



## Supplement

The following supplementary materials are available for this article: Vasques, D.T. and A. Ebihara 2022. Phylogeny, morphology and distribution of the *Hymenophyllum polyanthos* (Sw.) Sw. species complex (Hymenophyllaceae, Polypodiidae) in Japan. *Taiwania* 67(4): 524-538. doi: 10.6165/tai.2022.67.524

**Table S1.** List of samples obtained from GenBank and used for the molecular and morphological analysis. Vouchers are organized by Sample ID (correspondent to the phylogeny), taxonomic group, location, GenBank accession numbers and deposit herbaria. A dash (–) indicates missing data.

Sample ID	Family	Genus	Subgenus	Species Epithet	Location	GenBank Accession Number (RbcL)	GenBank Accession Number (Rps4-TrnS)	Herbarium
HV1997_23	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>apiculatum</i>	Venezuela	AF275642	AY095131	F
DV20150008	Hymenophyllaceae	<i>Hymenophyllum</i>	Globosa	<i>asplenoides</i>	Brazil	MN266593	MN266502	TNS
Hsu5853	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Hymenophyllum</i>	<i>barbatum</i>	Taiwan	MH211074	MH211103	TAIF
DV20150014	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Hymenophyllum</i>	<i>barbatum</i>	Japan, Tokyo	MN266597	MN266506	TNS
DV20150012	Hymenophyllaceae	<i>Hymenophyllum</i>	Globosa	<i>caudatum</i>	Brazil	MN266595	MN266504	TNS
H164	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>coreanum</i>	Japan, Saitama	MN266604	MN266513	TNS
UG253	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>coreanum</i>	Japan, Aichi	MN266664	MN266573	TNS
UG256	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>coreanum</i>	Japan, Saitama	MN266667	MN266576	TNS
Y5	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>corrugatum</i>	China	MN266674	MN266583	TNS
Danton sn	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>cuneatum</i>	Juan Fernandez Isl.	AY775401	AY775415	LPB
C13	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>cuneatum</i>	Chile	MN266590	MN266499	TNS
UG221	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Hymenophyllum</i>	<i>devolii</i>	Taiwan	MN266660	MN266569	TNS
Hsu5773	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>exquisitum</i>	Taiwan	MH211069	MH211098	TAIF
Hsu5910	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>exquisitum</i>	Taiwan	MH211070	MH211099	TAIF
Hsu5958	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>exquisitum</i>	Taiwan	MH211077	MH211106	TAIF
Wade1634	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>fujisanense</i>	Vietnam	MH211059	MH211088	TAIF
Wade2568	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>fujisanense</i>	Vietnam	MH211060	MH211089	TAIF
Hsu6414	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>fujisanense</i>		MH211079	MH211108	TAIF
Hsu6689	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>fujisanense</i>	Taiwan	MH211056	MH211085	TAIF
Hsu6758	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>fujisanense</i>	Taiwan	MH211057	MH211086	TAIF
Hsu6902	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>fujisanense</i>	Taiwan	MH211058	MH211087	TAIF
Ebihara991122_01	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>fujisanense</i>	Japan	AB083276	AY775423	TI
Kuo3535	Hymenophyllaceae	<i>Hymenophyllum</i>	Globosa	<i>imbricatum</i>	Taiwan	MH211076	MH211105	TAIF
Dubuisson 1999_9	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>inaequale</i>	La Reunion	AY095112	AY095122	P, F
Zhu868	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>longissimum</i>	China	MH211080	MH211109	TAIF
GC1000	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>mikawanum</i>	Japan, Aichi	MN266599	MN266508	TNS
Ebihara001228_03	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>mnioides</i>	New Caledonia	AB217849	DQ077944	TI
B22	Hymenophyllaceae	<i>Hymenophyllum</i>	Mecodium	<i>myriocarpum</i>	Bolivia	MN266587	MN266496	TNS



B25	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>myriocarpum</i>	Bolivia	MN266588	MN266497	TNS
B20	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>myriocarpum</i>	Bolivia	MN266586	MN266495	TNS
B16	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>myriocarpum</i>	Bolivia	MN266584	MN266493	TNS
B19	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>myriocarpum</i>	Bolivia	MN266585	MN266494	TNS
G6	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>novoguineense</i>	New Guinea	MN266598	MN266507	TNS
Ebihara001105_01	Hymenophyllaceae	<i>Hymenophyllum Hymenophyllum oligosorum</i>	<i>Hymenophyllum oligosorum</i>	Japan	AB064293	AY775422	TI
Hsu5646	Hymenophyllaceae	<i>Hymenophyllum Hymenophyllum oligosorum</i>	<i>Hymenophyllum oligosorum</i>	Taiwan	MH211073	MH211102	TAIF
Hsu6736	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>paniculiflorum</i>	Taiwan	MH211064	MH211093	TAIF
Hsu6930	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>paniculiflorum</i>	Taiwan	MH211065	MH211094	TAIF
Hsu5909	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>paniculiflorum</i>	Taiwan	MH211068	MH211097	TAIF
UG225	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>paniculiflorum</i>	Taiwan	MN266661	MN266570	TNS
Kuo3551	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>paniculiflorum</i>	Phillippines	MH211066	MH211095	TAIF
Kuo506	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>paniculiflorum</i>	Phillippines	MH211067	MH211096	TAIF
K18	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>paniculiflorum</i>	Malaysia	MN266612	MN266521	TNS
K41	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>paniculiflorum</i>	Malaysia	MN266617	MN266526	TNS
Hsu6121	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>parallelocarpum</i>	Taiwan	MH211071	MH211100	TAIF
Hsu7127	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>parallelocarpum</i>	Taiwan	MH211072	MH211101	TAIF
Kesller 9886	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Bolivia	AF275647	AY095139	UC; LPB
B3	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Bolivia	MN266589	MN266498	TNS
K35	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Malaysia	MN266613	MN266522	TNS
K36	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Malaysia	MN266614	MN266523	TNS
K44	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Malaysia	MN266619	MN266528	TNS
K45	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Malaysia	MN266620	MN266529	TNS
DV20150013	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Japan	MN266596	MN266505	TNS
H17	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Japan, Kanagawa	MN266605	MN266514	TNS
UG257	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Japan, Nagano	MN266668	MN266577	TNS
GC883	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Japan, Yakuhsima	MN266601	MN266510	TNS
KS1	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Japan, Yakushima	MN266621	MN266530	TNS
UG252	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Japan	MN266663	MN266572	TNS
UG226	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Taiwan	MN266662	MN266571	TNS
KS19	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Japan, Miyazaki	MN266622	MN266531	TNS
Nitta424	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Taiwan	MN266639	MN266548	TNS
UG254	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Japan, Kagoshima	MN266665	MN266574	TNS
UG255	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Japan, Wakayama	MN266666	MN266575	TNS
UG258	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Japan, Kagoshima	MN266669	MN266578	TNS
W16	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Taiwan	MN266670	MN266579	TNS
W17	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Taiwan	MN266671	MN266580	TNS
Y10	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Bhutan	MN266672	MN266581	TNS



<b>Wade1814</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Indonesia	MH211078	MH211107	TAIF
<b>I5</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Indonesia	MN266610	MN266519	TNS
<b>Nitta475</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Indonesia	MN266641	MN266550	TNS
<b>Nitta476</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Indonesia	MN266642	MN266551	TNS
<b>Nitta528</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Indonesia	MN266644	MN266553	TNS
<b>Nitta537</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Indonesia	MN266645	MN266554	TNS
<b>K39</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Malaysia	MN266615	MN266524	TNS
<b>K43</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Malaysia	MN266618	MN266527	TNS
<b>Kuo3550</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Philippines	MH211061	MH211090	TAIF
<b>Wade3915</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Philippines	MH211062	MH211091	TAIF
<b>HY16</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Cambodia	MN266608	MN266517	TNS
<b>Y11</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Bhutan	MN266673	MN266582	TNS
<b>Nitta426</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Taiwan	MN266640	MN266549	TNS
<b>uc40</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Tahiti	AY775406	AY775425	LPB
<b>Nitta1160</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	French Polynesia	MN266624	MN266533	TNS
<b>Nitta1254</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	French Polynesia	MN266625	MN266534	TNS
<b>Nitta1395</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	French Polynesia	MN266626	MN266535	TNS
<b>Nitta1438</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	French Polynesia	MN266627	MN266536	TNS
<b>Nitta1537</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	French Polynesia	MN266628	MN266537	TNS
<b>Nitta1806</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	French Polynesia	MN266631	MN266540	TNS
<b>Nitta2645</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	French Polynesia	MN266634	MN266543	TNS
<b>Nitta2824</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	French Polynesia	MN266636	MN266545	TNS
<b>Nitta42</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	French Polynesia	MN266638	MN266547	TNS
<b>Nitta6</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	French Polynesia	MN266646	MN266555	TNS
<b>Nitta631</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	French Polynesia	MN266647	MN266556	TNS
<b>Nitta78</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	French Polynesia	MN266648	MN266557	TNS
<b>S8</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Marquesas	MN266657	MN266566	TNS
<b>Nitta9</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	French Polynesia	MN266649	MN266558	TNS
<b>K12</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Malaysia	MN266611	MN266520	TNS
<b>Nitta515</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Indonesia	MN266643	MN266552	TNS
<b>Kuo3545</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Phillippines	MH211063	MH211092	TAIF
<b>K40</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Malaysia	MN266616	MN266525	TNS
<b>DV20150001</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Brazil	MN266591	MN266500	TNS
<b>DV20150004</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Brazil	MN266592	MN266501	TNS
<b>DV20150011</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	Brazil	MN266594	MN266503	TNS
<b>Dubuisson sn</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	La Reunion	AY775405	AY775424	LPB
<b>Nitta2770</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	French Polynesia	MN266635	MN266544	TNS
<b>Nitta3020</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>polyanthos</i>	French Polynesia	MN266637	MN266546	TNS
<b>Hsu3253</b>	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>punctisorum</i>	Taiwan	MH211052	MH211081	TAIF



Hsu6125	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>punctisorum</i>	Taiwan	MH211053	MH211082	TAIF
Hsu7349	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>punctisorum</i>	Taiwan	MH211054	MH211083	TAIF
Hsu4471	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>punctisorum</i>	China	MH211055	MH211084	TAIF
Callen sn	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>rarum</i>	New Zealand	-	GU200689	-
Z16	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>rarum</i>	New Zealand	AB49657	GU200689	TNS
H40	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	sp	Japan, Aomori	MN266606	MN266515	TNS
H88	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	sp	Japan, Nagano	MN266607	MN266516	TNS
Hsu4392	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>szechuanense</i>	China	MH211075	MH211104	TNS
Dubuisson 199927	Hymenophyllaceae	<i>Hymenophyllum Hymenophyllum</i>	<i>tenellum</i>	La Reunion	AY095116	AY095126	P, F
Stensvold sn1	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>wrigthii</i>	USA	JN585964	JN585967	UTC
Duffy sn	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>wrigthii</i>	USA	JN585966	JN585969	UTC
Stensvold sn2	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>wrigthii</i>	USA	JN585965	JN585968	UTC
GC435	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>wrigthii</i>	Japan, Akita	MN266600	MN266509	TNS
H16	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>wrigthii</i>	Japan, Gunma	MN266603	MN266512	TNS
GC980	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>wrigthii</i>	Japan, Tokyo	MN266602	MN266511	TNS
H12	Hymenophyllaceae	<i>Hymenophyllum Mecodium</i>	<i>wrigthii</i>	Japan, Nagano	AB083277	AY775430	TNS



**Table S2:** List of samples newly obtained in this study and used for the molecular and morphological analysis. Vouchers are organized by Sample ID (correspondent to the phylogeny), taxonomic group, location, GenBank accession numbers and deposit herbaria. A dash (-) indicates missing data.

Sample ID	Family	Genus	Subgenus	Species Epithet	Location	Collector	GenBank Accession Number (RbcL)	GenBank Accession Number (Rps4-TrnS)	Herbarium
DV2020058	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>coreanum</i>	Tokyo, Okutama, Unazawa to Ootaki	D.T. Vasques & S. Kurata	OP432124	OP432187	TI
DV2020087	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>coreanum</i>	Nagano, Takamori, Fudo Falls	D.T. Vasques & A. Ebihara	OP432116	OP432179	TI
DV2020089	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>coreanum</i>	Nagano, Takamori, Fudo Falls	D.T. Vasques & A. Ebihara	OP432117	OP432180	TI
DV2020091	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>coreanum</i>	Nagano, Takamori, Fudo Falls	D.T. Vasques & A. Ebihara	OP432118	OP432181	TI
DV2020094	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>coreanum</i>	Nagano, Takamori, Fudo Falls	D.T. Vasques & A. Ebihara	OP432126	OP432189	TI
DV2020098	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>coreanum</i>	Nagano, Iida-shi, Minamishinano, Hyogoe Pass	D.T. Vasques & A. Ebihara	OP432119	OP432182	TI
DV2020103	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>coreanum</i>	Nagano, Iida-shi, Minamishinano, Hyogoe Pass	D.T. Vasques & A. Ebihara	OP432121	OP432184	TI
DV2020108	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>coreanum</i>	Yamanashi, Aokigahara	D.T. Vasques & A. Ebihara	OP432122	OP432185	TI
DV2020109	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>coreanum</i>	Yamanashi, Aokigahara	D.T. Vasques & A. Ebihara	OP432123	OP432186	TI
DV2021001	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Wakayama, Shingu-shi, Oga, Kuwanoki Falls trail	D.T. Vasques & A. Ebihara	OP432101	OP432164	TI
DV2021002	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Wakayama, Shingu-shi, Kumanogawacho, Hanajiro Falls	D.T. Vasques & A. Ebihara	OP432102	OP432165	TI
DV2021003	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Wakayama, Shingu-shi, Oga, Kuwanoki Falls trail	D.T. Vasques & A. Ebihara	OP432103	OP432166	TI
DV2021004	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Wakayama, Shingu-shi, Oga, Kuwanoki Falls trail	D.T. Vasques & A. Ebihara	OP432104	OP432167	TI
DV2021005	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Wakayama, Shingu-shi, Oga, Kuwanoki Falls trail	D.T. Vasques & A. Ebihara	OP432105	OP432168	TI
DV2021007	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Wakayama, Shingu-shi, Oga, Kuwanoki Falls trail	D.T. Vasques & A. Ebihara	OP432106	OP432169	TI
DV2021009A	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Wakayama, Shingu-shi, Oga, Kuwanoki Falls trail	D.T. Vasques & A. Ebihara	OP432107	OP432170	TI
DV2021009B	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Wakayama, Shingu-shi, Oga, Kuwanoki Falls trail	D.T. Vasques & A. Ebihara	OP432108	OP432171	TI
DV2021010A	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Wakayama, Shingu-shi, