododendron cinnabarinum (1), Rhododendron leucaspis (1), Rhododendron schlippenbachii (5),

		Rhododendron pilosum (1), Rhododendron albrechtii (3), Rhododendron vaseyi (1), Rhododendron prunifolium (1), Rhododendron prinophyllum (1), Rhododendron periclymenoides (1), Rhododendron occidentale (3), Rhododendron cumberlandense (1), Rhododendron austrinum (1), Rhododendron atlanticum (3), Rhododendron arborescens (1), Rhododendron sherriffii (1), Rhododendron alutaceum (1), Rhododendron selense (2), Rhododendron smirnowii (2), Rhododendron ponticum (4), Rhododendron macrophyllum (2), Rhododendron degronianum (3), Rhododendron brachycarpum (3), Rhododendron elliottii (1), Rhododendron neriiflorum (3), Rhododendron strigillosum (2), Rhododendron annae (1), Rhododendron griersonianum (3), Rhododendron protistum (1), Rhododendron macabeanum (2), Rhododendron campylocarpum (2), Rhododendron auriculatum (1), Rhododendron thayerianum (1), Rhododendron ririei (1), Rhododendron albiflorum (2), Kalmia buxifolia (3), Rhododendron concinnum (1), Rhododendron henanense (1), Rhododendron molle (1), Rhododendron aureum (6), Rhododendron kawakamii (1), Rhododendron datiandingense (1), Rhododendron platypodum (1), Rhododendron cyanocarpum (2), Rhododendron lapponicum (2), Rhododendron groenlandicum (1), Rhododendron irroratum (2), Rhododendron insigne (1), Rhododendron eclecteum (1), Rhododendron taliense (1), Rhododendron forrestii (1), Rhododendron mallotum (1), Rhododendron floccigerum (1), Rhododendron catacosmum (1), Rhododendron beanianum (1), Rhododendron pseudochrysanthum (1), Rhododendron anhweiense (1), Rhododendron tsariense (1), Rhododendron mengtszense (1), Rhododendron aberconwayi (2), Rhododendron grande (1), Rhododendron fulvum (1), Rhododendron praevernum (1), Rhododendron orbiculare (1), Rhododendron rothschildii (1), Rhododendron wardii (1), Rhododendron campanulatum (1), Rhododendron barbatum (1), Rhododendron argyrophyllum (1), Rhododendron coryanum (1), Rhododendron adenopodum (1), Rhododendron lanigerum (1), Rhododendron agastum (1), Rhododendron maximum (2), Rhododendron hybrid (4), Kalmia latifolia (3), Rhododendron sinogrande (1), Rhododendron rex (1), Rhododendron edgeworthii (1), Rhododendron dimitrum (1), Rhododendron anthosphaerum (1), Rhododendron hyperythrum (1), Rhododendron ungernii (1), Rhododendron caucasicum (1), Rhododendron catawbiense (1), Menziesia pilosa (2), Menziesia ferruginea (1), Rhododendron quinquefolium (2), Rhododendron pentaphyllum (2)

2 ; 2	2 Family: Zingiberaceae (*n* = 2)	Siphonochilus kirkii (4), Siphonochilus decorus (3),
1 ; 3	1 Family: Ericaceae (*Harrimanella* = 1)	Harrimanella hypnoides (1),

3 ; 2	297 Family: Theaceae (*n* = 112), Sapotaceae (*n* = 104), Bromeliaceae (*n* = 39), Orchidaceae (*n* = 14), Fabaceae (*n* = 12), Ericaceae (*Rhododendron* = 2, *Bejaria* = 1), Asteliaceae (*n* = 3), Zingiberaceae (*n* = 3), Olacaceae (*n* = 2), , Proteaceae (*n* = 2), Clethraceae (*n* = 1), Loasaceae (*n* = 1), Euphorbiaceae (*n* = 1).	Rhododendron pachypodum (1), Bulbophyllum mentosum (1), Senna obtusifolia (3), Camellia mingii (1), Astelia australiana (2), Manilkara zapota (3), Camellia weiningensis (1), Manilkara mochisia (1), Pradosia ptychandra (4), Pouteria rodriguesiana (2), Pouteria guianensis (4), Pouteria gongrijpii (5), Pouteria eugeniifolia (2), Pouteria egregia (2), Pouteria decorticans (1), Pouteria cladantha (1), Micropholis melinoniana (1), Micropholis guyanensis (8), Micropholis cayennensis (1), Manilkara huberi (1), Ragala sanguinolenta (2), Chrysophyllum prieurii (2), Chrysophyllum lucentifolium (1), Chrysophyllum cuneifolium (2), Caperonia stenophylla (1), Xantolis weimingii (1), Sideroxylon spinosum (3), Camellia costata (18), Senna rugosa (1), Psychopsis sanderae (2), Astelia alpina (2), Camellia melliana (1), Camellia tachangensis (17), Camellia pilosperma (1), Camellia gymnogyna (6), Camellia fangchengensis (5), Camellia quinquelocularis (1), Camellia impressinervis (2), Camellia cuspidate (1), Manilkara kauki (1), Camellia sinensis (8), Camellia sp. (5), Camellia pitardii (5), Camellia paucipetala (1), Camellia longistyla (1), Camellia kweichowensis (1), Camellia delicata (1), Phanerodiscus capuronii (2), Camellia reticulata (8), Camellia semiserrata (7), Camellia saluenensis (2), Camellia hongkongensis (1), Stewartia obovata (1), Stewartia micrantha (1), Hartia laotica (1), Stewartia crassifolia (3), Stewartia cordifolia (3), Stewartia sinii (3), Stewartia pteropetiolata (7), Stewartia villosa (3), Schima superba (13), Stewartia sinensis (11), Stewartia pseudocamellia (8), Stewartia malacodendron (6), Stewartia monadelpha (4), Stewartia ovata (9), Stewartia rostrata (4), Stewartia rubiginosa (2), Stewartia serrata (2), Palaquium sp. (3), Madhuca dubardii (2), Sideroxylon lanuginosum (1), Sideroxylon wightianum (1), Astelia pumila (6), Senna tora (4), Cryptochilus luteus (1), Eria siamensis (1), Cryptochilus strictus (1), Camellia euphlebia (2), Blumenbachia dissecta (1), Pachites bodkinii (3), Pachites appressus (1), Gordonia lasianthus (3), Schima argentea (8), Stewartia calcicole (1), Franklinia alatamaha (4), Camellia mairei (1), Gordonia brandegeei (1), Schima wallichii (11), Schima sinensis (8), Schima sericans (5), Schima remotiserrata (3), Schima noronhae (3), Schima multibracteata (1), Schima khasiana (7), Schima crenata (1), Schima brevipedicellata (4), Camellia salicifolia (2), Camellia liberistyloides (1), Camellia grijsii (2), Camellia danzaiensis (4), Camellia leptophylla (3), Camellia ptilophylla (3), Camellia pubescens (3), Camellia arborescens (2), Camellia kwangsiensis (3), Camellia huana (2), Pouteria campechiana (2), Camellia albosericea (1), Camellia pingguoensis (5), Camellia micrantha (3), Camellia

		pubipetala (3), Camellia wumingensis (2), Cephalanthera humilis (1), Senna reticulata (1), Pouteria splendens (1), Aechmea andersoniana (1), Hohenbergia portoricensis (2), Hohenbergia spinulosa (2), Aechmea amorimii (1), Hohenbergia penduliflora (2), Hohenbergia proctorii (1), Hohenbergia antillana (1), Aechmea patentissima (2), Aechmea sulbahianensis (1), Aechmea lingulatoides (3), Hohenbergia distans (1), Hohenbergia jamaicana (1), Aechmea turbinocalyx (1), Ronnbergia brasiliensis (2), Aechmea pernambucentris (1), Aechmea bicolor (1), Hohenbergia inermis (1), Hohenbergia mesoamericana (1), Aechmea froesii (1), Hohenbergia caymanensis (1), Hohenbergia sp. (1), Aechmea maranguapensis (1), Aechmea incompta (1), Aechmea linharesiorum (1), Camellia magniflora (1), Camellia bailinshanica (1), Viridantha plumosa (2), Camellia omeiensis (2), Camellia oligophlebia (1), Camellia jinshajiangica (1), Camellia borealiyunnanica (2), Camellia brevipetiolata (1), Camellia lungshenensis (2), Camellia caudata (2), Camellia ptilosperma (2), Stewartia sichuanensis (1), Camellia minima (1), Camellia insularis (1), Pouteria viridis (1), Camellia nitidissima (15), Camellia longzhouensis (1), Camellia chrysanthoides (5), Camellia flavida (1), Camellia fascicularis (2), Camellia parvipetala (2), Camellia lienshanensis (1), Camellia bambusifolia (1), Schima parviflora (2), Schima sp. (1), Sophora sp. (1), Mimusops elengi (2), Camellia phellocapsa (1), Camellia macrosepala (1), Camellia limonia (2), Camellia hekouensis (1), Camellia euryoides (1), Camellia angustifolia (1), Camellia acutissima (1), Sapotaceae sp. (2), Ormosia bancana (1), Tainia acuminata (1), Camellia polyodonta (1), Camellia indochinensis (1), Rhododendron argyrophyllum (1), Mimusops coriacea (1), Astelia fragrans (1), Earina autumnalis (2), Banksia plumosa (1), Banksia carlinoides (1), Canistrum aurantiacum (1), Billbergia tweedieana (1), Pouteria xerocarpa (1), Planchonella myrsinodendron (1), Niemeyera prunifera (2), Tieghemella heckelii (1), Tieghemella Africana (1), Baillonella toxisperma (1), Autranella congolensis (1), Pouteria aningeri (1), Gambeya subnuda (1), Gambeya lacourtiana (1), Gambeya gigantea (1), Gambeya Africana (1), Astelia nervosa (2), Camellia perpetua (2), Planchonella cinerea (1), Schima mertensiana (2), Camellia rostrata (1), Faucherea thouvenotii (1), Mimusops capuronii (1), Capurodendron madagascariense (1), Olax sp. (1), Camellia debaoensis (1), Synsepalum dulcificum (3), Camellia crapnelliana (1), Epipactis helleborine (1), Myrocarpus fastigiatus (1), Collospermum microspermum (1), Collospermum hastatum (2), Astelia nadeaudii (1), Astelia papuana (1), Astelia neocaledonica (1), Astelia menziesiana (2), Astelia

		argyrocoma (1), Astelia graminea (1), Astelia banksia (2), Pouteria caimito (2), Vitellaria paradoxa (2), Madhuca hainanensis (1), Camellia fraternal (1), Camellia chuongtsoensis (1), Sideroxylon cinereum (1), Stewartia tonkinensis (2), Stewartia laotica (1), Hohenbergia negrilensis (1), Senna gardneri (1), Pouteria singularis (1), Gomesa radicans (1), Xantolis siamensis (1), Van-royena castanosperma (1), Synsepalum passargei (1), Sarcaulus brasiliensis (1), Pradosia surinamensis (1), Pradosia brevipes (1), Pouteria vernicosa (1), Sersalisia sericea (1), Pouteria multiflora (1), Pouteria macrophylla (1), Planchonella linggensis (1), Planchonella howeana (1), Pouteria hispida (1), Pouteria gardneriana (1), Micropholis egensis (1), Pouteria domingensis (1), Pouteria alnifolia (1), Planchonella kaalaensis (1), Pichonia daenikeri (1), Pichonia balansana (1), Omphalocarpum pachysteloides (1), Pycnandra francii (1), Amorphospermum antilogum (1), Neohemsleya usambarensis (1), Micropholis venulose (1), Leptostylis filipes (1), Planchonella baillonii (1), Englerophytum natalense (1), Englerophytum magalismontanum (1), Elaeoluma schomburgkiana (1), Ecclinusa ramiflora (1), Ecclinusa guianensis (1), Diploon cuspidatum (1), Delpydora macrophylla (1), Delpydora gracilis (1), Chrysophyllum venezuelanense (1), Chrysophyllum fenerivense (1), Chrysophyllum pruniforme (1), Chrysophyllum boivinianum (1), Chrysophyllum bangweolense (1), Breviea sericea (1), Pleioluma sebertii (1), Pleioluma baueri (1), Aubregrinia taiensis (1), Elaeoluma glabrescens (1), Chrysophyllum imperial (1), Chromolucuma rubriflora (1), Swartzia panacoco (1), Swartzia myrtifolia (1), Swartzia acutifolia (1), Bulbophyllum aubrevillei (1), Madhuca macrophylla (1), Argania spinosa (1), Aulotandra trialata (1), Aulotandra cf. trigonocarpa (3), Siphonochilus aethiopicus (1), Stewartia gemmate (1), Isotropis forrestii (2), Bejaria aestuans (1), Eberhardtia tonkinensis (1), Clethra fabri (1), Psychopsis papilio (2), Planchonella novozelandica (1),

