Supplementary Material 2

Structural-variant dot plots for the manually verified cases

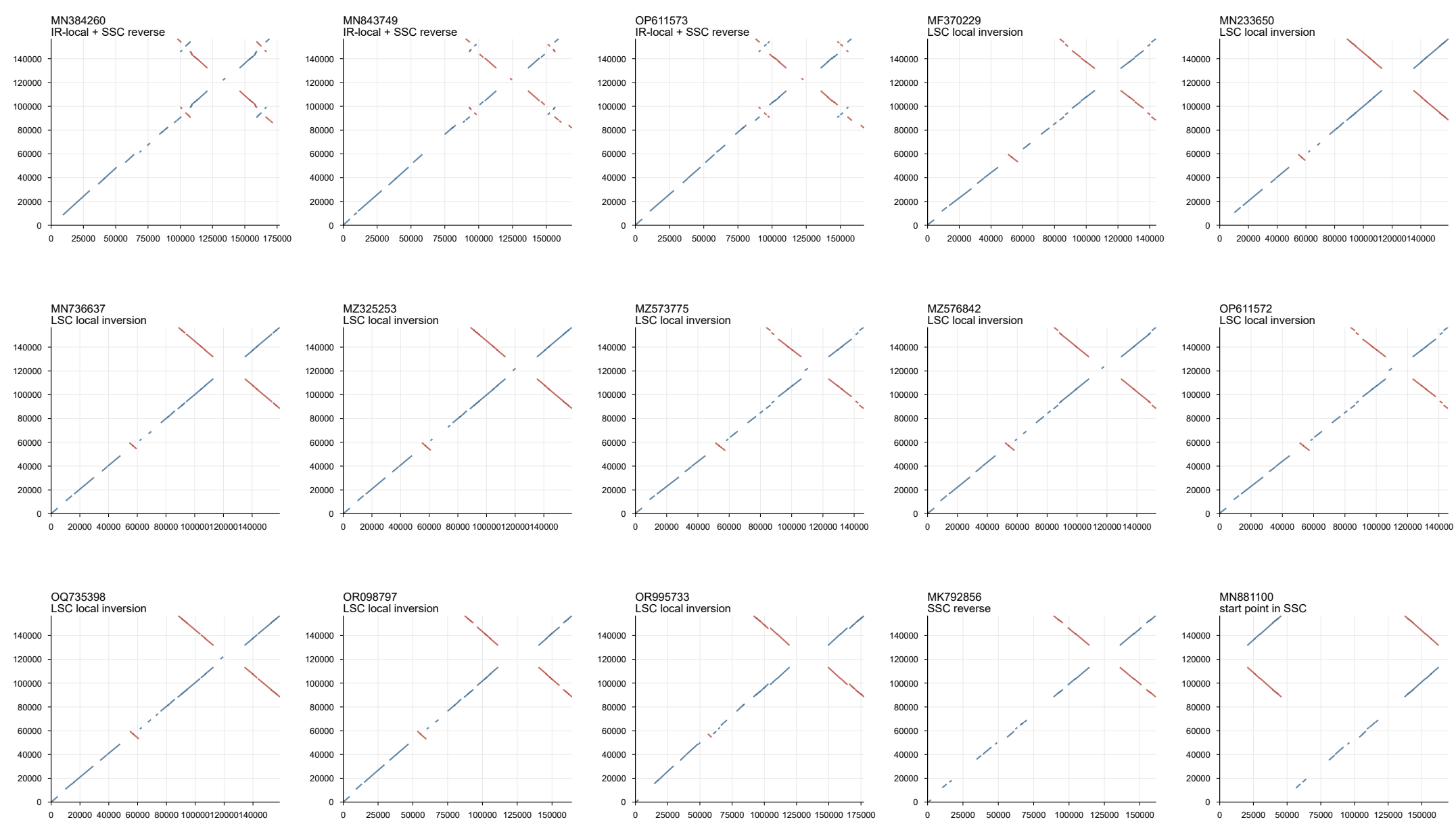
Vector BLAST dot plots. Each paper has one Sup2 page number. For every case the reference is the first record in the corresponding *_all.fasta file; each panel compares one listed structural variant (query) with the reference (subject). Blue, forward HSP; red, reverse HSP. HSPs <500 bp or <80% identity are omitted. Panel titles give the accession and the variant class reported in the manual LASTAL review. Because the reference is the first listed accession, each panel shows the difference relative to that sequence; if the reference itself carries the same inversion, the panel can be flat even when the absolute variant class is correct.

Case	Reference	Variants	Sup2 page
2432370	JX978472	15	1
2559713	MT129631	7	2
2309262	KX063863	10	3
2694148	MK611803	1	4
2378966	MK611803	1	5
2324928	KF856619	4	6
2420842	MG459020	1	7
2420847	HM125536	7	8
2530712	MH751592	2	9
2306207	MN539621	8	10
2544681	MF135595	5	11
2275827	MG831880	6	12
2281029	MK262735	3	13
2288889	MK611803	7	14
2567461	MG604297	50	15--16
2621456	MT991757	1	17
2621463	GU456628	29	18
2622811	NC_034691	21	19
2629683	MG813874	25	20
2704257	LC767269	1	21

2432370 | The first complete chloroplast genome of Cymodocea rotundata (Cymodoceaceae)

Reference: JX978472 (Najas flexilis, 156,366 bp)

Reference = first record in all.fasta.

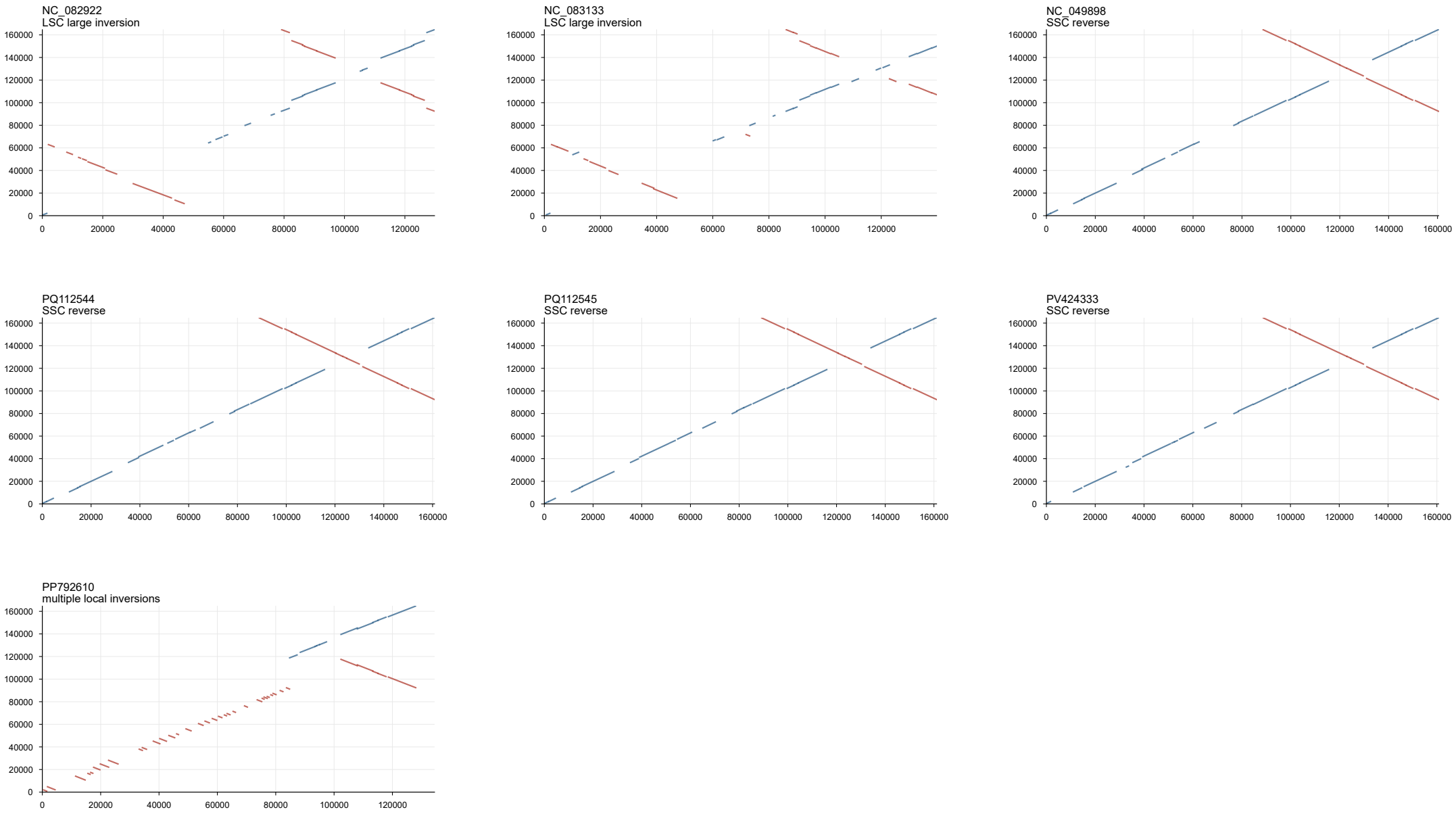


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2559713 | The complete chloroplast genome of Hiptage benghalensis (Malpighiaceae)

Reference: MT129631 (Rhizophora apiculata, 164,560 bp)

Reference = first record in all.fasta.

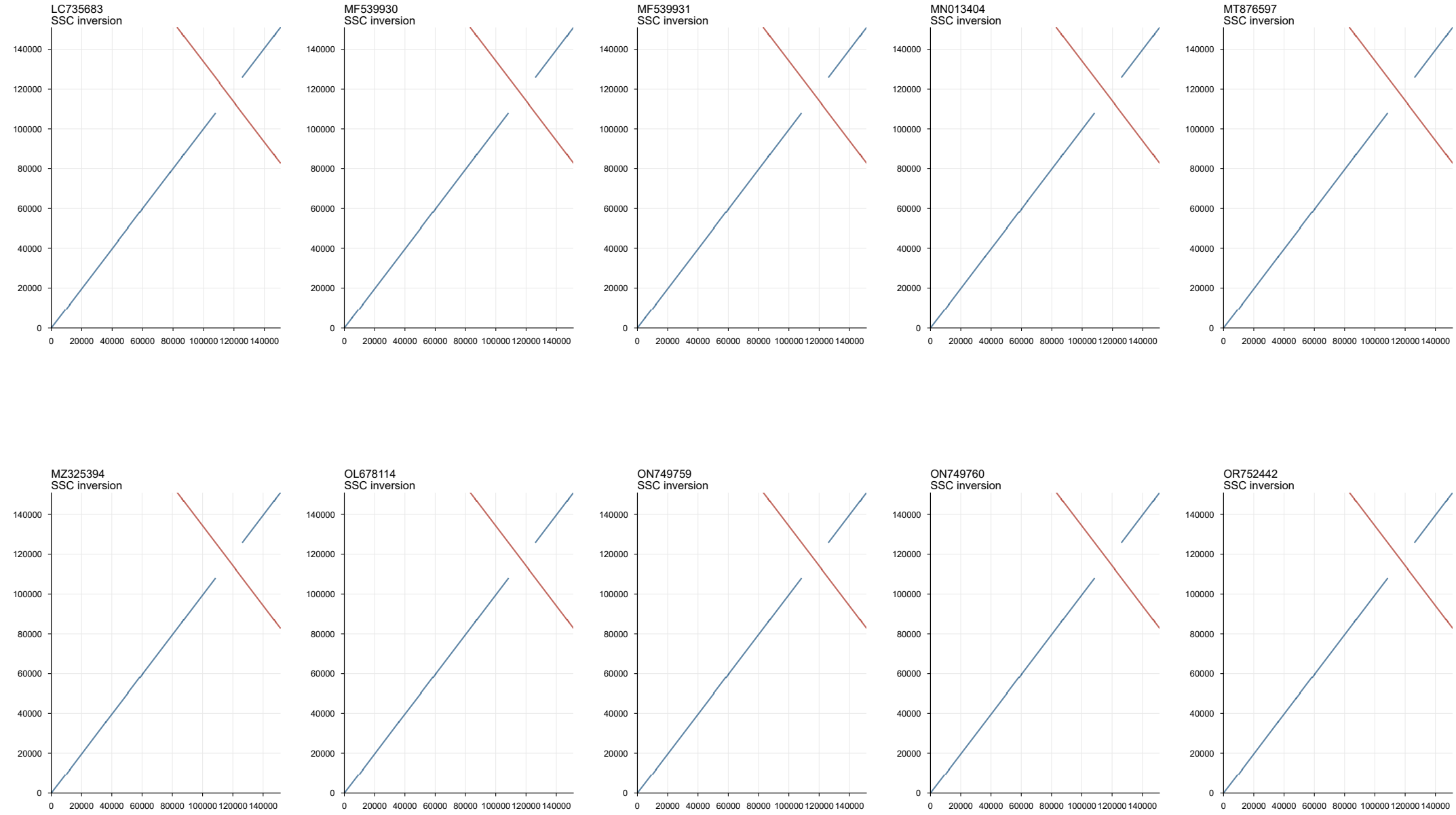


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2309262 | The complete chloroplast genome of Sinosenecio globigerus (Asteraceae)

Reference: KX063863 (Soliva sessilis, 150,784 bp)

Reference = first record in all.fasta.

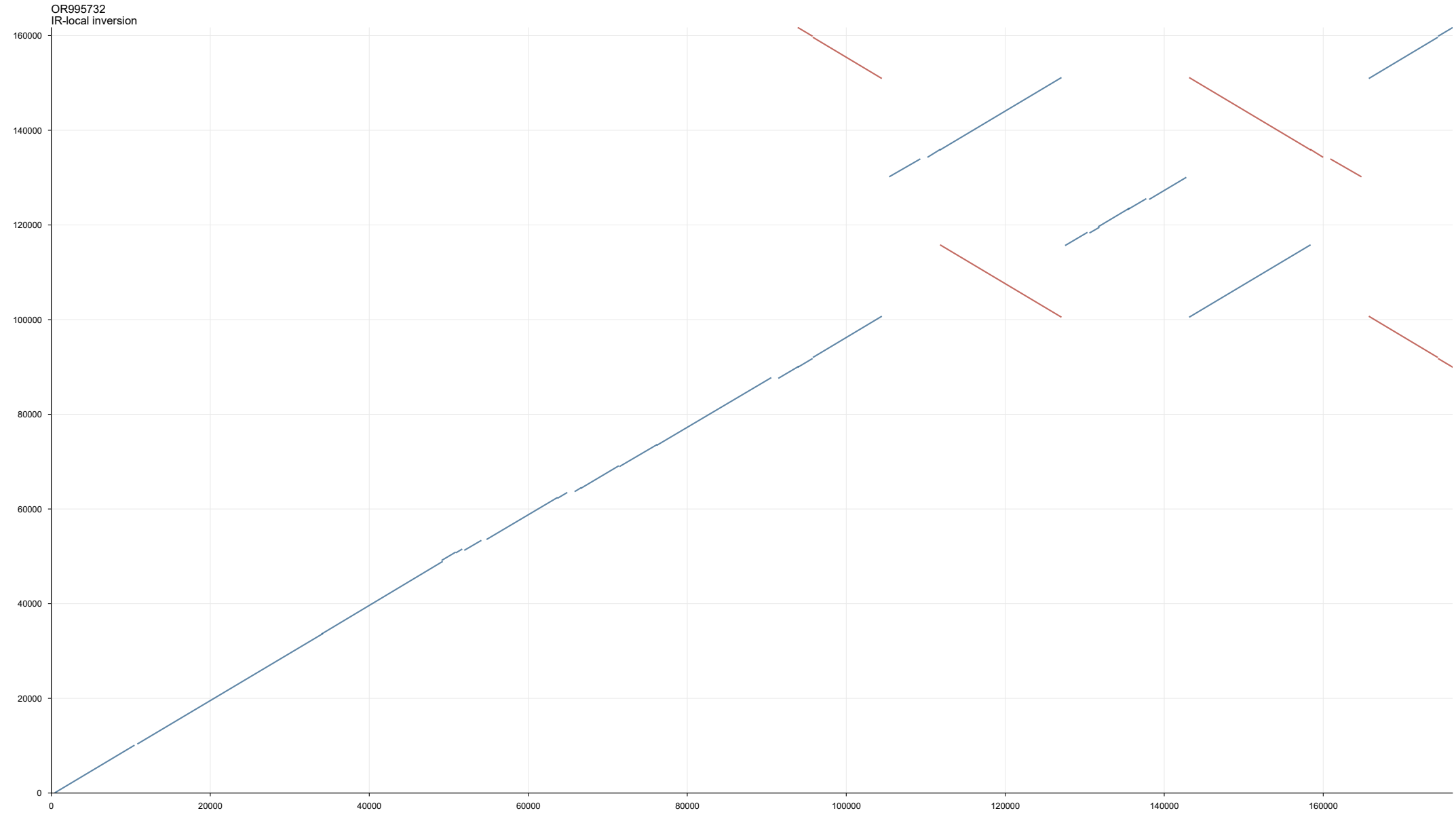


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2694148 | Complete chloroplast genome of Amorphophallus ochroleucus (Araceae)

Reference: MK611803 (Amorphophallus konjac, 161,647 bp)

Reference = first record in all.fasta; the supplied list contained only OR995732, which is the query.

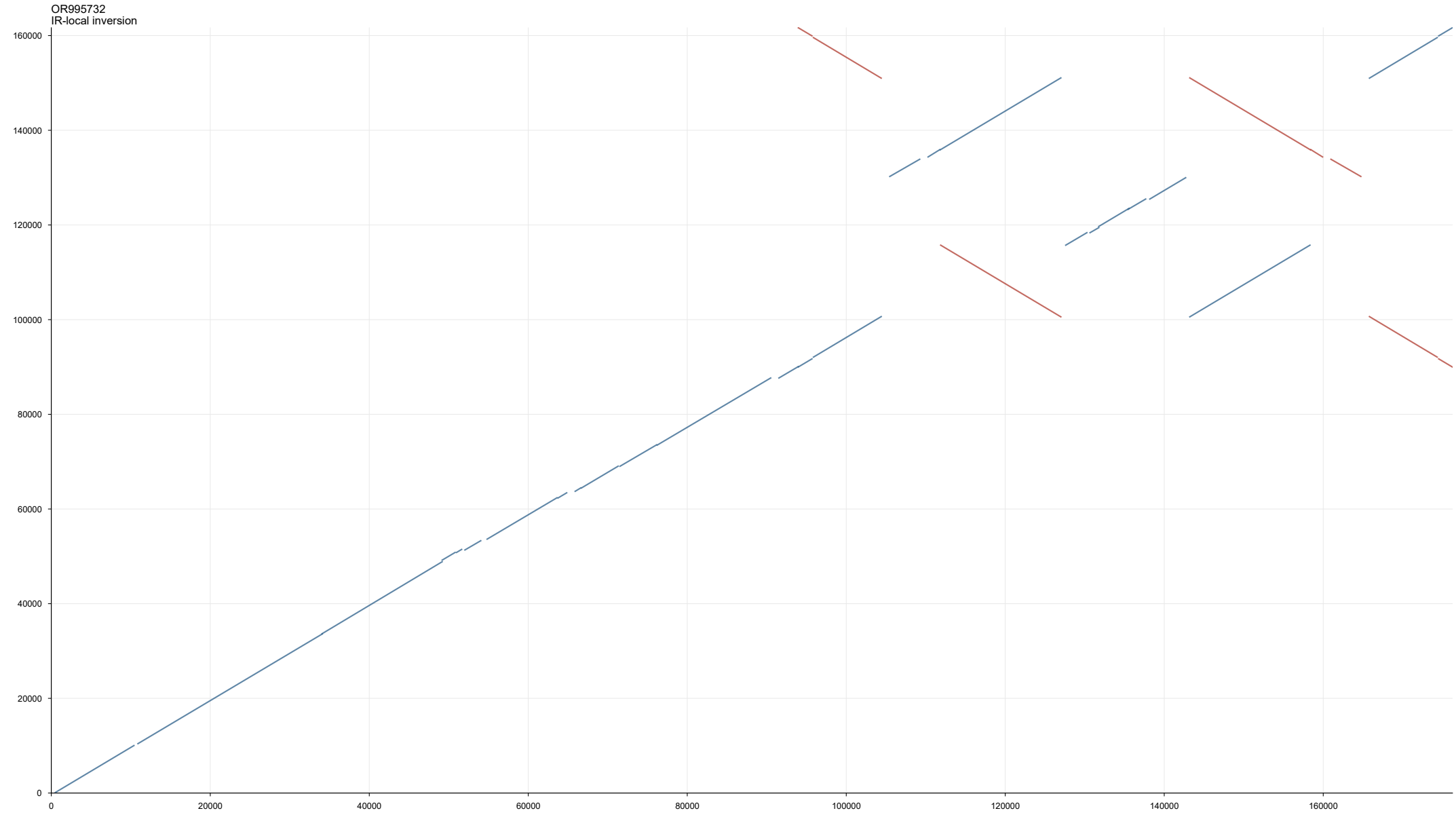


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2378966 | Complete chloroplast genome of Amorphophallus paeoniifolius (Araceae)

Reference: MK611803 (Amorphophallus konjac, 161,647 bp)

Reference = first record in all.fasta.

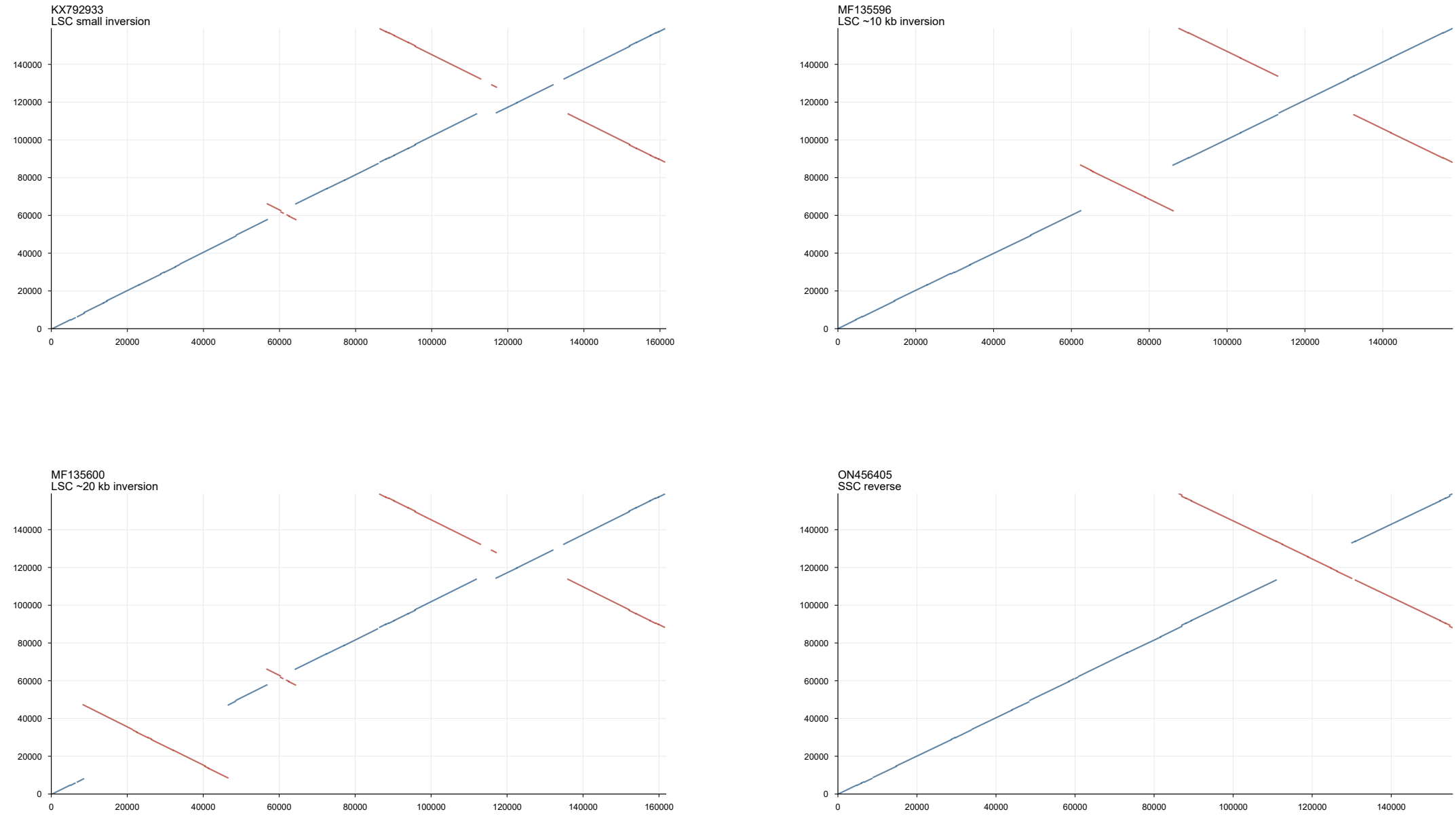


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2324928 | The complete chloroplast genome of Bauhinia glauca subsp. hupehana (Fabaceae)

Reference: KF856619 (Cercis canadensis, 158,995 bp)

Reference = first record in all.fasta.

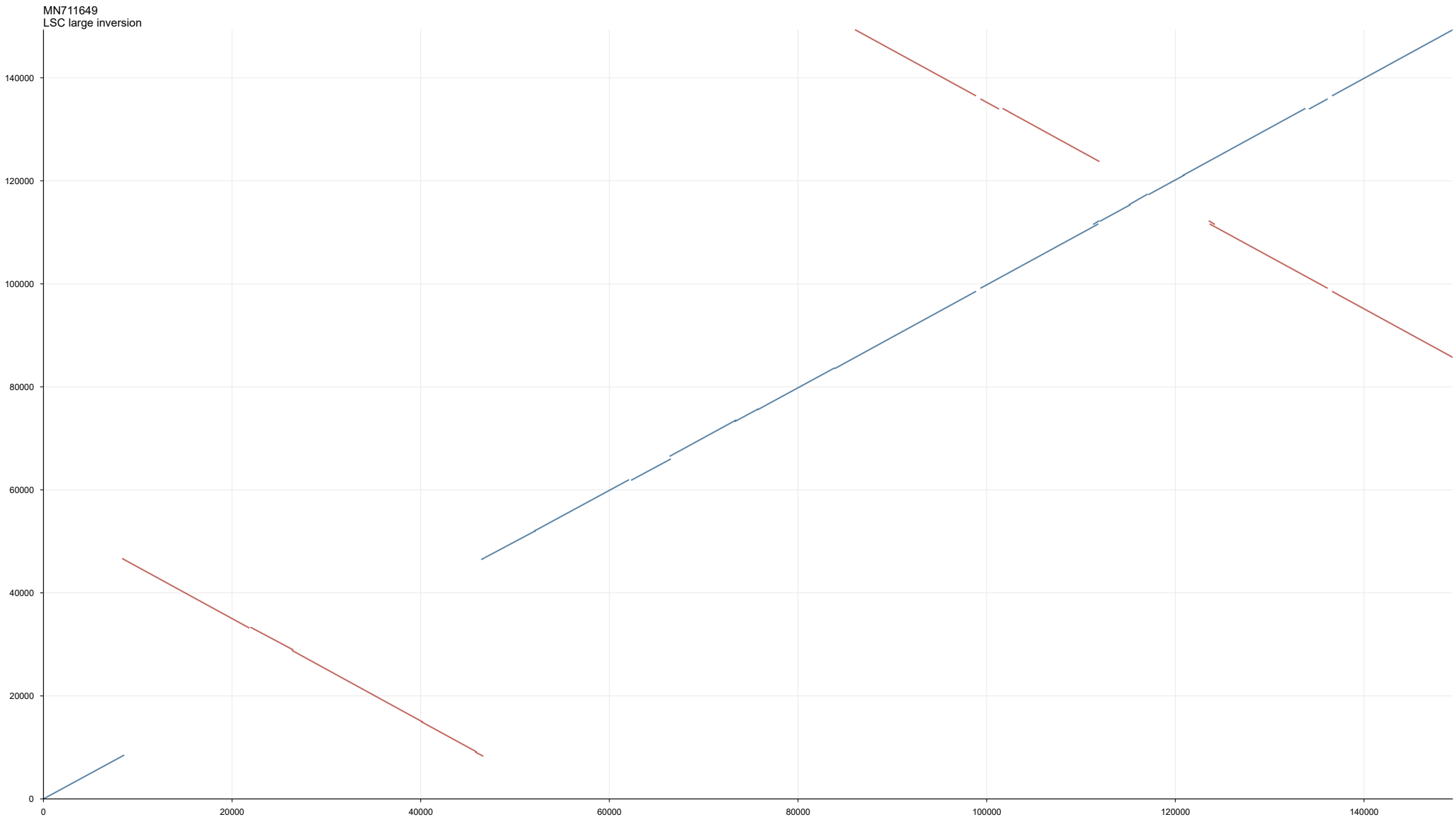


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2420842 | The complete chloroplast genome of Phalaenopsis deliciosa (Orchidaceae)

Reference: MG459020 (Phalaenopsis pulcherrima, 149,272 bp)

Reference = first record in all.fasta; the supplied list contained only MN711649, which is the query.

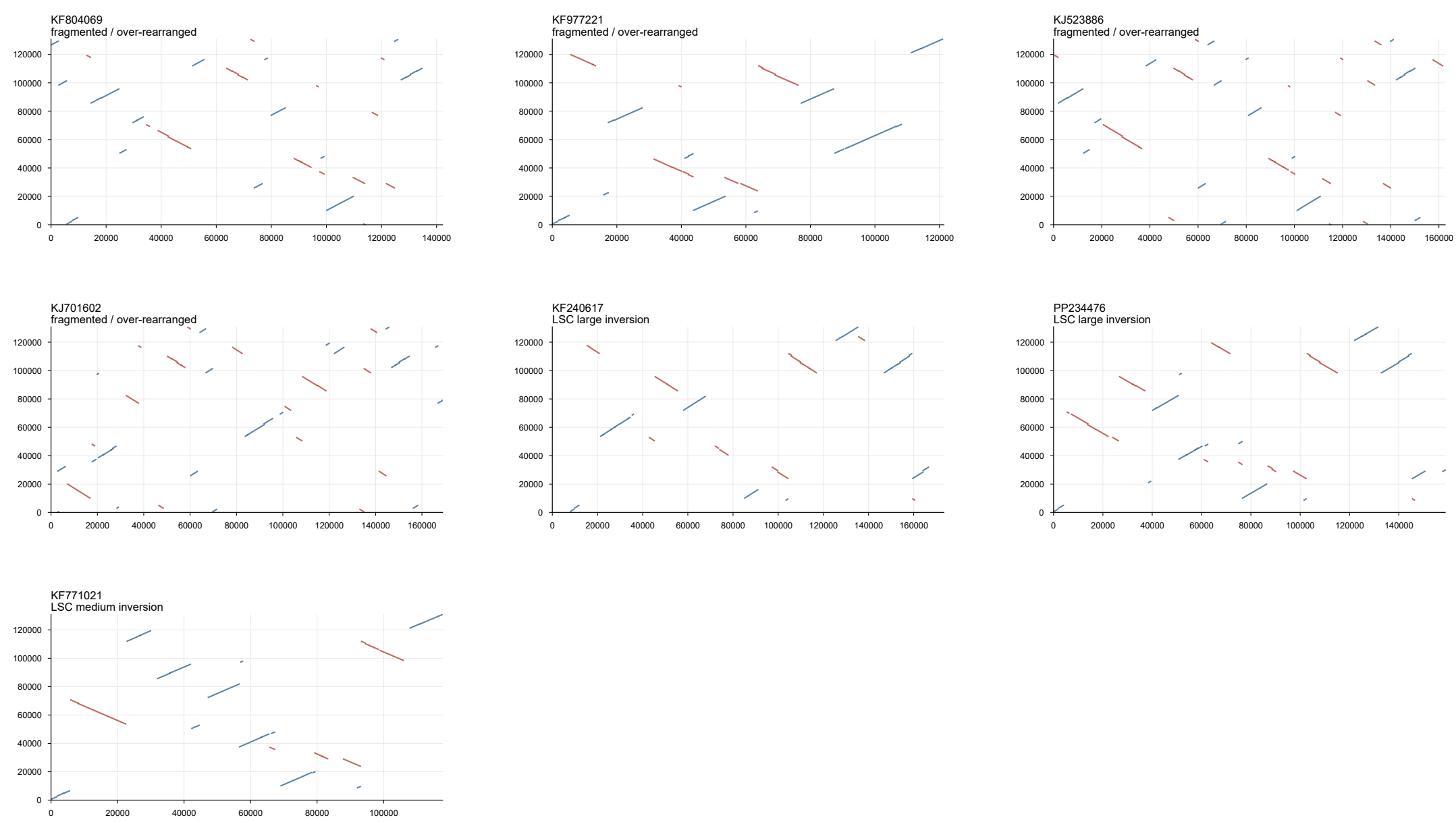


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2420847 | The complete chloroplast genome of Erodium cicutarium (Geraniaceae)

Reference: HM125536 (Erodium texanum, 130,812 bp)

Reference = first record in all.fasta. An earlier manual LASTAL check used PP868416; that comparison is separate.

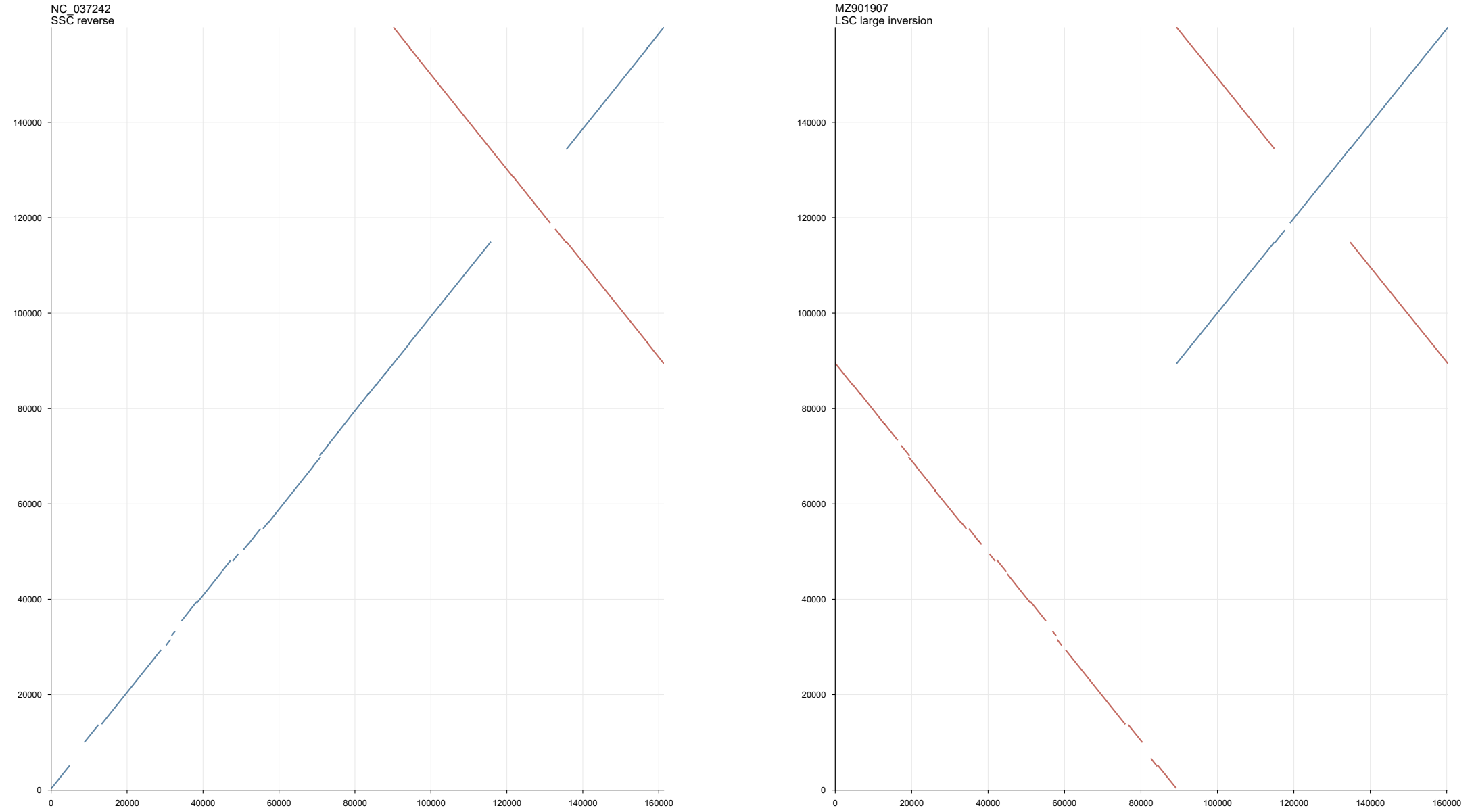


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2530712 | The first complete chloroplast genome of Sterculia foetida (Malvaceae)

Reference: MH751592 (Bixa orellana, 159,825 bp)

Supplied list says MN533876; the GenBank accession in the dataset is MN533976.

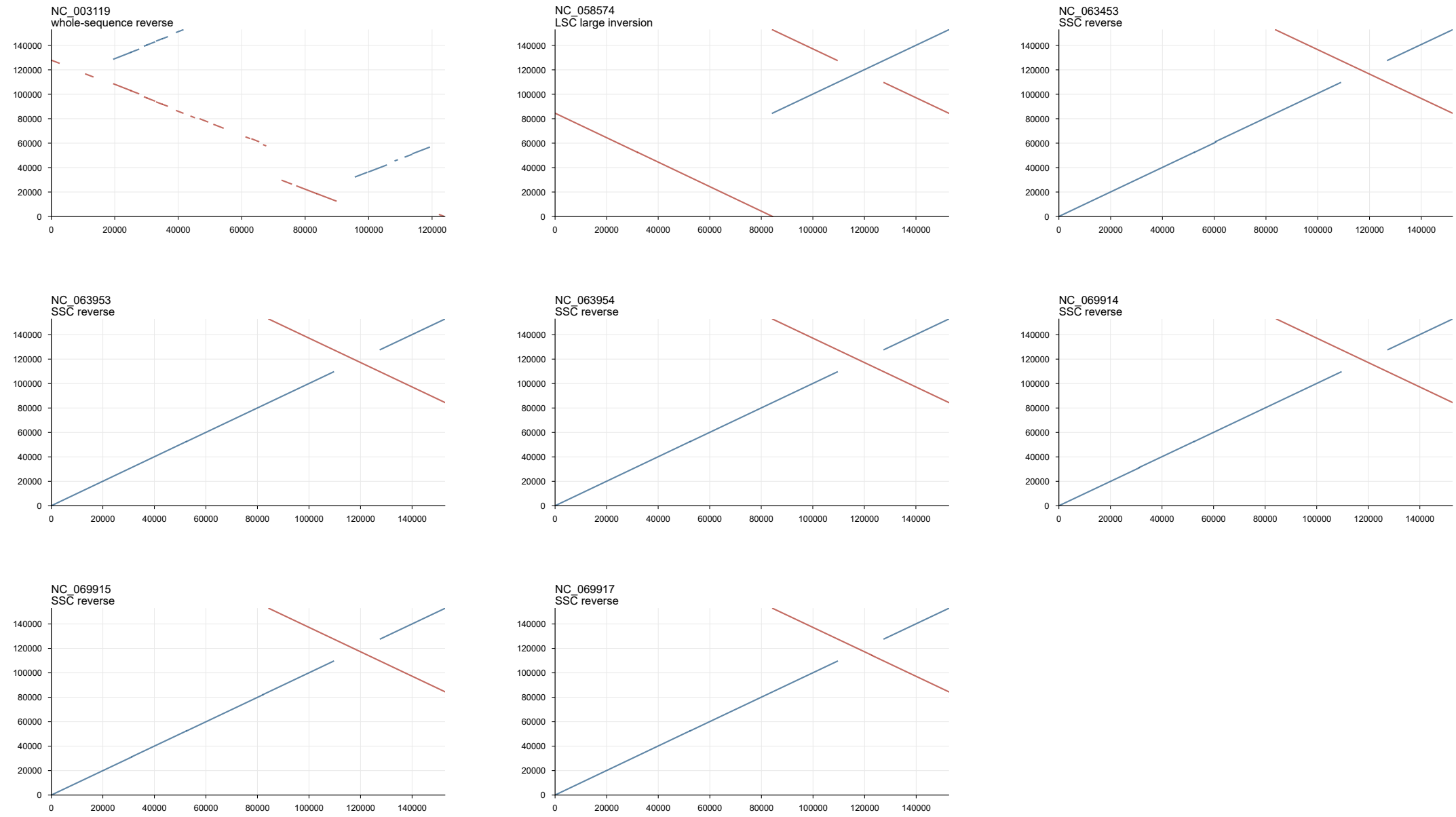


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2306207 | The complete chloroplast genome of Asterothamnus centraliasiaticus (Asteraceae)

Reference: MN539621 (Aster spathulifolius, 152,732 bp)

Reference = first record in all.fasta.

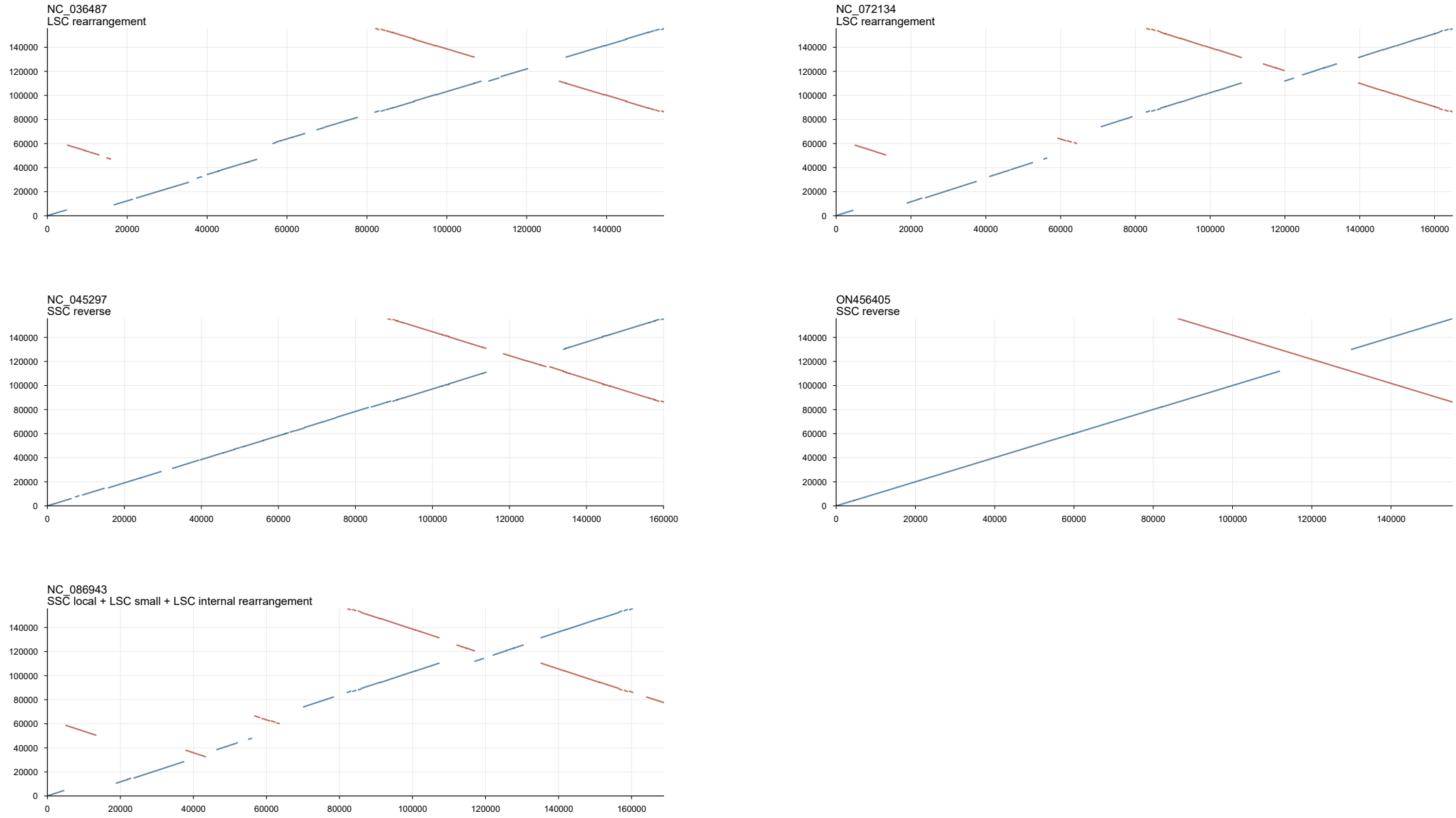


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2544681 | The complete chloroplast genome of Cynometra cebuensis (Fabaceae)

Reference: MF135595 (Bauhinia brachycarpa, 155,548 bp)

Reference = first record in all.fasta.

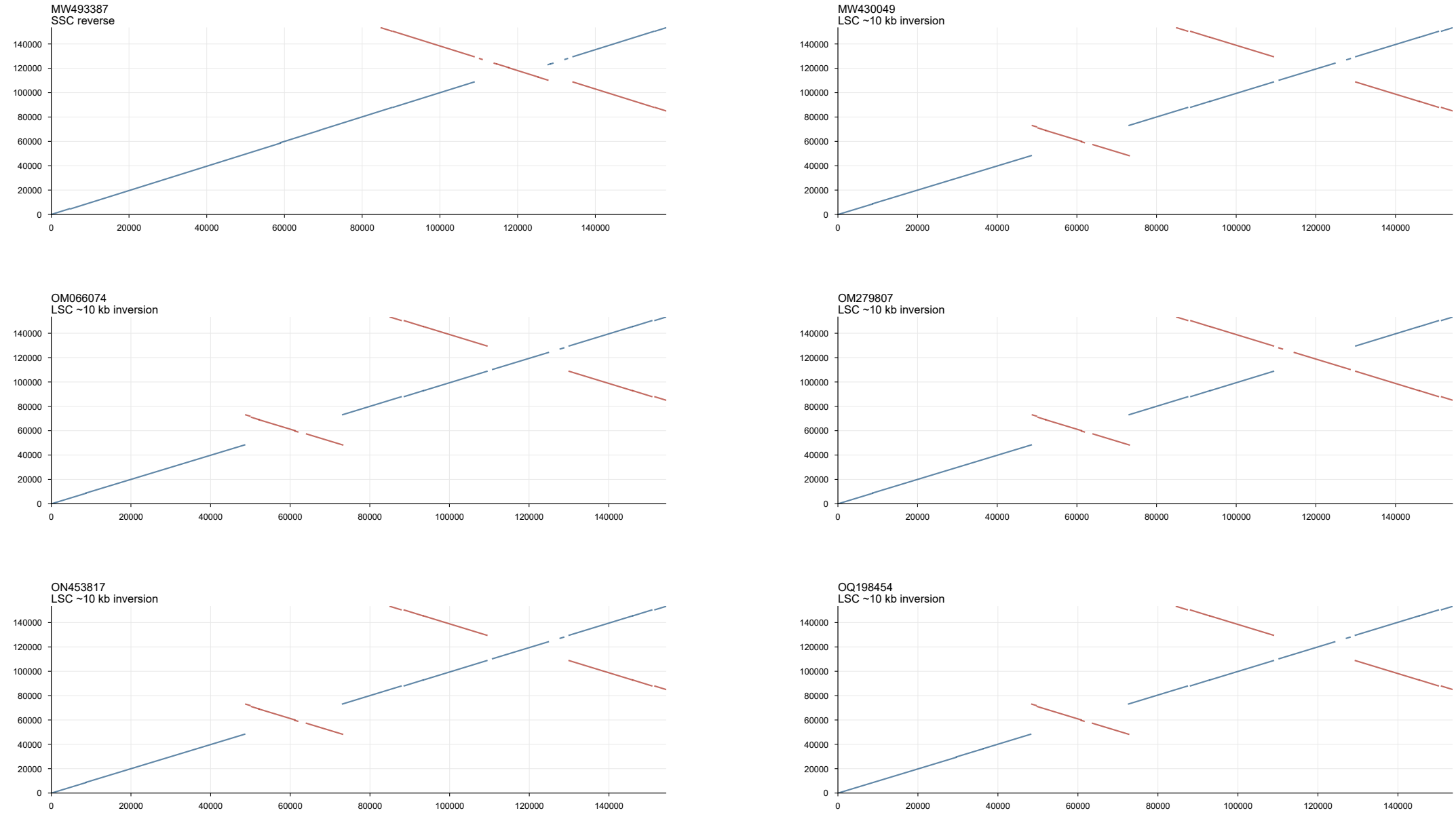


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2275827 | The complete plastome of Campsis radicans (Bignoniaceae)

Reference: MG831880 (Tecomaria capensis, 153,263 bp)

Reference = first record in all.fasta.

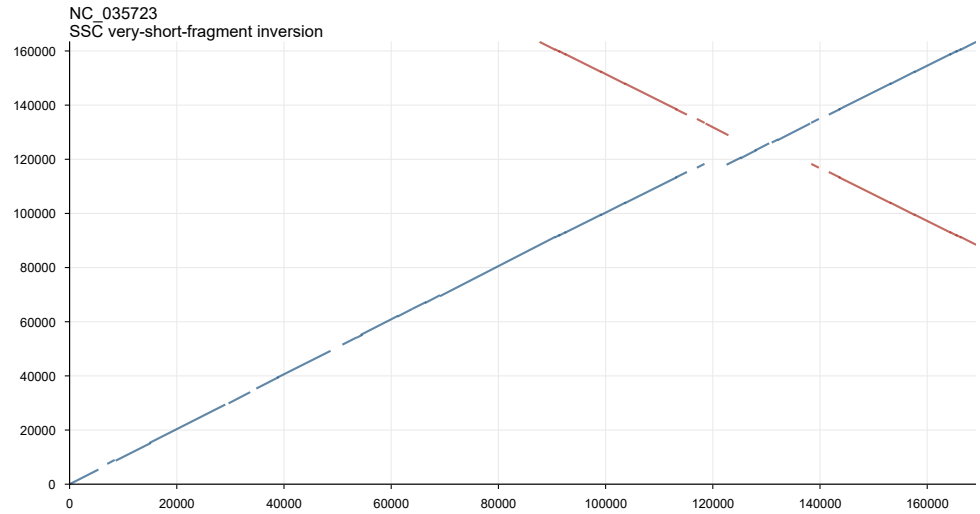


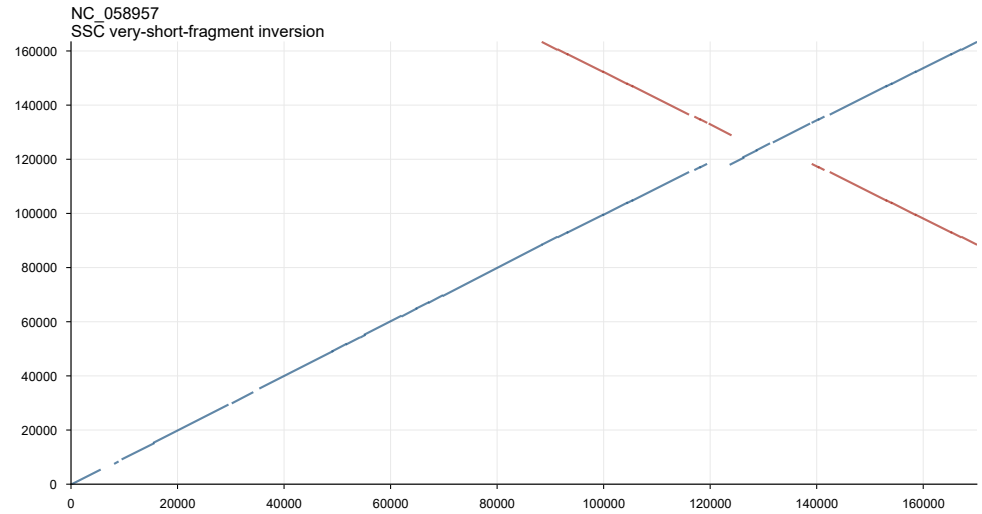
Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

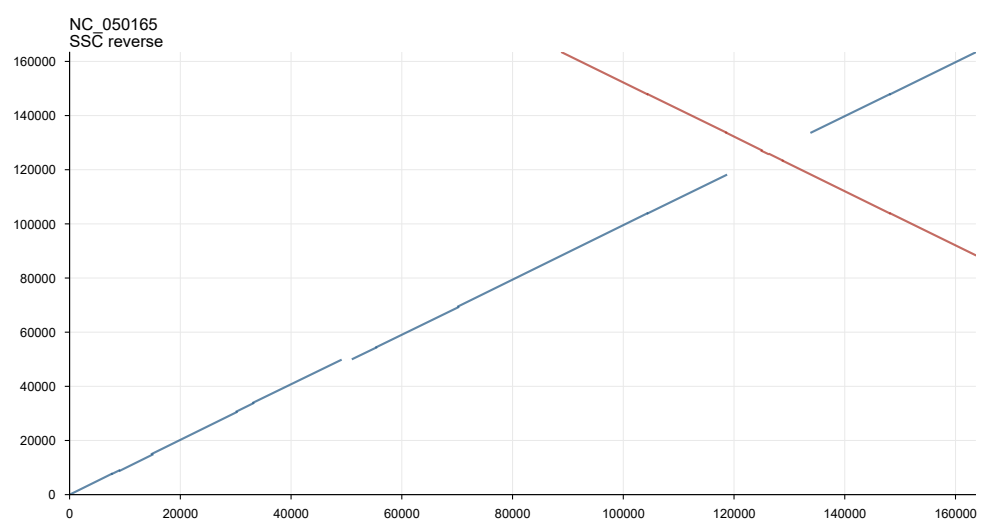
2281029 | The complete chloroplast genome of Hedychium flavum (Zingiberaceae)

Reference: MK262735 (Globba schomburgkii, 163,325 bp)

Reference = first accession in the supplied list. Supplied NC_058597 is corrected to NC_058957.





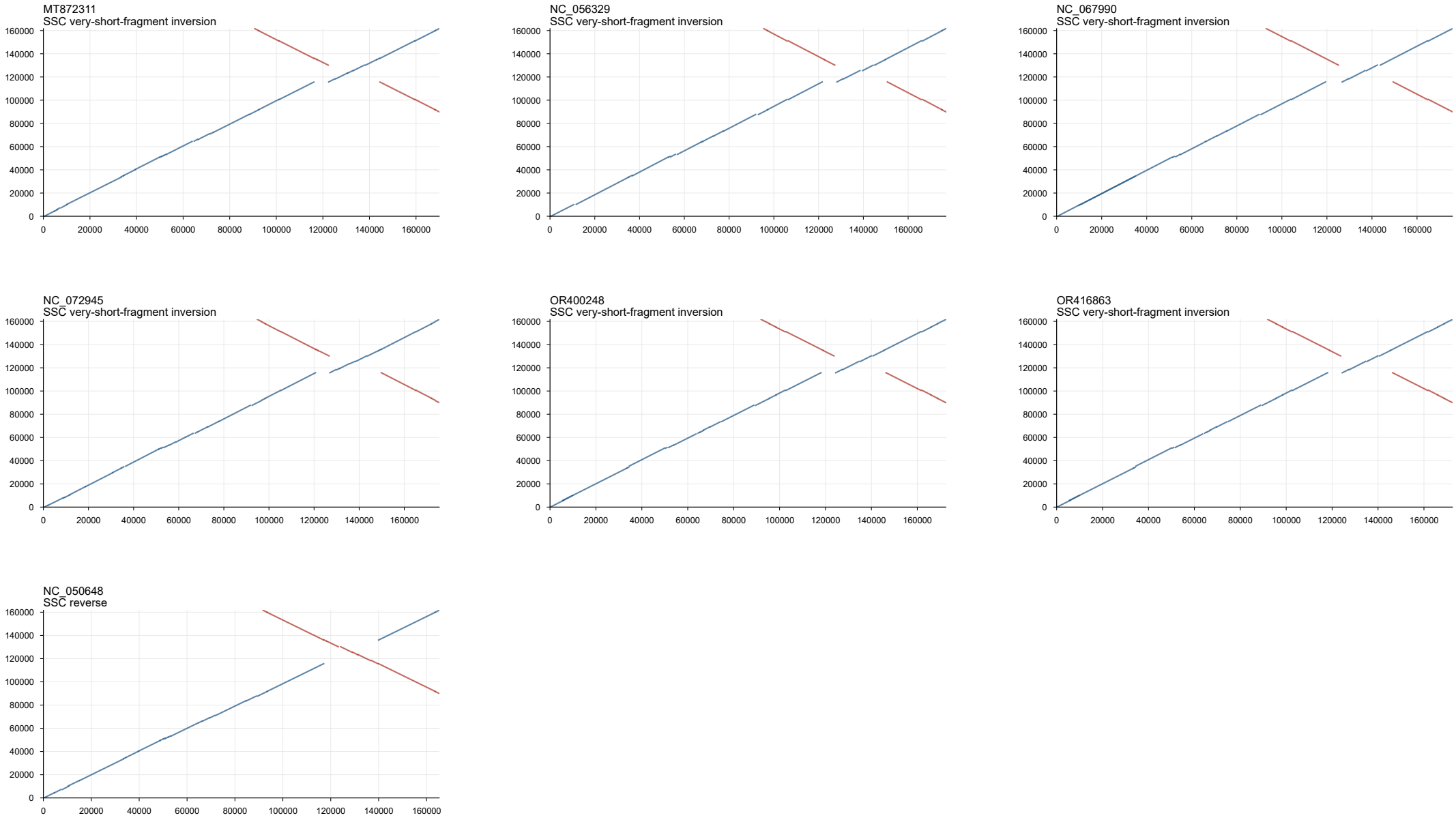


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2288889 | The complete chloroplast genome of Amorphophallus krausei (Araceae)

Reference: MK611803 (Amorphophallus konjac, 161,647 bp)

Reference = first record in all.fasta.

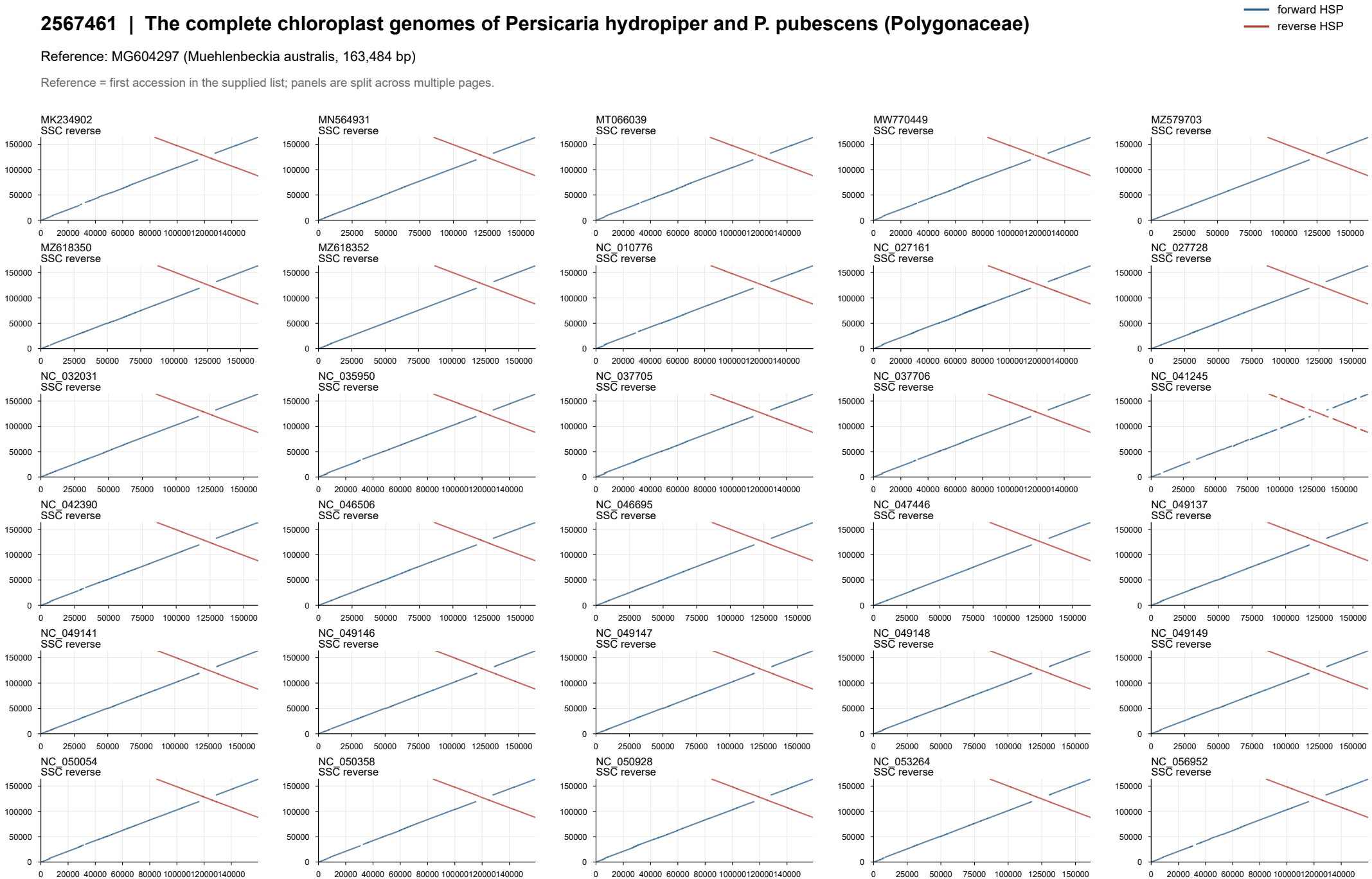


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2567461 | The complete chloroplast genomes of Persicaria hydropiper and P. pubescens (Polygonaceae)

Reference: MG604297 (Muehlenbeckia australis, 163,484 bp)

Reference = first accession in the supplied list; panels are split across multiple pages.

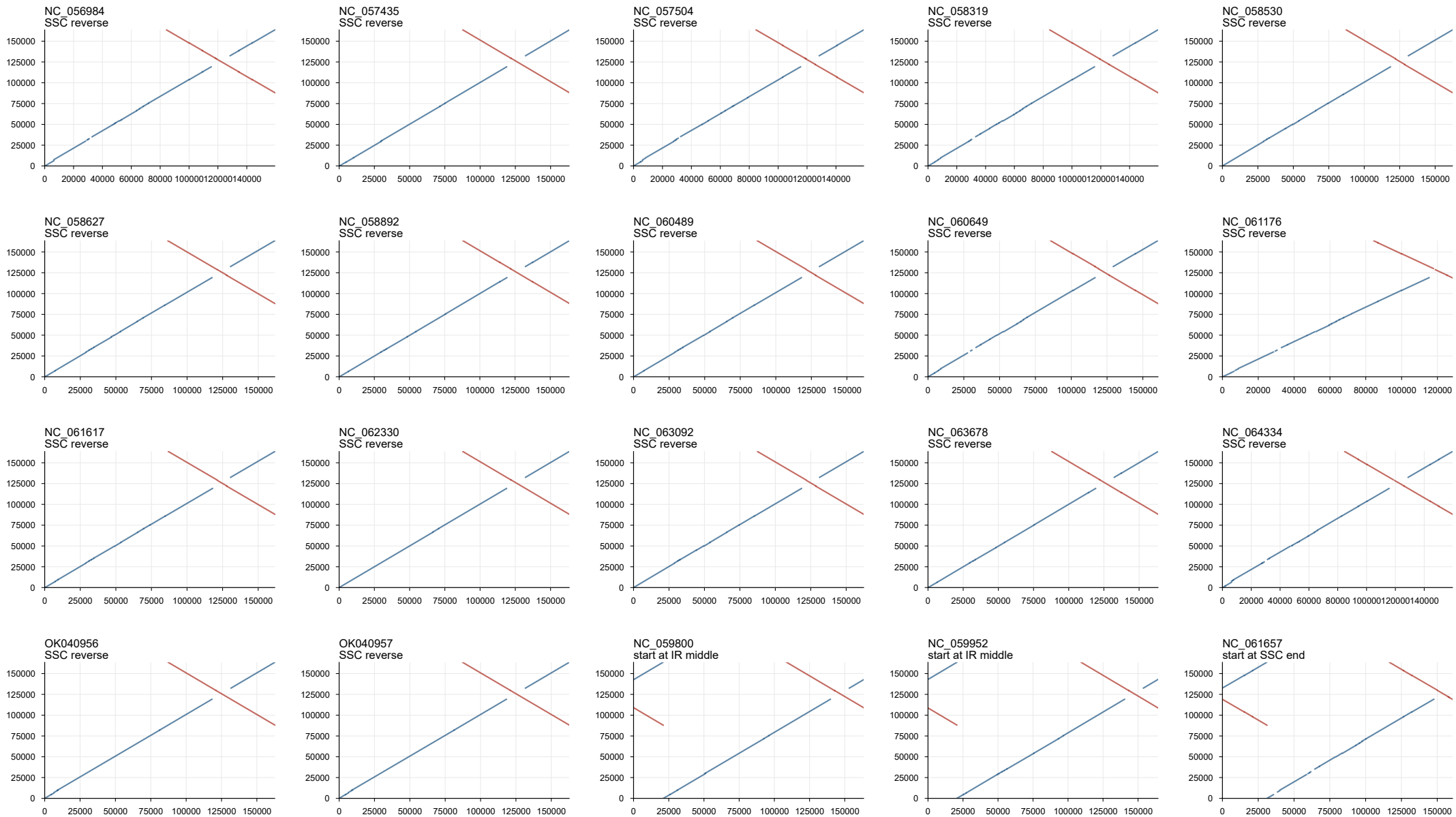


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2567461 | The complete chloroplast genomes of Persicaria hydropiper and P. pubescens (Polygonaceae)

Reference: MG604297 (Muehlenbeckia australis, 163,484 bp)

Reference = first accession in the supplied list; panels are split across multiple pages.

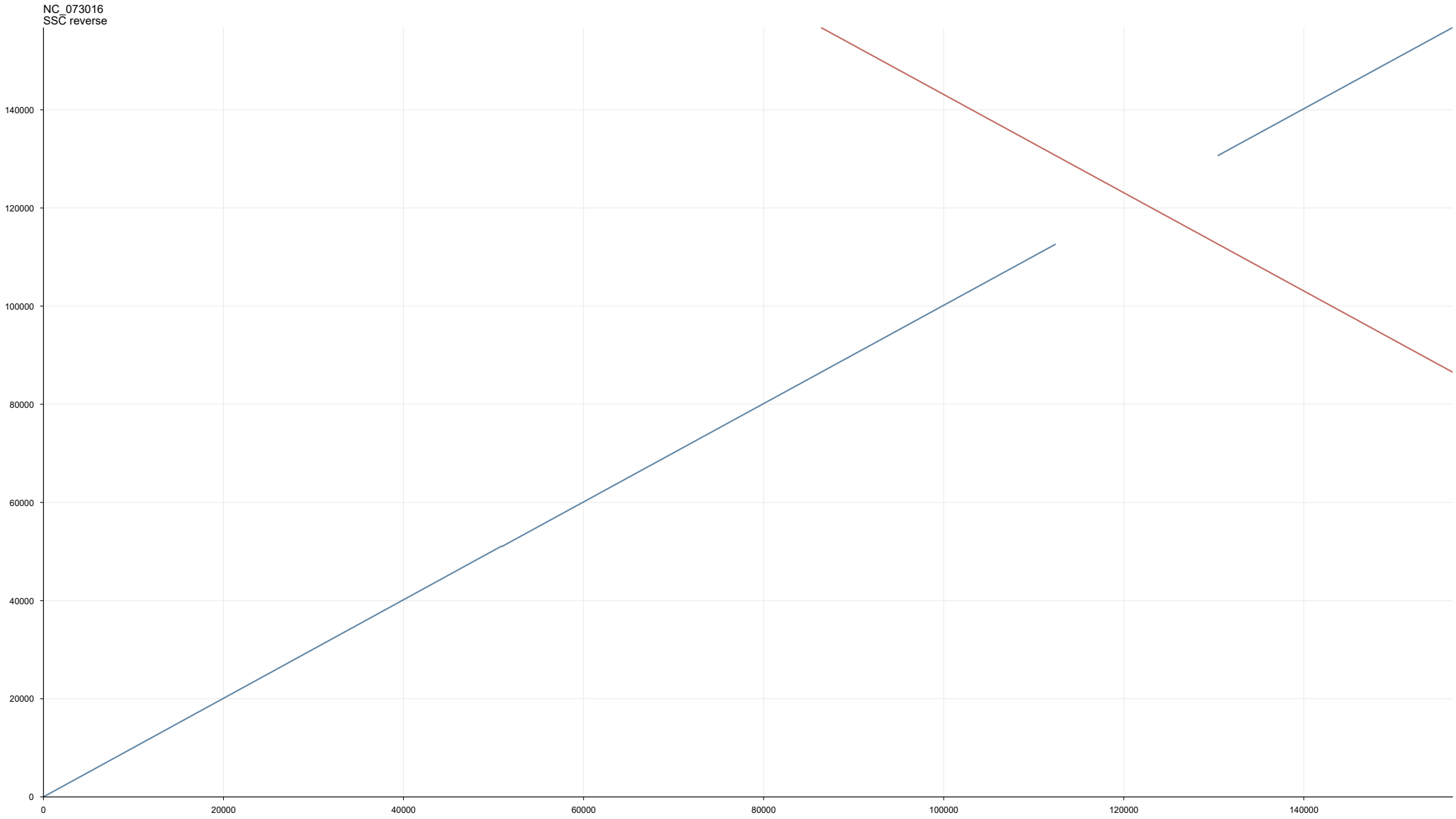


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2621456 | Chloroplast genome sequencing and phylogenetic analysis of Tetrapanax papyrifer (Araliaceae)

Reference: MT991757 (Hedera rhombea, 156,680 bp)

Reference = first accession in the supplied list; reference starts at the SSC end.

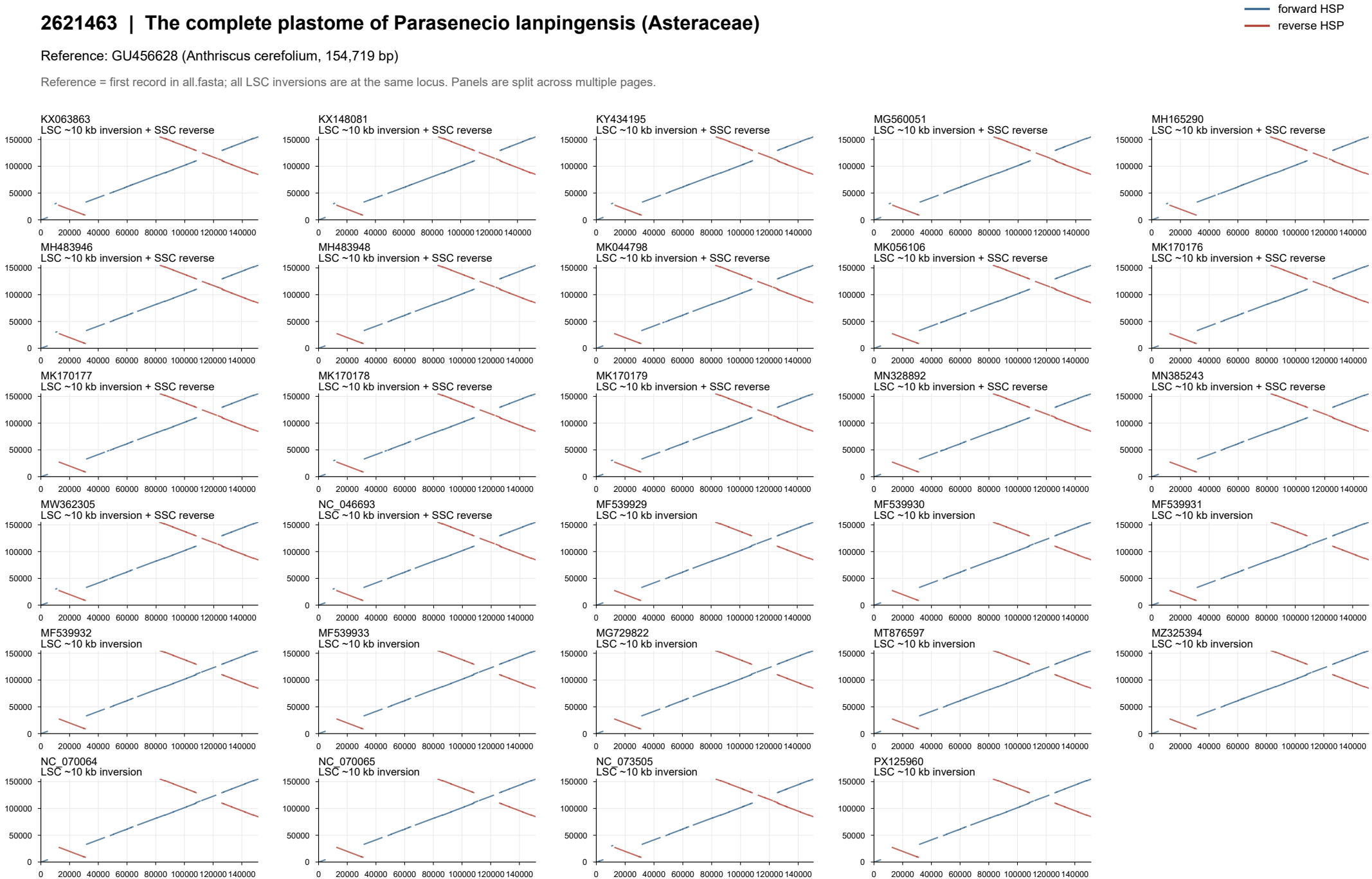


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2621463 | The complete plastome of Parasenecio lanpingensis (Asteraceae)

Reference: GU456628 (Anthriscus cerefolium, 154,719 bp)

Reference = first record in all.fasta; all LSC inversions are at the same locus. Panels are split across multiple pages.

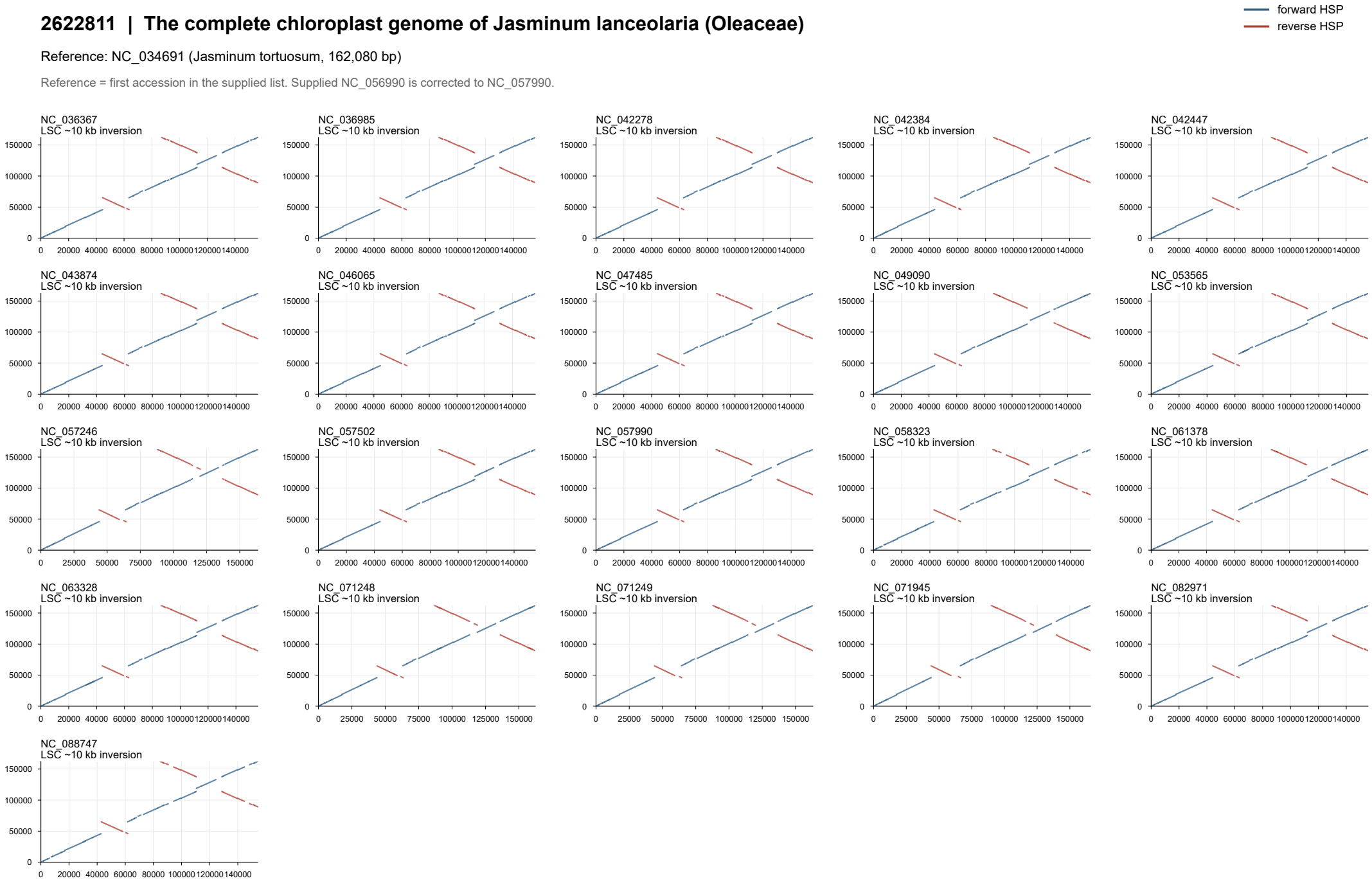


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2622811 | The complete chloroplast genome of Jasminum lanceolaria (Oleaceae)

Reference: NC_034691 (Jasminum tortuosum, 162,080 bp)

Reference = first accession in the supplied list. Supplied NC_056990 is corrected to NC_057990.

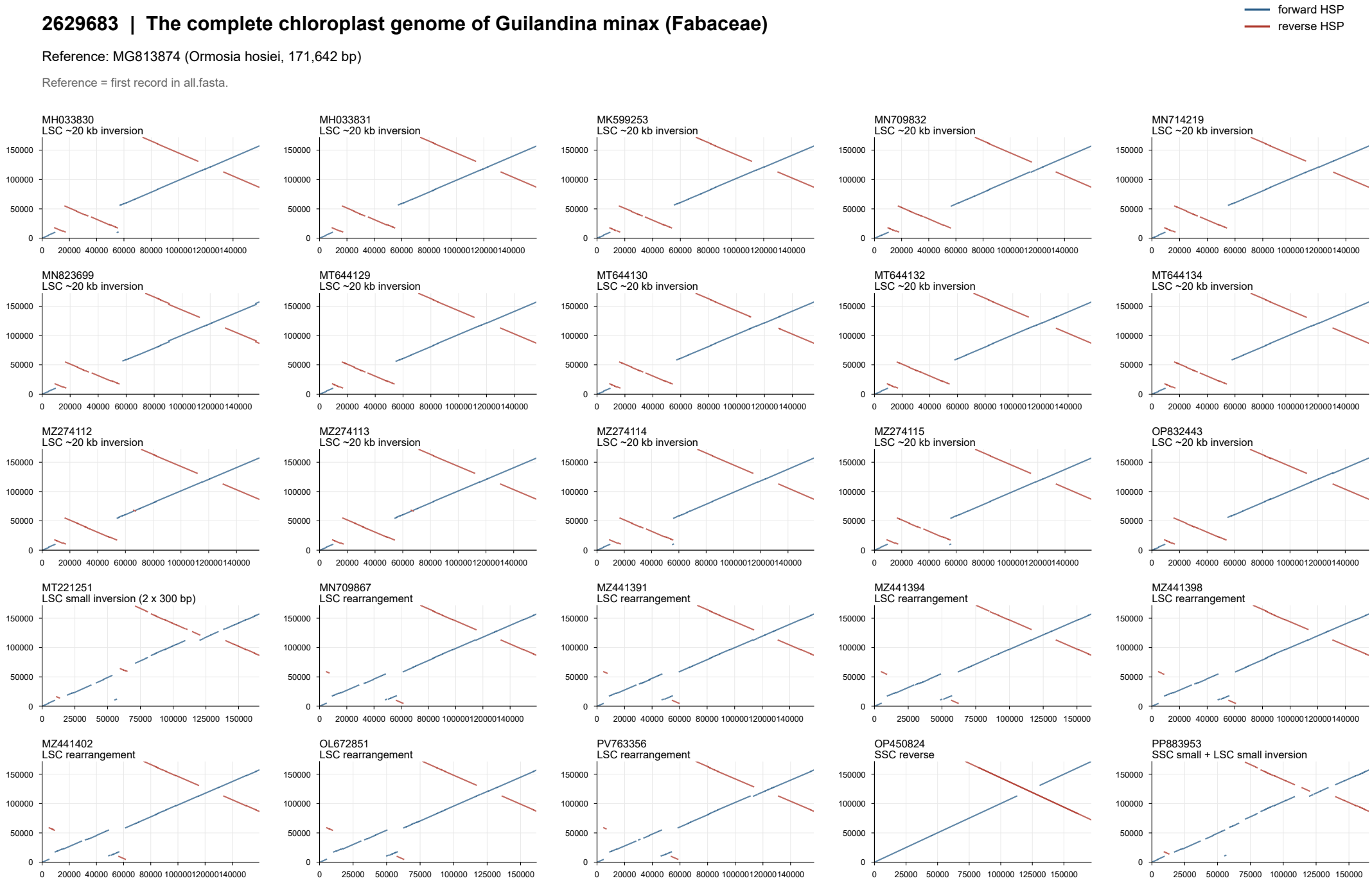


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2629683 | The complete chloroplast genome of Guilandina minax (Fabaceae)

Reference: MG813874 (Ormosia hosiei, 171,642 bp)

Reference = first record in all.fasta.

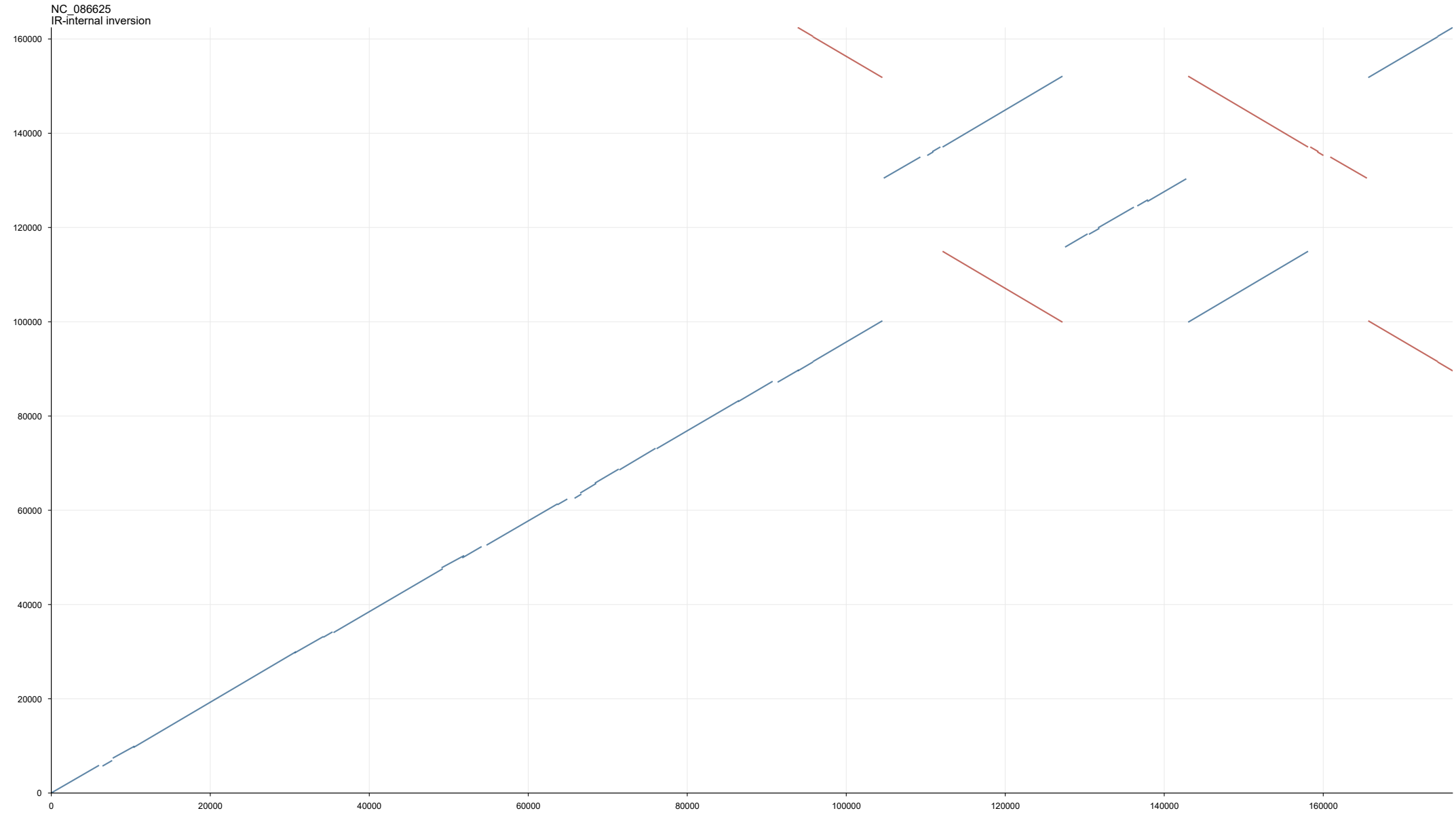


Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.

2704257 | Chloroplast genome of Amorphophallus josefbogneri (Araceae)

Reference: LC767269 (Colocasia esculenta, 162,376 bp)

Reference = first record in all.fasta; the supplied list contained only NC_086625, which is the query.



Query = listed variant; subject = reference. Blue = forward, red = reverse. HSPs <500 bp or <80% identity omitted.