2 ; 3	5 Family: Campanulaceae (*n* = 5)	Codonopsis atriplicifolia (2), Codonopsis javanica (1), Cyananthus lobatus (1), Codonopsis bhutanica (1), Leptocodon hirsutus (1),
4 ; 2	5 Family: Orchidaceae (*n* = 4), Bromeliaceae (*n* = 1).	Tainia dunnii (2), Tainia cordifolia (4), Hohenbergia laesslei (1), Tainia sp. (1), Tainia macrantha (1),
3 ; 3	11 Family: Orchidaceae (*n* = 4), Ericaceae (*Vaccinium* = 2), Betulaceae (*n* = 1), Fabaceae (*n* = 1), Campanulaceae (*n* = 1), Bromeliaceae (*n* = 1), Solanaceae (*n* = 1).	Eria coronaria (1), Mesoamerantha guatemalensis (1), Zygostates apiculate (1), Zygostates grandiflora (1), Zygostates alleniana (1), Solanum cheesmaniae (1), Vaccinium oxycoccos (3), Vaccinium microcarpum (2), Alnus incana (1), Chamaecrista ericifolia (1), Cyclocodon axillaris (1),

Primer-BLAST results for *Calluna vulgaris* marker with multiple isolates removed.

>OZ071054.1 Calluna vulgaris genome assembly, organelle: plastid:chloroplast

product length = 98

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Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        24330  ......................  24309

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        24233  ........................  24256
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>LT606490.1 Empetrum nigrum chloroplast genomic DNA containing trnL(UAA) intron region, isolate L600-2-8 - Sequence 4

product length = 97

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 307 ......C.............A 328

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 403 ....A 380

>OZ076487.1 Corema album genome assembly, organelle: plastid:chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 159880 ......C.............A 159859

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 159783 ....A 159806

>KP737379.1 Daboecia cantabrica tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 387 ......C.............A 408

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 484 ....A 461

>MT779562.1 Kalmia procumbens voucher OLD06733 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 359 ......C.............A 380

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 456 ....A 433

>MT779552.1 Rhododendron camtschaticum voucher 100317 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 357 ......C.............A 378

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 454 ....A 431

>AB080038.1 Menziesia multiflora chloroplast trnL gene, intron sequence

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 406 ....A...........A 427

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 503 ....A 480

>AB080037.1 Menziesia katsumatae chloroplast trnL gene, intron sequence

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 406 ....A...........A 427

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Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        503  ......................A  480
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>AB080036.1 Menziesia goyozanensis chloroplast trnL gene, intron sequence

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product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        406  ........A............A  427

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        503  ......................A  480
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>AB080034.1 Rhododendron benhallii chloroplast trnL gene, intron sequence

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        406  ........A............A  427

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        503  ......................A  480
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>NC_047438.1 Rhododendron delavayi var. delavayi chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        11894  ......C.A............A  11915

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        11991  ......................A  11968
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>MK262861.1 Rhododendron ferrugineum isolate TER01 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 381 ......C.A.....A 402

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 478 .....A 455

>PQ536991.1 Rhododendron nivale subsp. boreale chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 11278 ......C.A.....A 11299

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 11375 .....A 11352

>PQ550124.1 Rhododendron rupicola chloroplast, partial genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 11507 ......C.A.....A 11528

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 11604 .....A 11581

>PQ550123.1 Rhododendron phaeochrysum chloroplast, partial genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

```
Template        11898  ......C.A............A  11919

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        11995  ......................A  11972
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>PQ550122.1 Rhododendron aganniphum chloroplast, partial genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        11898  ......C.A............A  11919

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        11995  ......................A  11972
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>MF683824.1 Rhododendron arboreum isolate TNORA618 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        348  ......C.A............A  369

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        445  ......................A  422
```

>LT160662.1 Kalmia procumbens chloroplast genomic DNA containing tRNA-Leu (trnL) region

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product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        412  ..C...C.............A  433

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        509  ......................A  486
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>KY853193.1 Rhododendron sp. SZ-2017 isolate SBSH9 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 407 ......C.A.....A 428

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 504 .....A 481

>KY853181.1 Rhododendron decorum isolate SBSD5 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 407 ......C.A.....A 428

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 504 .....A 481

>NC 088748.1 Rhododendron williamsianum chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 11887 ......C.A.....A 11908

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 11984 .....A 11961

>KY486316.1 Rhododendron mucronulatum isolate R.m-Oblach-1 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 374 ......C.A.....A 395

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 471 .....A 448

>KY486315.1 Rhododendron sichotense isolate R.s-Amgu-5 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 374 ......C.A.....A 395

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 471 .....A 448

>KY486313.1 Rhododendron dauricum isolate R.d-Arsh-1 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 376 ......C.A.....A 397

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 473 .....A 450

>KY486312.1 Rhododendron ledebourii isolate R.l-Y-4 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 375 ......C.A.....A 396

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        472  ......................A  449
```

>NC_086505.1 Rhododendron purdomii chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        11886  ......C.A............A  11907

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        11983  ......................A  11960
```

>NC_083984.1 Rhododendron ambiguum chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        11837  ......C.A............A  11858

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        11934  ......................A  11911
```

>OQ054014.1 Rhododendron przewalskii subsp. przewalskii chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        11883  ......C.A............A  11904

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        11980  ......................A  11957
```

>KP979097.1 Rhododendron stapfianum voucher SNP.21910 trnL-trnF intergenic spacer region, partial sequence; mitochondrial

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 364 ......C.A.....A 385

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 461 .....A 438

>KP979095.1 Rhododendron fallacinum voucher SNP.28502 trnL-trnF intergenic spacer region, partial sequence; mitochondrial

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 354 ......C.A.....A 375

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 451 .....A 428

>KP979092.1 Rhododendron planecostatum voucher SNP.21930 trnL-trnF intergenic spacer region, partial sequence; mitochondrial

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 363 ......C.A.....A 384

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 460 .....A 437

>KP979089.1 Rhododendron crassifolium voucher SNP.21940 trnL-trnF intergenic spacer region, partial sequence; mitochondrial

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        363  ......C.A............A  384

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        460  ........................A  437
```

>KP979085.1 Rhododendron buxifolium voucher SNP.32304 trnL-trnF intergenic spacer region, partial sequence; mitochondrial

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        363  ......C.A............A  384

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        460  ........................A  437
```

>KP979083.1 Rhododendron rugosum voucher SNP.28508 trnL-trnF intergenic spacer region, partial sequence; mitochondrial

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        363  ......C.A............A  384

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        460  ........................A  437
```

>KP979080.1 Rhododendron exuberans voucher SNP.21911 trnL-trnF intergenic spacer region, partial sequence; mitochondrial

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        363  ......C.A............A  384

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
```

```
Template        460  .....................A  437
```

>KP979073.1 Rhododendron lowii voucher SNP.32305 trnL-trnF intergenic spacer region, partial sequence; mitochondrial

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        363  ......C.A............A  384

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        460  .....................A  437
```

>KP979071.1 Rhododendron suaveolens voucher SNP.21914 trnL-trnF intergenic spacer region, partial sequence; mitochondrial

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        364  ......C.A............A  385

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        461  .....................A  438
```

>KP979068.1 Rhododendron stenophyllum voucher SNP.28517 trnL-trnF intergenic spacer region, partial sequence; mitochondrial

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        363  ......C.A............A  384

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        460  .....................A  437
```

>KP979064.1 Rhododendron cuneifolium voucher SNP.28514 trnL-trnF intergenic spacer region, partial sequence; mitochondrial

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 354 ......C.A.....A 375

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 451 .....A 428

>KP979062.1 Rhododendron praetervisum voucher SNP.21944 trnL-trnF intergenic spacer region, partial sequence; mitochondrial

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 363 ......C.A.....A 384

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 460 .....A 437

>KP979054.1 Rhododendron javanicum voucher SNP.21939 trnL-trnF intergenic spacer region, partial sequence; mitochondrial

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 363 ......C.A.....A 384

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 460 .....A 437

>KP979050.1 Rhododendron orbiculatum voucher SNP.21955 trnL-trnF intergenic spacer region, partial sequence; mitochondrial

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        363  ......C.A............A  384

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        460  ........................A  437
```

>KP979042.1 Rhododendron borneense voucher SNP.21936 trnL-trnF intergenic spacer region, partial sequence; mitochondrial

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        354  ......C.A............A  375

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        451  ........................A  428
```

>KP979034.1 Rhododendron acuminatum voucher SNP.28509 trnL-trnF intergenic spacer region, partial sequence; mitochondrial

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        354  ......C.A............A  375

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        451  ........................A  428
```

>KP979004.1 Rhododendron bagobonum voucher SNP.21907 trnL-trnF intergenic spacer region, partial sequence; mitochondrial

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        363  ......C.A............A  384

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        460  ........................A  437
```

>NC_069024.1 Rhododendron anthopogonoides voucher Herbarium of Qinghai Hospital of Traditional Chinese Medicine chloroplast, complete genome

product length = 98

```
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        17278  ......C.A............A  17299

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        17375  ......................A  17352
```

>NC_067871.1 Rhododendron capitatum chloroplast, complete genome

product length = 98

```
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        11771  ......C.A............A  11792

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        11868  ......................A  11845
```

>NC_067870.1 Rhododendron thymifolium chloroplast, complete genome

product length = 98

```
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        11775  ......C.A............A  11796

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        11872  ......................A  11849
```

>NC_065477.1 Rhododendron micranthum chloroplast, complete genome

product length = 98

```
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        12140  ......C.A............A  12161

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        12237  ........................A  12214
```

>NC_061396.1 Rhododendron calophytum chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        11922  ......C.A............A  11943

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        12019  ........................A  11996
```

>OL639014.1 Rhododendron oreodoxa var. fargesii chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        11883  ......C.A............A  11904

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        11980  ........................A  11957
```

>MT990971.1 Rhododendron minus isolate 2254 trnL-trnF intergenic spacer region, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        358  ......C.A............A  379

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
```

Template 455 .....A 432

>MT990965.1 Rhododendron carolinianum isolate 2248 trnL-trnF intergenic spacer region, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 358 ......C.A.....A 379

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 455 .....A 432

>MT990961.1 Rhododendron chapmanii isolate 2244 trnL-trnF intergenic spacer region, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 357 ......C.A.....A 378

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 454 .....A 431

>MT990960.1 Rhododendron smokianum isolate 2243 trnL-trnF intergenic spacer region, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 358 ......C.A.....A 379

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 455 .....A 432

>MW374796.1 Rhododendron shanii chloroplast, complete genome

product length = 98

```
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        11839  ......C.A............A  11860

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        11936  ......................A  11913
```

>MZ493266.1 Rhododendron duclouxii isolate 1103 tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        382  ......C.A............A  403

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        479  ......................A  456
```

>MZ493253.1 Rhododendron spinuliferum isolate 399 tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        382  ......C.A............A  403

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        479  ......................A  456
```

>MZ493248.1 Rhododendron spiciferum isolate 1124 tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
```

```
Template        384  ......C.A............A  405


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        481  ........................A  458
```

>MZ493239.1 Rhododendron scabrifolium isolate 1097 tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        382  ......C.A............A  403


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        479  ........................A  456
```

>KC195979.1 Rhododendron mollicomum voucher GLM-123334 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        386  ......C.A............A  407


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        483  ........................A  460
```

>KC195978.1 Rhododendron virgatum voucher 2203 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        386  ......C.A............A  407
```

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        483  ......................A  460
```

>MT779561.1 Kalmia angustifolia voucher OLD06732 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        357  ..C...C.............A  378

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        454  ......................A  431
```

>MT779551.1 Rhododendron emarginatum voucher 1997/094 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        361  ......C.A............A  382

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        458  ......................A  435
```

>MT779550.1 Rhododendron himantodes voucher 1997/020 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        357  ......C.A............A  378

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        454  ......................A  431
```

>MT779549.1 Rhododendron loranthiflorum voucher 1997/025 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 365 ......C.A.....A 386

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 462 .....A 439

>MT779548.1 Rhododendron edanoi voucher 2002/388 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 365 ......C.A.....A 386

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 462 .....A 439

>MT779547.1 Rhododendron konori voucher 2001/003 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 365 ......C.A.....A 386

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 462 .....A 439

>MT779546.1 Rhododendron polyanthemum voucher 1994/013 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        365  ......C.A............A  386

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        462  ........................A  439
```

>MT779545.1 Rhododendron macgregoriae voucher 2007/614 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        365  ......C.A............A  386

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        462  ........................A  439
```

>MT779544.1 Rhododendron lochiae voucher 1972/109 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        360  ......C.A............A  381

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        457  ........................A  434
```

>MT779543.1 Rhododendron laetum voucher 1973/020 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        365  ......C.A............A  386

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
```

Template 462 .....A 439

>MT779541.1 Rhododendron aurigeranum voucher 1986/003 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 365 ......C.A.....A 386

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 462 .....A 439

>MT779540.1 Rhododendron retusum voucher 1973/064 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 356 ......C.A.....A 377

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 453 .....A 430

>MT779539.1 Rhododendron zaleucum voucher 2002/1096b trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 357 ......C.A.....A 378

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 454 .....A 431

>MT779533.1 Rhododendron lutescens voucher 100362 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 358 ......C.A.....A 379

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 455 .....A 432

>MT779531.1 Rhododendron christianae voucher 2002/375 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 365 ......C.A.....A 386

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 462 .....A 439

>MT779526.1 Rhododendron xanthostephanum voucher 100474 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 357 ......C.A.....A 378

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 454 .....A 431

>MT779525.1 Rhododendron auritum voucher 101052 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 357 ......C.A.....A 378

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        454  ........................A  431
```

>MT779522.1 Rhododendron racemosum voucher OLD00795 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        357  ......C.A............A  378

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        454  ........................A  431
```

>MT779518.1 Rhododendron hirsutum voucher OLD00789 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        323  ......C.A............A  344

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        420  ........................A  397
```

>MT779516.1 Rhododendron moupinense voucher 100374 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        358  ......C.A............A  379

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        455  ........................A  432
```

>MT779512.1 Rhododendron tomentosum voucher 100426 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 358 ......C.A.....A 379

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 455 .....A 432

>MT779511.1 Rhododendron tapetiforme voucher 101054 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 357 ......C.A.....A 378

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 454 .....A 431

>MT779510.1 Rhododendron setosum voucher 2010/384 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 362 ......C.A.....A 383

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 459 .....A 436

>MT779508.1 Rhododendron polycladum voucher 100392 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        278  ......C.A............A  299

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        375  ........................A  352
```

>MT779507.1 Rhododendron nitidulum voucher 100377 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        357  ......C.A............A  378

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        454  ........................A  431
```

>MT779506.1 Rhododendron hippophaeoides voucher 100353 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        357  ......C.A............A  378

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        454  ........................A  431
```

>MT779505.1 Rhododendron fastigiatum voucher 100343 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        357  ......C.A............A  378

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
```

Template 454 .....A 431

>MT779504.1 Rhododendron rubiginosum voucher 100404 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 357 ......C.A.....A 378

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 454 .....A 431

>MT779503.1 Rhododendron bracteatum voucher 100848 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 357 ......C.A.....A 378

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 454 .....A 431

>MT779502.1 Rhododendron charitopes voucher 100866 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 356 ......C.A.....A 377

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 453 .....A 430

>MT779500.1 Rhododendron keysii voucher 100748 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 357 ......C.A.....A 378

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 454 .....A 431

>MT779499.1 Rhododendron cinnabarinum voucher 100322 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 358 ......C.A.....A 379

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 455 .....A 432

>MT779497.1 Rhododendron leucaspis voucher 100468 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 357 ......C.A.....A 378

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 454 .....A 431

>MT779495.1 Rhododendron schlippenbachii voucher 100408 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 358 ......C.A.....A 379

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 455 .....A 432

>MT779494.1 Rhododendron pilosum voucher 1266 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 357 ......C.A.....A 378

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 454 .....A 431

>MT779492.1 Rhododendron albrechtii voucher 100005 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 357 ......C.A.....A 378

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 454 .....A 431

>MT779491.1 Rhododendron vaseyi voucher 100431 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 356 ......C.A.....A 377

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 453 .....A 430

>MT779489.1 Rhododendron prunifolium voucher 101046 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 356 ......C.A.....A 377

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 453 .....A 430

>MT779488.1 Rhododendron prinophyllum voucher 100397 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 355 ......C.A.....A 376

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 452 .....A 429

>MT779487.1 Rhododendron periclymenoides voucher 100391 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 356 ......C.A.....A 377

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 453 .....A 430

>MT779486.1 Rhododendron occidentale voucher 100380 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        356  ......C.A............A  377

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        453  ........................A  430
```

>MT779484.1 Rhododendron cumberlandense voucher 101045 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        356  ......C.A............A  377

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        453  ........................A  430
```

>MT779483.1 Rhododendron austrinum voucher 100456 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        357  ......C.A............A  378

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        454  ........................A  431
```

>MT779482.1 Rhododendron atlanticum voucher 100013 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        356  ......C.A............A  377

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
```

Template 453 .....A 430

>MT779480.1 Rhododendron arborescens voucher 101044 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 356 ......C.A.....A 377

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 453 .....A 430

>MT779477.1 Rhododendron sherriffii voucher 100795 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 358 ......C.A.....A 379

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 455 .....A 432

>MT779473.1 Rhododendron alutaceum voucher 100821 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 358 ......C.A.....A 379

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 455 .....A 432

>MT779472.1 Rhododendron selense voucher 100412 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 358 ......C.A.....A 379

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 455 .....A 432

>MT779471.1 Rhododendron smirnowii voucher 100417 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 357 ......C.A.....A 378

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 454 .....A 431

>MT779470.1 Rhododendron ponticum voucher 100393 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 356 ......C.A.....A 377

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 453 .....A 430

>MT779469.1 Rhododendron macrophyllum voucher 100837 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 358 ......C.A.....A 379

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        455  ........................A  432
```

>MT779468.1 Rhododendron degronianum voucher 100338 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        356  ......C.A............A  377

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        453  ........................A  430
```

>MT779467.1 Rhododendron brachycarpum voucher 100248 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        357  ......C.A............A  378

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        454  ........................A  431
```

>MT779466.1 Rhododendron elliottii voucher 100496 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 109
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        357  ......C.A............A  378

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        465  ........................A  442
```

>MT779465.1 Rhododendron neriiflorum voucher 1999/259 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 357 ......C.A.....A 378

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 454 .....A 431

>MT779464.1 Rhododendron strigillosum voucher 100420 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 357 ......C.A.....A 378

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 454 .....A 431

>MT779463.1 Rhododendron annae voucher 100794 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 355 ......C.A.....A 376

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 452 .....A 429

>MT779462.1 Rhododendron griersonianum voucher 100483 trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        358  ......C.A............A  379

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        455  ........................A  432
```

>MT779461.1 Rhododendron protistum voucher 100880 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        373  ......C.A............A  394

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        470  ........................A  447
```

>MT779459.1 Rhododendron macabeanum voucher 100467 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        373  ......C.A............A  394

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        470  ........................A  447
```

>MT779454.1 Rhododendron campylocarpum voucher 100315 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        358  ......C.A............A  379
```

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        455  ......................A  432
```

>MT779453.1 Rhododendron auriculatum voucher 100016 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        357  ......C.A............A  378

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        454  ......................A  431
```

>MT779452.1 Rhododendron thayerianum voucher 100856 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        357  ......C.A............A  378

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        454  ......................A  431
```

>MT779451.1 Rhododendron ririei voucher 100889 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        358  ......C.A............A  379

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        455  ......................A  432
```

>MT779448.1 Rhododendron albiflorum voucher 2007/083d trnL-trnF intergenic spacer region, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 357 ......C.A.....A 378

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 454 .....A 431

>MT505833.1 Kalmia buxifolia isolate MtLeConte_3 tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 353 ..C...C.....A 374

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 450 .....A 427

>MT239366.1 Rhododendron concinnum chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 11844 ......C.A.....A 11865

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 11941 .....A 11918

>MT239363.1 Rhododendron henanense subsp. lingbaoense chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

```
Template        11906  ......C.A............A  11927

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        12003  ......................A  11980
```

>MZ073672.1 Rhododendron molle chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        11923  ......C.A............A  11944

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        12020  ......................A  11997
```

>KC690314.1 Rhododendron aureum haplotype E tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        379  ......C.A............A  400

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        476  ......................A  453
```

>NC_058233.1 Rhododendron kawakamii chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        96112  ......C.A............A  96133

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        96209  ......................A  96186
```

>NC_057644.1 Rhododendron datiandingense chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 110803 ......C.A.....A 110824

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 110900 .....A 110877

>NC_053746.1 Rhododendron platypodum voucher LH Ma Wulong 2020516 chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 11890 ......C.A.....A 11911

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 11987 .....A 11964

>HM636522.1 Rhododendron cyanocarpum isolate RCCF trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 257 ......C.A.....A 278

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 354 .....A 331

>GQ245396.1 Rhododendron lapponicum tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        412  ......C.A............A  433

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        509  ........................A  486
```

>GQ245395.1 Rhododendron groenlandicum tRNA-Leu (trnL) gene, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        412  ......C.A............A  433

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        509  ........................A  486
```

>FJ807957.1 Rhododendron irroratum isolate ITDP0501 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        545  ......C.A............A  524

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        448  ........................A  471
```

>EU087425.1 Rhododendron insigne tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        316  ......C.A............A  337
```

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        413  ......................A  390
```

>EU087419.1 Rhododendron eclecteum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        316  ......C.A............A  337

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        413  ......................A  390
```

>EU087415.1 Rhododendron taliense tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        316  ......C.A............A  337

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        413  ......................A  390
```

>EU087408.1 Rhododendron forrestii tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        316  ......C.A............A  337

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        413  ......................A  390
```

>EU087406.1 Rhododendron mallotum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 316 ......C.A.....A 337

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 413 .....A 390

>EU087405.1 Rhododendron floccigerum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 315 ......C.A.....A 336

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 412 .....A 389

>EU087402.1 Rhododendron catacosmum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 315 ......C.A.....A 336

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 412 .....A 389

>EU087401.1 Rhododendron beanianum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        317  ......C.A............A  338

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        414  ........................A  391
```

>EU087400.1 Rhododendron pseudochrysanthum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        315  ......C.A............A  336

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        412  ........................A  389
```

>EU087397.1 Rhododendron anhweiense tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        316  ......C.A............A  337

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        413  ........................A  390
```

>EU087396.1 Rhododendron tsariense tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        314  ......C.A............A  335

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
```

Template 411 .....A 388

>EU087394.1 Rhododendron mengtszense tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 315 ......C.A.....A 336

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 412 .....A 389

>EU087392.1 Rhododendron aberconwayi tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 315 ......C.A.....A 336

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 412 .....A 389

>EU087385.1 Rhododendron grande tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 331 ......C.A.....A 352

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 428 .....A 405

>EU087384.1 Rhododendron fulvum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 317 ......C.A.....A 338

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 414 .....A 391

>EU087381.1 Rhododendron praevernum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 316 ......C.A.....A 337

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 413 .....A 390

>EU087378.1 Rhododendron orbiculare tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 315 ......C.A.....A 336

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 412 .....A 389

>EU087374.1 Rhododendron rothschildii tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 332 ......C.A.....A 353

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        429  ......................A  406
```

>EU087371.1 Rhododendron wardii tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        317  ......C.A............A  338

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        414  ......................A  391
```

>EU087369.1 Rhododendron campanulatum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        314  ......C.A............A  335

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        411  ......................A  388
```

>EU087367.1 Rhododendron barbatum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        331  ......C.A............A  352

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        428  ......................A  405
```

>EU087365.1 Rhododendron argyrophyllum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 315 ......C.A.....A 336

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 412 .....A 389

>EU087364.1 Rhododendron coryanum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 315 ......C.A.....A 336

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 412 .....A 389

>EU087363.1 Rhododendron adenopodum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 316 ......C.A.....A 337

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 413 .....A 390

>EU087362.1 Rhododendron lanigerum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22

Template        315  ......C.A............A  336


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24

Template        412  ........................A  389
```

>DQ784107.1 Rhododendron agastum isolate ATSZ0501 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98

Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22

Template        406  ......C.A............A  427


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24

Template        503  ........................A  480
```

>AJ626922.1 Rhododendron maximum chloroplast partial tRNA-Leu gene for transfer RNA-Leu and partial trnL-F intergenic spacer region

```
product length = 98

Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22

Template        396  ......C.A............A  417


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24

Template        493  ........................A  470
```

>AJ626921.1 Rhododendron hybrid cultivar 'Hillier' chloroplast partial tRNA-Leu gene for transfer RNA-Leu, isolate B and partial trnL-F intergenic spacer region and partial trnL-F intergenic spacer region

```
product length = 98

Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22

Template        396  ......C.A............A  417
```

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        493  ......................A  470
```

>AJ626917.1 Kalmia latifolia chloroplast partial tRNA-Leu gene for transfer RNA-Leu, isolate B and partial trnL-F intergenic spacer region and partial trnL-F intergenic spacer region

```
product length = 99
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        398  ..C...C.............A  419

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        496  ......................A  473
```

>DQ999966.1 Rhododendron sinogrande tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        403  ......C.A............A  424

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        500  ......................A  477
```

>DQ999961.1 Rhododendron rex subsp. fictolacteum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        387  ......C.A............A  408

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
```

Template 484 .....A 461

>DQ999959.1 Rhododendron edgeworthii tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 386 ......C.A.....A 407

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 483 .....A 460

>DQ999958.1 Rhododendron dimitrum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 109

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 386 ......C.A.....A 407

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 494 .....A 471

>DQ999956.1 Rhododendron anthosphaerum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 387 ......C.A.....A 408

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 484 .....A 461

>AY496922.1 Rhododendron hyperythrum tRNA-Leu gene and trnL-trnF spacer sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 385 ......C.A.....A 406

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 482 .....A 459

>AY496919.1 Rhododendron ungernii tRNA-Leu gene and trnL-trnF spacer sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 386 ......C.A.....A 407

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 483 .....A 460

>AY496916.1 Rhododendron caucasicum tRNA-Leu gene and trnL-trnF spacer sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 386 ......C.A.....A 407

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 483 .....A 460

>AY496915.1 Rhododendron catawbiense tRNA-Leu gene and trnL-trnF spacer sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 386 ......C.A.....A 407

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        483  ........................A  460
```

>AF452224.1 Menziesia pilosa tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer region, partial sequence; chloroplast gene for chloroplast product

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        386  ......C.A............A  407

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        483  ........................A  460
```

>AF452223.1 Menziesia ciliicalyx var. multiflora tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer region, partial sequence; chloroplast gene for chloroplast product

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        386  ......C.A............A  407

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        483  ........................A  460
```

>AF452215.1 Rhododendron nipponicum tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer region, partial sequence; chloroplast gene for chloroplast product

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        382  ......C.A............A  403

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
```

```
Template        479  ......................A  456
```

>AF452207.1 Rhododendron santapaui tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer region, partial sequence; chloroplast gene for chloroplast product

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        389  ......C.A............A  410

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        486  ......................A  463
```

>AF394255.1 Rhododendron primuliflorum chloroplast tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        386  ......C.A............A  407

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        483  ......................A  460
```

>AF394253.1 Rhododendron trichocladum chloroplast tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        380  ......C.A............A  401

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        477  ......................A  454
```

>AF394252.1 Ledum palustre var. palustre chloroplast tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        387  ......C.A............A  408

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        484  ........................A  461
```

>AF394247.1 Rhododendron fortunei chloroplast tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        386  ......C.A............A  407

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        483  ........................A  460
```

>AB038842.1 Rhododendron keiskei chloroplast gene, intron of trnL, partial sequence

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        388  ......C.A............A  409

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        485  ........................A  462
```

>AB038840.1 Rhododendron pentaphyllum chloroplast gene, intron of trnL, partial sequence

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        388  ......C.A............A  409

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        485  ........................A  462
```

>AB038838.1 Rhododendron quinquefolium chloroplast gene, intron of trnL, partial sequence

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        388  ......C.A............A  409

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        485  ........................A  462
```

>AB038836.1 Rhododendron nipponicum chloroplast gene, intron of trnL, partial sequence

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        386  ......C.A............A  407

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        483  ........................A  460
```

>AB080043.1 Rhododendron semibarbatum chloroplast trnL gene, intron sequence

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        406  ..C.....A............A  427
```

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        503  ........................A  480
```

>AB080042.1 Rhododendron kaempferi chloroplast trnL gene, intron sequence

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        406  ..C.....A............A  427

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        503  ........................A  480
```

>AB080040.1 Menziesia pilosa chloroplast trnL gene, intron sequence

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        406  ....A...A............A  427

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        503  ........................A  480
```

>AB080035.1 Menziesia ferruginea chloroplast trnL gene, intron sequence

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        406  ....A...A............A  427

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        503  ........................A  480
```

>MH603442.1 Siphonochilus kirkii voucher Zomlefer et al 2300 (FTG, NY) isolate 2004-0324A plastid, partial genome

product length = 104

Forward primer	1	CATCGTTTGCTAGATCTTTTGC	22
Template	48023	...A.................A	48044

Reverse primer	1	CAATAAATTTCATTGTTGTCGGTC	24
Template	48126	.T.....................A	48103

>LT160660.1 Harrimanella hypnoides chloroplast genomic DNA containing tRNA-Leu (trnL) region

product length = 97

Forward primer	1	CATCGTTTGCTAGATCTTTTGC	22
Template	418	......C..............	439

Reverse primer	1	CAATAAATTTCATTGTTGTCGGTC	24
Template	514	AC.....................A	491

>AY994539.1 Siphonochilus decorus voucher NMNH 00-135 tRNA-Leu gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe gene, partial sequence; chloroplast

product length = 104

Forward primer	1	CATCGTTTGCTAGATCTTTTGC	22
Template	439	...A.................A	460

Reverse primer	1	CAATAAATTTCATTGTTGTCGGTC	24
Template	542	.T.....................A	519

>AF394249.1 Rhododendron pachypodum chloroplast tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 386 ......C.A.....A 407

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 483 T.....A 460

>NC_048482.1 Bulbophyllum mentosum voucher C. Fiorini, 323 (HBCB) chloroplast, complete genome

product length = 93

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 47321 ...A.....A.....A 47342

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 47413 .T.....A 47390

>NC_047283.1 Senna obtusifolia chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 53272 ...A.....A.....A 53293

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 53369 .T.....A 53346

>NC_046699.1 Camellia mingii voucher S. X. Yang 5610 plastid, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50002 ...A.....A.....A 50023

```
Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50099  .T.....................A  50076
```

>NC_045865.1 Astelia australiana isolate 13384 voucher 13384 chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        49450  ...A.....A...........A  49471

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        49547  .T.....................A  49524
```

>MN295595.1 Manilkara zapota chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50711  ...A.....A...........A  50732

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50808  .T.....................A  50785
```

>MK820035.1 Camellia weiningensis chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        49634  ...A.....A...........A  49655

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        49731  .T.....................A  49708
```

>MK187141.1 Manilkara mochisia voucher JG-16-P05_H3 tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 410 ...A.....A..........A 431

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 507 .T.....................A 484

>MK797536.1 Pradosia ptychandra voucher LV109316 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 284 ...A.....A..........A 305

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 381 .T.....................A 358

>MK797531.1 Pouteria rodriguesiana voucher A110022 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 363 ...A.....A..........A 384

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 460 .T.....................A 437

>MK797528.1 Pouteria guianensis voucher NH200008 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 363 ...A.....A..........A 384

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        460  .T.....................A  437
```

>MK797525.1 Pouteria gongrijpii voucher P01860033 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        367  ...A.....A...........A  388

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        464  .T.....................A  441
```

>MK797520.1 Pouteria eugeniifolia voucher A110009 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        358  ...A.....A...........A  379

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        455  .T.....................A  432
```

>MK797519.1 Pouteria egregia voucher B422016 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        394  ...A.....A...........A  415

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        491  .T.....................A  468
```

>MK797517.1 Pouteria decorticans voucher NH200123 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 341 ...A.....A..........A 362

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 438 .T.....................A 415

>MK797516.1 Pouteria cladantha voucher NH200203 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 336 ...A.....A..........A 357

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 433 .T.....................A 410

>MK797444.1 Micropholis melinoniana voucher A110164 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 362 ...A.....A..........A 383

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 459 .T.....................A 436

>MK797443.1 Micropholis guyanensis voucher LV109265 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22

Template        313  ...A.....A..........A  334


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24

Template        410  .T.....................A  387
```

>MK797435.1 Micropholis cayennensis voucher NH200222 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

```
product length = 98

Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22

Template        357  ...A.....A..........A  378


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24

Template        454  .T.....................A  431
```

>MK797415.1 Manilkara huberi voucher NH200285 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

```
product length = 98

Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22

Template        358  ...A.....A..........A  379


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24

Template        455  .T.....................A  432
```

>MK797159.1 Ragala sanguinolenta voucher B420004 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

```
product length = 98

Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22

Template        366  ...A.....A..........A  387


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24

Template        463  .T.....................A  440
```

>MK797157.1 Chrysophyllum prieurii voucher B437055 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 354 ...A.....A.....A 375

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 451 .T.....A 428

>MK797156.1 Chrysophyllum lucentifolium voucher NL110055 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 363 ...A.....A.....A 384

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 460 .T.....A 437

>MK797155.1 Chrysophyllum cuneifolium voucher B435039 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 365 ...A.....A.....A 386

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 462 .T.....A 439

>MK797127.1 Caperonia stenophylla voucher OT3161 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        342  ...A.....A..........A  363

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        439  .T.....................A  416
```

>PV548271.1 Xantolis weimingii isolate ES2450 chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50525  ...A.....A..........A  50546

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50622  .T.....................A  50599
```

>OZ249363.1 Sideroxylon spinosum genome assembly, chromosome: 7A

```
product length = 98
Forward primer  1         CATCGTTTGCTAGATCTTTTGC  22
Template        32155018  ...A.....A..........A  32155039

Reverse primer  1         CAATAAATTTCATTGTTGTCGGTC  24
Template        32155115  .T.....................A  32155092


product length = 98
Forward primer  1         CATCGTTTGCTAGATCTTTTGC  22
Template        21634174  ...A.....A..........A  21634153

Reverse primer  1         CAATAAATTTCATTGTTGTCGGTC  24
Template        21634077  .T.....................A  21634100
```

>PV424010.1 Camellia costata isolate RJ chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50071 ...A.....A.....A 50092

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50168 .T.....A 50145

>MK390628.1 Senna rugosa voucher A.O. Souza 201 (UFG) tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 414 ...A.....A.....A 435

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 511 .T.....A 488

>PV340847.1 Psychopsis sanderae voucher MHLi or156 chloroplast, complete genome

product length = 93

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 47912 ...A.....A.....A 47933

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 48004 .T.....A 47981

>PV409670.1 Astelia alpina chloroplast, complete genome

product length = 98

```
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        49282  ...A.....A..........A  49303

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        49379  .T.....................A  49356
```

>PV345991.1 Camellia melliana chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50055  ...A.....A..........A  50076

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50152  .T.....................A  50129
```

>OQ503626.1 Camellia tachangensis var. remotiserrata isolate YH04 chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50065  ...A.....A..........A  50086

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50162  .T.....................A  50139
```

>OQ503616.1 Camellia pilosperma isolate re429 chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        49977  ...A.....A..........A  49998

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
```

Template 50074 .T.....A 50051

>OQ503599.1 Camellia gymnogyna isolate re400 chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50066 ...A.....A.....A 50087

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50163 .T.....A 50140

>OQ503598.1 Camellia fangchengensis isolate re381 chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50034 ...A.....A.....A 50055

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50131 .T.....A 50108

>OQ503555.1 Camellia quinquelocularis isolate PA02 chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 49996 ...A.....A.....A 50017

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50093 .T.....A 50070

>OQ503554.1 Camellia impressinervis isolate KM35 chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50050 ...A.....A..........A 50071

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50147 .T.....................A 50124

>OQ503549.1 Camellia cuspidata isolate KM6 chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50048 ...A.....A..........A 50069

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50145 .T.....................A 50122

>PV010369.1 Manilkara kauki chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 51001 ...A.....A..........A 51022

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 51098 .T.....................A 51075

>PQ539953.1 Camellia sp. XX-2024b chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 49976 ...A.....A..........A 49997

```
Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50073  .T.....................A  50050
```

>PQ539952.1 Camellia pitardii chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50128  ...A.....A...........A  50149

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50225  .T.....................A  50202
```

>PQ539951.1 Camellia paucipetala chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50145  ...A.....A...........A  50166

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50242  .T.....................A  50219
```

>PQ539950.1 Camellia longistyla chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        49955  ...A.....A...........A  49976

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50052  .T.....................A  50029
```

>PQ539949.1 Camellia kweichowensis chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 49986 ...A.....A..........A 50007

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50083 .T.....................A 50060

>PQ539948.1 Camellia delicata chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 49977 ...A.....A..........A 49998

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50074 .T.....................A 50051

>OR933667.1 Phanerodiscus capuronii clone contig9 tRNA-Leu (trnL-UAA) and tRNA-Phe (trnF-GAA) genes, complete sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 1230 ...A..C.............A 1251

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 1327 .T.....................A 1304

>EU564035.1 Camellia reticulata voucher Xiao 0010 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 389 ...A.....A..........A 410

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        486  .T.....................A  463
```

>EU564032.1 Camellia semiserrata voucher Yang 1102 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        390  ...A.....A...........A  411

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        487  .T.....................A  464
```

>EU564031.1 Camellia saluenensis voucher Xiao 9901 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        391  ...A.....A...........A  412

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        488  .T.....................A  465
```

>EU564030.1 Camellia hongkongensis voucher Liu 0610 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        389  ...A.....A...........A  410

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        486  .T.....................A  463
```

>NC_041472.1 Stewartia obovata chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50653  ...A.....A..........A  50674

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50750  .T.....................A  50727
```

>NC_041471.1 Stewartia micrantha chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50620  ...A.....A..........A  50641

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50717  .T.....................A  50694
```

>NC_041509.1 Hartia laotica chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50644  ...A.....A..........A  50665

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50741  .T.....................A  50718
```

>MH782184.1 Stewartia crassifolia chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50632  ...A.....A..........A  50653
```

```
Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50729  .T.....................A  50706
```

>MH782183.1 Stewartia cordifolia chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50420  ...A.....A...........A  50441

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50517  .T.....................A  50494
```

>NC_041470.1 Stewartia sinii chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50667  ...A.....A...........A  50688

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50764  .T.....................A  50741
```

>MH782181.1 Stewartia pteropetiolata chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50643  ...A.....A...........A  50664

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50740  .T.....................A  50717
```

>NC_041469.1 Stewartia villosa chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50701 ...A.....A..........A 50722

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50798 .T.....................A 50775

>MH782179.1 Schima superba chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50166 ...A.....A..........A 50187

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50263 .T.....................A 50240

>MH782177.1 Stewartia sinensis var. acutisepala chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50630 ...A.....A..........A 50651

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50727 .T.....................A 50704

>MH782175.1 Stewartia malacodendron chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50509 ...A.....A..........A 50530

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50606 .T.....A 50583

>NC_041468.1 Stewartia monadelpha chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50615 ...A.....A.....A 50636

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50712 .T.....A 50689

>MH782173.1 Stewartia ovata chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50604 ...A.....A.....A 50625

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50701 .T.....A 50678

>MH753082.1 Stewartia pseudocamellia chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50583 ...A.....A.....A 50604

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50680 .T.....A 50657

>MH753081.1 Stewartia rostrata chloroplast, complete genome

product length = 98

```
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50574  ...A.....A..........A  50595

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50671  .T.....................A  50648
```

>MH753080.1 Stewartia rubiginosa chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50592  ...A.....A..........A  50613

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50689  .T.....................A  50666
```

>NC_041467.1 Stewartia serrata chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50597  ...A.....A..........A  50618

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50694  .T.....................A  50671
```

>OR670934.1 Palaquium sp. isolate TV424 tRNA-Leu (trnL) gene, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        419  ...A.....A..........A  440

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        516  .T.....................A  493
```

>OR670766.1 Madhuca dubardii isolate TV078 tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 417 ...A.....A..........A 438

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 514 .T.....................A 491

>MG709382.1 Sideroxylon lanuginosum voucher AH01 tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 430 ...A.....A..........A 451

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 527 .T.....................A 504

>NC_041130.1 Sideroxylon wightianum chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 51864 ...A.....A..........A 51885

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 51961 .T.....................A 51938

>MH752984.1 Astelia pumila isolate ACMO.8 chloroplast, complete genome

product length = 98

```
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        49139  ...A.....A..........A  49160

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        49236  .T.....................A  49213
```

>KX268216.1 Senna tora voucher RNG:1958 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        347  ...A.....A..........A  368

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        444  .T.....................A  421
```

>KY239485.1 Cryptochilus luteus voucher NTH3479 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 93
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        384  ...A.....A..........A  405

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        476  .T.....................A  453
```

>KY239484.1 Eria siamensis voucher QSBG OR-2007-537/1 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 93
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        436  ...A.....A..........A  457
```

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        528  .T.....................A  505
```

>KY239483.1 Cryptochilus strictus voucher Pradhan 8 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 93
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        459  ...A.....A...........A  480

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        551  .T.....................A  528
```

>KY172817.1 Camellia euphlebia voucher SD001-2011 tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRAN-Phe (trnF) gene, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        451  ...A.....A...........A  472

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        548  .T.....................A  525
```

>KY286968.1 Blumenbachia dissecta isolate W4001 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        357  ...A..C..............A  378

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        454  .T.....................A  431
```

>KX673560.1 Pachites bodkinii voucher T603 tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; plastid

product length = 92

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 264 ...A.....A..........A 285

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 355 .T.....................A 332

>KX673559.1 Pachites appressus voucher HTC 1102 tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; plastid

product length = 92

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 244 ...A.....A..........A 265

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 335 .T.....................A 312

>NC_035699.1 Gordonia lasianthus voucher JCRA 110687 plastid, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50717 ...A.....A..........A 50738

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50814 .T.....................A 50791

>KY406784.1 Schima argentea plastid, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50364 ...A.....A..........A 50385

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50461 .T.....................A 50438

>NC_035696.1 Stewartia calcicola voucher YXQ030 plastid, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50637 ...A.....A..........A 50658

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50734 .T.....................A 50711

>NC_035692.1 Franklinia alatamaha voucher MO-6587811 plastid, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50674 ...A.....A..........A 50695

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50771 .T.....................A 50748

>NC_035688.1 Camellia mairei voucher YangSX 5054 plastid, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50073 ...A.....A..........A 50094

```
Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50170  .T.....................A  50147
```

>NC_035646.1 Gordonia brandegeei voucher N. Zamora 7196 plastid, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50718  ...A.....A...........A  50739

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50815  .T.....................A  50792
```

>NC_035546.1 Schima wallichii voucher YXQ001 plastid, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50355  ...A.....A...........A  50376

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50452  .T.....................A  50429
```

>NC_035544.1 Schima sinensis voucher YXQ2902 plastid, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50370  ...A.....A...........A  50391

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50467  .T.....................A  50444
```

>NC_035543.1 Schima sericans voucher YXQ053 plastid, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50375 ...A.....A..........A 50396

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50472 .T.....................A 50449

>NC_035542.1 Schima remotiserrata voucher YXQ186 plastid, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50347 ...A.....A..........A 50368

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50444 .T.....................A 50421

>NC_035541.1 Schima noronhae voucher YXQ034 plastid, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50362 ...A.....A..........A 50383

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50459 .T.....................A 50436

>NC_035540.1 Schima multibracteata voucher YXQ146 plastid, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50351 ...A.....A..........A 50372

```
Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50448  .T.....................A  50425
```

>NC_035539.1 Schima khasiana voucher YXQ070 plastid, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50352  ...A.....A...........A  50373

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50449  .T.....................A  50426
```

>NC_035538.1 Schima crenata voucher YXQ103 plastid, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50354  ...A.....A...........A  50375

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50451  .T.....................A  50428
```

>NC_035537.1 Schima brevipedicellata voucher YXQ069 plastid, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50353  ...A.....A...........A  50374

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50450  .T.....................A  50427
```

>NC_087749.1 Camellia salicifolia chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 49744 ...A.....A..........A 49765

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 49841 .T.....................A 49818

>NC_087748.1 Camellia liberistyloides chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 38981 ...A.....A..........A 39002

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 39078 .T.....................A 39055

>OR353673.1 Camellia grijsii var. shensiensis chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 49945 ...A.....A..........A 49966

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50042 .T.....................A 50019

>OR423135.1 Camellia danzaiensis voucher YSX5082_2A chloroplast, partial genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 49509 ...A.....A..........A 49530

```
Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        49606  .T.....................A  49583
```

>OR423133.1 Camellia leptophylla voucher YSX5076 chloroplast, partial genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50064  ...A.....A...........A  50085

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50161  .T.....................A  50138
```

>OR415834.1 Camellia ptilophylla voucher YSX51073 chloroplast, partial genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50016  ...A.....A...........A  50037

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50113  .T.....................A  50090
```

>OQ852473.1 Camellia pubescens voucher YSX4457 chloroplast, partial genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        49658  ...A.....A...........A  49679

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        49755  .T.....................A  49732
```

>OQ852472.1 Camellia arborescens voucher YSX2759 chloroplast, partial genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50057 ...A.....A.....A 50078

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50154 .T.....A 50131

>OQ646047.1 Camellia kwangsiensis voucher YSX6257 chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50062 ...A.....A.....A 50083

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50159 .T.....A 50136

>KY626040.1 Camellia huana chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50044 ...A.....A.....A 50065

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50141 .T.....A 50118

>NC_033501.1 Pouteria campechiana voucher PDBK 2014-0238 chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

```
Template        50286  ...A.....A..........A  50307

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50383  .T.....................A  50360
```

>NC_085496.1 Camellia albosericea chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50075  ...A.....A..........A  50096

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50172  .T.....................A  50149
```

>ON422323.1 Camellia pingguoensis chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50064  ...A.....A..........A  50085

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50161  .T.....................A  50138
```

>ON422321.1 Camellia micrantha chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50034  ...A.....A..........A  50055

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50131  .T.....................A  50108
```

>ON418955.1 Camellia pubipetala chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50063 ...A.....A..........A 50084

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50160 .T.....................A 50137

>ON418954.1 Camellia wumingensis chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50039 ...A.....A..........A 50060

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50136 .T.....................A 50113

>NC_030706.1 Cephalanthera humilis voucher Jin X.H. 10379 (PE) plastid, complete genome

product length = 93

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 49569 ...A.....A..........A 49590

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 49661 .T.....................A 49638

>NC_083217.1 Senna reticulata chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 51881 ...A.....A..........A 51902

```
Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        51978  .T.....................A  51955
```

>OQ451429.1 Pouteria splendens voucher NG 4754_EIF trnL-trnF intergenic spacer region, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        399  ...A.....A...........A  420

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        496  .T.....................A  473
```

>KU763011.1 Aechmea andersoniana voucher Leme 4365-TYPE (HB) tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        425  ..GA.................A  446

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        522  .T.....................A  499
```

>KU763009.1 Hohenbergia portoricensis voucher Luther sn (SEL) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        417  ..GA.................A  438

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
```

Template 514 .T.....................A 491

>KU763007.1 Hohenbergia spinulosa voucher Aguirre-Santoro 1506 (SEL) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 424 ..GA.................A 445

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 521 .T.....................A 498

>KU763006.1 Aechmea amorimii voucher Aguirre-Santoro 722 (RMH) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 424 ..GA.................A 445

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 521 .T.....................A 498

>KU762999.1 Hohenbergia penduliflora voucher Becquer s. n. (Living specimen) tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 425 ..GA.................A 446

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 522 .T.....A 499

>KU762993.1 Hohenbergia proctorii voucher Aguirre-Santoro 1811 (IJ) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 421 ..GA.....A 442

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 518 .T.....A 495

>KU762990.1 Hohenbergia antillana voucher Stevens 229 (NY) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 424 ..GA.....A 445

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 521 .T.....A 498

>KU762987.1 Aechmea patentissima voucher Leme 6509 (Living specimen) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 425 ..GA.....A 446

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 522 .T.....A 499

>KU762985.1 Aechmea sulbahianensis voucher Leme 6720-TYPE (HB.) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 425 ..GA.....A 446

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 522 .T.....A 499

>KU762968.1 Aechmea lingulatoides voucher Monteiro 495 (RB) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 99

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 425 ..GA.....A 446

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 523 .T.....A 500

>KU762962.1 Hohenbergia distans voucher Aguirre-Santoro 1814 (IJ) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 424 ..GA.....A 445

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 521 .T.....A 498

>KU762960.1 Hohenbergia jamaicana voucher Aguirre-Santoro 1810 (NY) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 425 ..GA.....A 446

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 522 .T.....A 499

>KU762958.1 Aechmea turbinocalyx voucher Monteiro 453 (RB) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 425 ..GA.....A 446

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 522 .T.....A 499

>KU762957.1 Ronnbergia brasiliensis voucher Monteiro 473 (RB) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 425 ..GA.....A 446

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 522 .T.....A 499

>KU762955.1 Aechmea pernambucentris voucher Leme 6610 (HB) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 420 ..GA.....A 441

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 517 .T.....A 494

>KU762953.1 Aechmea bicolor voucher Monteiro 483 (RB) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 431 ..GA.....A 452

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 528 .T.....A 505

>KU762952.1 Hohenbergia inermis voucher Aguirre-Santoro 1807 (IJ) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 424 ..GA.....A 445

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 521 .T.....A 498

>KU762951.1 Hohenbergia mesoamericana voucher Ramirez 1666 (CICY) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 427 ..GA.....A 448

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 524 .T.....A 501

>KU762947.1 Aechmea froesii voucher Aguirre-Santoro 711 (SEL) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 424 ..GA.....A 445

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 521 .T.....A 498

>KU762926.1 Hohenbergia caymanensis voucher Aguirre-Santoro 1509 (SEL) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 425 ..GA.....A 446

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 522 .T.....A 499

>KU762923.1 Hohenbergia sp. JAS-2016 voucher Aguirre-Santoro 1816 (NY) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 425 ..GA.....A 446

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 522 .T.....A 499

>KU762917.1 Aechmea maranguapensis voucher Leme 3914-TYPE (RB) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 425 ..GA.....A 446

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 522 .T.....A 499

>KU762912.1 Aechmea incompta voucher Leme 3746 (Living specimen) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 425 ..GA.....A 446

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 522 .T.....A 499

>KU762910.1 Aechmea linharesiorum voucher Aguirre-Santoro 707 (SEL) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 425 ..GA.....A 446

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 522 .T.....A 499

>NC_081063.1 Camellia magniflora chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 49638 ...A.....A.....A 49659

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 49735 .T.....A 49712

>NC_080884.1 Camellia bailinshanica chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50073 ...A.....A.....A 50094

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50170 .T.....A 50147

>NC_081704.1 Viridantha plumosa isolate T303 voucher MEXU:Salazar 9484 chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 90070 ..GA.....A 90091

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 90167 .T.....A 90144

>NC_080233.1 Camellia omeiensis chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50069 ...A.....A.....A 50090

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50166 .T.....A 50143

>NC_080228.1 Camellia oligophlebia chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50080 ...A.....A.....A 50101

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50177 .T.....A 50154

>NC_079935.1 Camellia jinshajiangica chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50084 ...A.....A.....A 50105

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

```
Template        50181  .T.....................A  50158
```

>NC_082534.1 Camellia borealiyunnanica chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        49676  ...A.....A...........A  49697

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        49773  .T.....................A  49750
```

>NC_079666.1 Camellia brevipetiolata chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        49981  ...A.....A...........A  50002

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50078  .T.....................A  50055
```

>NC_072608.1 Camellia lungshenensis chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        94218  ...A.....A...........A  94239

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        94315  .T.....................A  94292
```

>NC_072329.1 Camellia caudata chloroplast, complete genome

```
product length = 98
```

```
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50065  ...A.....A..........A  50086

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50162  .T.....................A  50139
```

>ON208848.1 Camellia ptilosperma chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50035  ...A.....A..........A  50056

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50132  .T.....................A  50109
```

>NC_070087.1 Stewartia sichuanensis chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50755  ...A.....A..........A  50776

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50852  .T.....................A  50829
```

>NC_069310.1 Camellia minima chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50087  ...A.....A..........A  50108

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50184  .T.....................A  50161
```

>NC_069309.1 Camellia insularis chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50063 ...A.....A.....A 50084

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50160 .T.....A 50137

>OP650217.1 Pouteria viridis chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50746 ...A.....A.....A 50767

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50843 .T.....A 50820

>OM084924.1 Camellia nitidissima isolate GLA tRNA-Leu (trnL-UAA) and tRNA-Phe (trnF-GAA) genes, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 388 ...A.....A.....A 409

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 485 .T.....A 462

>NC_068781.1 Camellia longzhouensis chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

```
Template        50069  ...A.....A..........A  50090

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50166  .T.....................A  50143
```

>OM935753.1 Camellia chrysanthoides chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50061  ...A.....A..........A  50082

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50158  .T.....................A  50135
```

>NC_068780.1 Camellia flavida chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50052  ...A.....A..........A  50073

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50149  .T.....................A  50126
```

>OM868265.1 Camellia fascicularis chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50044  ...A.....A..........A  50065

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50141  .T.....................A  50118
```

>NC_067089.1 Camellia parvipetala chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50070 ...A.....A..........A 50091

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50167 .T.....................A 50144

>NC_067086.1 Camellia lienshanensis chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 49963 ...A.....A..........A 49984

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50060 .T.....................A 50037

>NC_067085.1 Camellia bambusifolia chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 94307 ...A.....A..........A 94328

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 94404 .T.....................A 94381

>OL449832.1 Schima parviflora chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50389 ...A.....A..........A 50410

```
Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50486  .T.....................A  50463
```

>OL449818.1 Schima sp. YXQ228 chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50371  ...A.....A...........A  50392

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50468  .T.....................A  50445
```

>MW376915.1 Sophora sp. ND-2022 chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        53155  ...A.....A...........A  53176

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        53252  .T.....................A  53229
```

>NC_061660.1 Mimusops elengi chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        51863  ...A.....A...........A  51884

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        51960  .T.....................A  51937
```

>MW120318.1 Camellia phellocapsa isolate C21 trnL-trnF intergenic spacer and tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 435 ...A.....A..........A 414

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 338 .T.....................A 361

>MW120290.1 Camellia macrosepala isolate D68 trnL-trnF intergenic spacer and tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 435 ...A.....A..........A 414

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 338 .T.....................A 361

>MW120278.1 Camellia limonia isolate C61 trnL-trnF intergenic spacer and tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 435 ...A.....A..........A 414

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 338 .T.....................A 361

>MW120255.1 Camellia hekouensis isolate D27 trnL-trnF intergenic spacer and tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 430 ...A.....A..........A 409

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        333  .T.....................A  356
```

>MW120241.1 Camellia euryoides isolate D47 trnL-trnF intergenic spacer and tRNA-Leu (trnL) gene, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        429  ...A.....A...........A  408

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        332  .T.....................A  355
```

>MW120213.1 Camellia angustifolia isolate D02 trnL-trnF intergenic spacer and tRNA-Leu (trnL) gene, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        435  ...A.....A...........A  414

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        338  .T.....................A  361
```

>MW120210.1 Camellia acutissima isolate D59 trnL-trnF intergenic spacer and tRNA-Leu (trnL) gene, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        435  ...A.....A...........A  414

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        338  .T.....................A  361
```

>AB981779.1 Sapotaceae sp. A3-002 chloroplast rbcL gene, partial sequence, isolate: a3-2

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 114 ...A.....A..........A 93

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 17 .T.....................A 40

>MT737976.1 Ormosia bancana voucher K.M. Wong 43 (A) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 364 ...A.....A..........A 385

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 461 .T.....................A 438

>NC_060558.1 Tainia acuminata chloroplast, complete genome

product length = 93

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 48012 ..GA.................A 48033

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 48104 .T.....................A 48081

>OK377261.1 Camellia polyodonta chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

```
Template        50008  ...A.....A..........A  50029


Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50105  .T.....................A  50082
```

>OK135162.1 Camellia indochinensis var. tunghinensis chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50052  ...A.....A..........A  50073


Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50149  .T.....................A  50126
```

>MT779450.1 Rhododendron argyrophyllum voucher 100812 trnL-trnF intergenic spacer region, partial sequence; plastid

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        357  ......C.A............A  378


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        454  ...A...................A  431
```

>NC_058625.1 Mimusops coriacea voucher UEC 90949 chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        51816  ...A.....A..........A  51837


Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        51913  .T.....................A  51890
```

>KF591290.1 Astelia fragrans voucher Allan Herbarium CHR 630380 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 411 ...A.....A.....A 432

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 508 .T.....A 485

>KF591259.1 Earina autumnalis voucher Allan Herbarium CHR 630370 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 93

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 453 ...A.....A.....A 474

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 545 .T.....A 522

>JQ765222.1 Banksia plumosa isolate BF42 trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 353 ..CA.....A 374

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 450 .T.....A 427

>JQ765180.1 Banksia carlinoides isolate BF93 trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 353 ..CA.....A 374

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 450 .T.....A 427

>JX649514.1 Canistrum aurantiacum isolate BB092 tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 389 ..GA.....A 410

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 486 .T.....A 463

>JX649508.1 Billbergia tweedieana isolate BB121 tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 389 ..GA.....A 410

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 486 .T.....A 463

>KC428586.1 Pouteria xerocarpa voucher UQ WellsJ 157-Pxe tRNA-Leu (trnL) gene and trnL-F intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

```
Template        358  ...A.....A..........A  379


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        455  .T.....................A  432
```

>KC428585.1 Planchonella myrsinodendron voucher UQ WellsJ 156-Pmy tRNA-Leu (trnL) gene and trnL-F intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        358  ...A.....A..........A  379


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        455  .T.....................A  432
```

>KC428566.1 Niemeyera prunifera voucher QRS 69608 tRNA-Leu (trnL) gene and trnL-F intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        358  ...A.....A..........A  379


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        455  .T.....................A  432
```

>MZ274148.1 Tieghemella heckelii voucher BRLU:Bourland 605 chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        51898  ...A.....A..........A  51919


Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
```

Template 51995 .T.....A 51972

>MZ274147.1 Tieghemella africana voucher WAG:Breteler 14812 chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 51859 ...A.....A.....A 51880

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 51956 .T.....A 51933

>MZ274146.1 Baillonella toxisperma voucher BR:Van Valkenburg 3166 chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 51854 ...A.....A.....A 51875

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 51951 .T.....A 51928

>MZ274145.1 Autranella congolensis voucher BRLU:Ley 1132 chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 51664 ...A.....A.....A 51685

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 51761 .T.....A 51738

>MZ274144.1 Pouteria aningeri voucher BRLU:Bourland 536 chloroplast, complete genome

product length = 98

```
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50761  ...A.....A..........A  50782

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50858  .T.....................A  50835
```

>MZ274141.1 Gambeya subnuda voucher BR:Jongkind 12497 chloroplast, complete genome

product length = 98

```
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50722  ...A.....A..........A  50743

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50819  .T.....................A  50796
```

>MZ274140.1 Gambeya lacourtiana voucher BR:Wieringa 1674 chloroplast, complete genome

product length = 98

```
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50696  ...A.....A..........A  50717

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50793  .T.....................A  50770
```

>MZ274139.1 Gambeya gigantea voucher WAG:Breteler 15392 chloroplast, complete genome

product length = 98

```
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50713  ...A.....A..........A  50734
```

```
Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50810  .T.....................A  50787
```

>MZ274138.1 Gambeya africana voucher WAG:Jongkind 10814 chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50661  ...A.....A...........A  50682

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50758  .T.....................A  50735
```

>MZ047865.1 Astelia nervosa tRNA-Leu (trnL) gene, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        390  ...A.....A...........A  411

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        487  .T.....................A  464
```

>MT157621.1 Camellia perpetua chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        36530  ...A.....A...........A  36509

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        36433  .T.....................A  36456
```

>MT366823.1 Planchonella cinerea isolate EDNA19-0053540 tRNA-Leu (trnL-UUA) gene, intron; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 399 ...A.....A.....A 420

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 496 .T.....A 473

>AB817591.1 Schima mertensiana chloroplast trnL gene, intron, partial sequence, isolate: OGA0397

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 389 ...A.....A.....A 410

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 486 .T.....A 463

>NC_058254.1 Camellia rostrata voucher YangSX 6081 plastid, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 49704 ...A.....A.....A 49725

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 49801 .T.....A 49778

>KC479316.1 Faucherea thouvenotii tRNA-Leu (trnL) gene, intron; chloroplast

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        424  ...A.....A..........A  445

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        521  .T.....................A  498
```

>KC479315.1 Mimusops capuronii tRNA-Leu (trnL) gene, intron; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        423  ...A.....A..........A  444

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        520  .T.....................A  497
```

>KC479314.1 Capurodendron madagascariense tRNA-Leu (trnL) gene, intron; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        379  ...A.....A..........A  400

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        476  .T.....................A  453
```

>KC479288.1 Olax sp. Mada159 tRNA-Leu (trnL) gene, intron; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        467  ...A..C.............A  488

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
```

Template 564 .T.....A 541

>NC_057958.1 Camellia debaoensis chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 94310 ...A.....A.....A 94331

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 94407 .T.....A 94384

>HQ158591.1 Synsepalum dulcificum tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 410 ...A.....A.....A 431

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 507 .T.....A 484

>HQ158588.1 Camellia sinensis tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 99

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 422 ...A.....A.....A 443

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 520 .T.....A 497

>HQ158573.1 Camellia crapnelliana tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 422 ...A.....A..........A 443

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 519 .T.....................A 496

>JN811777.1 Epipactis helleborine isolate E.h.10 tRNA-Leu (trnL) gene, intron 1; chloroplast

product length = 93

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 538 ...A.....A..........A 559

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 630 .T.....................A 607

>JX275895.1 Myrocarpus fastigiatus voucher D.Cardoso 2404 (HUEFS) tRNA-Leu (trnL) gene, intron; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 429 ...A.....A..........A 450

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 526 .T.....................A 503

>JX182539.1 Collospermum microspermum voucher JLB244 tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 408 ...A.....A..........A 429

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 505 .T.....................A 482

>JX182538.1 Collospermum hastatum voucher JLB s.n. tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 406 ...A.....A..........A 427

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 503 .T.....................A 480

>JX182519.1 Astelia nadeaudii voucher JYM s.n. tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 408 ...A.....A..........A 429

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 505 .T.....................A 482

>JX182526.1 Astelia papuana voucher PR71 tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 408 ...A.....A..........A 429

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        505  .T.....................A  482
```

>JX182520.1 Astelia neocaledonica voucher JM595 tRNA-Leu (trnL) gene, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        413  ...A.....A...........A  434

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        510  .T.....................A  487
```

>JX182516.1 Astelia menziesiana voucher JLB107 tRNA-Leu (trnL) gene, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        409  ...A.....A...........A  430

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        506  .T.....................A  483
```

>JX182503.1 Astelia argyrocoma voucher JLB137 tRNA-Leu (trnL) gene, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        408  ...A.....A...........A  429

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        505  .T.....................A  482
```

>JX182508.1 Astelia graminea voucher JLB257 tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 408 ...A.....A..........A 429

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 505 .T.....................A 482

>JX182505.1 Astelia banksii voucher JLB228 tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 413 ...A.....A..........A 434

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 510 .T.....................A 487

>MN065160.1 Pouteria caimito chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 50787 ...A.....A..........A 50808

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 50884 .T.....................A 50861

>NC_057076.1 Vitellaria paradoxa chloroplast, complete genome

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

```
Template        51898  ...A.....A..........A  51919

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        51995  .T.....................A  51972
```

>NC_053619.1 Madhuca hainanensis chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        51763  ...A.....A..........A  51784

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        51860  .T.....................A  51837
```

>NC_050388.1 Camellia fraterna chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50049  ...A.....A..........A  50070

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50146  .T.....................A  50123
```

>MT663341.1 Camellia chuongtsoensis chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        49738  ...A.....A..........A  49759

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        49835  .T.....................A  49812
```

>JF804930.1 Sideroxylon cinereum tRNA-Leu (trnL-UAA) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 199 ...A.....A..........A 220

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 296 .T.....................A 273

>HM100601.1 Stewartia tonkinensis isolate 4556 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 435 ...A.....A..........A 456

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 532 .T.....................A 509

>HM100594.1 Stewartia laotica isolate 4812 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 437 ...A.....A..........A 458

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 534 .T.....................A 511

>FJ942960.1 Hohenbergia negrilensis tRNA-Leu (trnL) gene, partial sequence; and trnL-trnF intergenic spacer, complete sequence; chloroplast

product length = 97

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 482 ..GA.....A 503

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 578 .T.....A 555

>FJ009877.1 Senna gardneri isolate FS413 tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 374 ...A.....A.....A 395

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 471 .T.....A 448

>FJ039206.1 Pouteria singularis voucher NL110247 tRNA-Leu(UAA) (trnL) gene, intron; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 416 ...A.....A.....A 437

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 513 .T.....A 490

>FJ562410.1 Gomesa radicans voucher Whitten 2988 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 93

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

```
Template        548  ...A.....A..........A  569


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        640  .T.....................A  617
```

>DQ344340.1 Xantolis siamensis tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        411  ...A.....A..........A  432


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        508  .T.....................A  485
```

>DQ344339.1 Van-royena castanosperma tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        414  ...A.....A..........A  435


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        511  .T.....................A  488
```

>DQ344338.1 Synsepalum passargei tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        398  ...A.....A..........A  419


Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        495  .T.....................A  472
```

>DQ344336.1 Sarcaulus brasiliensis tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 402 ...A.....A..........A 423

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 499 .T.....................A 476

>DQ344333.1 Pradosia surinamensis tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 403 ...A.....A..........A 424

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 500 .T.....................A 477

>DQ344331.1 Pradosia brevipes tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 383 ...A.....A..........A 404

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 480 .T.....................A 457

>DQ344330.1 Pouteria vernicosa tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 413 ...A.....A..........A 434

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 510 .T.....................A 487

>DQ344329.1 Sersalisia sericea tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 407 ...A.....A..........A 428

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 504 .T.....................A 481

>DQ344327.1 Pouteria multiflora tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 351 ...A.....A..........A 372

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 448 .T.....................A 425

>DQ344326.1 Pouteria macrophylla tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 407 ...A.....A..........A 428

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        504  .T.....................A  481
```

>DQ344325.1 Planchonella linggensis tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        407  ...A.....A...........A  428

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        504  .T.....................A  481
```

>DQ344324.1 Planchonella howeana tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        407  ...A.....A...........A  428

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        504  .T.....................A  481
```

>DQ344323.1 Pouteria hispida tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        407  ...A.....A...........A  428

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        504  .T.....................A  481
```

>DQ344321.1 Pouteria gardneriana tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 407 ...A.....A..........A 428

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 504 .T.....................A 481

>DQ344303.1 Micropholis egensis tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 407 ...A.....A..........A 428

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 504 .T.....................A 481

>DQ344319.1 Pouteria domingensis tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 407 ...A.....A..........A 428

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 504 .T.....................A 481

>DQ344316.1 Pouteria alnifolia tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        407  ...A.....A..........A  428

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        504  .T.....................A  481
```

>DQ344314.1 Planchonella kaalaensis tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        407  ...A.....A..........A  428

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        504  .T.....................A  481
```

>DQ344313.1 Pichonia daenikeri tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        407  ...A.....A..........A  428

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        504  .T.....................A  481
```

>DQ344312.1 Pichonia balansana tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        407  ...A.....A..........A  428

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
```

Template 504 .T.....A 481

>DQ344310.1 Omphalocarpum pachysteloides tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 407 ...A.....A.....A 428

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 504 .T.....A 481

>DQ344309.1 Pycnandra francii tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 407 ...A.....A.....A 428

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 504 .T.....A 481

>DQ344307.1 Amorphospermum antilogum tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 407 ...A.....A.....A 428

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 504 .T.....A 481

>DQ344306.1 Neohemsleya usambarensis tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 407 ...A.....A..........A 428

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 504 .T.....................A 481

>DQ344305.1 Micropholis venulosa tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 407 ...A.....A..........A 428

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 504 .T.....................A 481

>DQ344301.1 Leptostylis filipes tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 407 ...A.....A..........A 428

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 504 .T.....................A 481

>DQ344300.1 Planchonella baillonii tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 407 ...A.....A..........A 428

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        504  .T.....................A  481
```

>DQ344299.1 Englerophytum natalense tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        407  ...A.....A...........A  428

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        504  .T.....................A  481
```

>DQ344298.1 Englerophytum magalismontanum tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        406  ...A.....A...........A  427

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        503  .T.....................A  480
```

>DQ344297.1 Elaeoluma schomburgkiana tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 103
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        407  ...A.....A...........A  428

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        509  .T.....................A  486
```

>DQ344296.1 Ecclinusa ramiflora tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        387  ...A.....A..........A  408

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        484  .T.....................A  461
```

>DQ344295.1 Ecclinusa guianensis tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        407  ...A.....A..........A  428

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        504  .T.....................A  481
```

>DQ344293.1 Diploon cuspidatum tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        402  ...A.....A..........A  423

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        499  .T.....................A  476
```

>DQ344292.1 Delpydora macrophylla tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        412  ...A.....A..........A  433

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        509  .T.....................A  486
```

>DQ344291.1 Delpydora gracilis tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        407  ...A.....A..........A  428

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        504  .T.....................A  481
```

>DQ344290.1 Chrysophyllum venezuelanense tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        407  ...A.....A..........A  428

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        504  .T.....................A  481
```

>DQ344286.1 Chrysophyllum fenerivense tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        407  ...A.....A..........A  428

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
```

```
Template        504  .T.....................A  481
```

>DQ344288.1 Chrysophyllum pruniforme tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        407  ...A.....A...........A  428

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        504  .T.....................A  481
```

>DQ344284.1 Chrysophyllum boivinianum tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        407  ...A.....A...........A  428

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        504  .T.....................A  481
```

>DQ344283.1 Chrysophyllum bangweolense tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        407  ...A.....A...........A  428

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        504  .T.....................A  481
```

>DQ344282.1 Breviea sericea tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 417 ...A.....A..........A 438

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 514 .T.....................A 491

>DQ344280.1 Pleioluma sebertii tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 407 ...A.....A..........A 428

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 504 .T.....................A 481

>DQ344279.1 Pleioluma baueri tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 407 ...A.....A..........A 428

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 504 .T.....................A 481

>DQ344278.1 Aubregrinia taiensis tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 385 ...A.....A..........A 406

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        482  .T.....................A  459
```

>EF558604.1 Elaeoluma glabrescens tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

```
product length = 103
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        413  ...A.....A...........A  434

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        515  .T.....................A  492
```

>EF558603.1 Chrysophyllum imperiale tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        408  ...A.....A...........A  429

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        505  .T.....................A  482
```

>EF558602.1 Chromolucuma rubriflora tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        407  ...A.....A...........A  428

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
```

```
Template        504  .T.....................A  481
```

>EF466325.1 Swartzia panacoco var. sagotii isolate S73panacS64 voucher Torke 220 (MO) authority Swartzia panacoco var. sagotii (Sandwith) R.S.Cowan tRNA-Leu (trnL) gene, intron; chloroplast

```
product length = 98

Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22

Template        406  ...A.....A...........A  427

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24

Template        503  .G.....................A  480
```

>EF466318.1 Swartzia myrtifolia var. elegans isolate S73myrtE87 voucher Sant'Ana 874 (MO) authority Swartzia myrtifolia Sm. var. elegans (Schott) R.S.Cowan tRNA-Leu (trnL) gene, intron; chloroplast

```
product length = 98

Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22

Template        424  ...A.....A...........A  445

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24

Template        521  .G.....................A  498
```

>EF466272.1 Swartzia acutifolia isolate S73acut53 voucher Alves 2342 (SP) authority Swartzia acutifolia Vog. tRNA-Leu (trnL) gene, intron; chloroplast

```
product length = 98

Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22

Template        440  ...A.....A...........A  461

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24

Template        537  .G.....................A  514
```

>EF200155.1 Bulbophyllum aubrevillei voucher K16631 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence

product length = 93

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 632 ...A.....A..........A 653

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 724 .T.....................A 701

>DQ924308.1 Madhuca macrophylla voucher Chase 1363 (K) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 400 ...A.....A..........A 421

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 497 .T.....................A 474

>DQ924307.1 Argania spinosa voucher Chase 978 (K) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; plastid

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 399 ...A.....A..........A 420

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 496 .T.....................A 473

>AY769778.1 Aulotandra trialata tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 105

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 440 ...A.....A..........A 461

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 544 .T.....................A 521

>AY769777.1 Aulotandra cf. trigonocarpa Wilkin 1141 tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 105

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 448 ...A.....A..........A 469

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 552 .T.....................A 529

>AY769774.1 Siphonochilus aethiopicus tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 104

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 419 ...A.....A..........A 440

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 522 .T.....................A 499

>AY216565.1 Stewartia gemmata tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence; chloroplast gene for chloroplast product

product length = 98

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        380  ...A.....A..........A  401

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        477  .T.....................A  454
```

>AY251249.1 Isotropis forrestii chloroplast tRNA-Leu gene and trnL-trnF intergenic spacer, partial sequence

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        434  ...A.....A..........A  455

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        531  .T.....................A  508
```

>AF394264.1 Bejaria aestuans chloroplast tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        384  ..C...C.............A  405

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        481  ...C...................A  458
```

>AF534666.1 Eberhardtia tonkinensis chloroplast tRNA-Leu (trnL) gene, partial sequence and trnL-trnF intergenic spacer region

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        385  ...A.....A..........A  406

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
```

```
Template        482  .T.....................A  459
```

>AF499827.1 Clethra fabri tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast gene for chloroplast product

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        377  ...A.....A...........A  398

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        474  .T.....................A  451
```

>AF350740.1 Psychopsis papilio tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 93
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        583  ...A.....A...........A  604

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        675  .T.....................A  652
```

>AF396221.1 Planchonella novozelandica tRNA-Leu (trnL) gene, intron sequence; chloroplast gene for chloroplast product

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        402  ...A.....A...........A  423

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        499  .T.....................A  476
```

>PQ146530.1 Codonopsis atriplicifolia chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        50247  ...A.....A.............  50226

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        50150  .T.................C....A  50173
```

>NC_063743.1 Codonopsis javanica chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        69824  ...A.....A.............  69845

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        69921  .T.................C....A  69898
```

>NC_063739.1 Cyananthus lobatus chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        55846  ...A.....A.............  55825

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        55749  .T.................C....A  55772
```

>NC_063738.1 Codonopsis bhutanica chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        56176  ...A.....A.............  56155
```

```
Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        56079  .T..............C....A  56102
```

>MW149119.1 Leptocodon hirsutus chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        56045  ...A.....A.............  56024

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        55948  .T..............C....A  55971
```

>NC_045862.1 Tainia dunnii voucher FAFU01867 chloroplast, complete genome

```
product length = 93
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        48244  T.GA..................A  48265

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        48336  .T.....................A  48313
```

>NC_045851.1 Tainia cordifolia voucher FAFU08457 chloroplast, complete genome

```
product length = 93
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        48178  T.GA..................A  48199

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        48270  .T.....................A  48247
```

>KU762927.1 Hohenbergia laesslei voucher Aguirre-Santoro 1809 (NY) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer,

complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 425 .MGA.....A 446

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 522 .T.....A 499

>KM025193.1 Tainia sp. Li 150 tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 93

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 646 T.GA.....A 667

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 738 .T.....A 715

>KM025191.1 Tainia macrantha voucher L.Li 093(IBSC) tRNA-Leu (trnL) gene, partial sequence; chloroplast

product length = 93

Forward primer 1 CATCGTTTGCTAGATCTTTTGC 22

Template 585 T.GA.....A 606

Reverse primer 1 CAATAAATTTCATTGTTGTCGGTC 24

Template 677 .T.....A 654

>KY239380.1 Eria coronaria voucher P. Sanders P001 tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

product length = 93

```
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        541  ...A.....A..........A  562

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        633  .TC.....................A  610
```

>NC_080305.1 Mesoamerantha guatemalensis isolate IR1837 voucher CICY:Ramirez 1837 chloroplast, complete genome

```
product length = 98
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        95285  ...A.....A..........A  95306

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        95382  .TC.....................A  95359
```

>FJ562407.1 Zygostates apiculata voucher Whitten 2929 FLAS tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 93
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        459  ...A.....A..........A  480

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        551  .TC.....................A  528
```

>AF350666.1 Zygostates grandiflora tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 93
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        458  ...A.....A..........A  479
```

```
Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        550  .TC....................A  527
```

>DQ315941.1 Zygostates alleniana tRNA-Leu (trnL) gene and trnL-trnF intergenic spacer, partial sequence; chloroplast

```
product length = 93
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        458  ...A.....A...........A  479

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        550  .TC....................A  527
```

>AP038850.1 Solanum cheesmaniae LA0166 DNA, chromosome 1, nearly complete sequence

```
product length = 98
Forward primer  1         CATCGTTTGCTAGATCTTTTGC  22
Template        52560572  ...A.....A...........A  52560551

Reverse primer  1         CAATAAATTTCATTGTTGTCGGTC  24
Template        52560475  .T..............C....A  52560498
```

>LC864051.1 Vaccinium oxycoccos TI:Murata & Kuroda 13073101 chloroplast trnL gene for intron 1, partial sequence

```
product length = 98
Forward primer  1    CATCGTTTGCTAGATCTTTTGC  22
Template        393  ......C......T.......A  414

Reverse primer  1    CAATAAATTTCATTGTTGTCGGTC  24
Template        490  ...G.........C........A  467
```

>LC864048.1 Vaccinium microcarpum TI:Murata & Kuroda 13080101 chloroplast trnL gene for intron 1, partial sequence

product length = 98

Forward primer	1	CATCGTTTGCTAGATCTTTTGC	22
Template	394	......C......T.......A	415

Reverse primer	1	CAATAAATTTCATTGTTGTCGGTC	24
Template	491	...G..........C........A	468

>OZ222492.1 Alnus incana genome assembly, chromosome: 4

product length = 98

Forward primer	1	CATCGTTTGCTAGATCTTTTGC	22
Template	16602977	...A.....A...........A	16602956

Reverse primer	1	CAATAAATTTCATTGTTGTCGGTC	24
Template	16602880	.T.........C..........A	16602903

>MW558013.1 Chamaecrista ericifolia voucher M.M.T. Cota 723 (HUEFS) tRNA-Leu (trnL) gene, partial sequence; trnL-trnF intergenic spacer, complete sequence; and tRNA-Phe (trnF) gene, partial sequence; chloroplast

product length = 98

Forward primer	1	CATCGTTTGCTAGATCTTTTGC	22
Template	302	...A.....A...........A	323

Reverse primer	1	CAATAAATTTCATTGTTGTCGGTC	24
Template	399	.T..............A.....A	376

>NC_063741.1 Cyclocodon axillaris chloroplast, complete genome

product length = 98

```
Forward primer  1      CATCGTTTGCTAGATCTTTTGC  22
Template        52131  ...A.....A..........A  52110

Reverse primer  1      CAATAAATTTCATTGTTGTCGGTC  24
Template        52034  .T..............C....A  52057
```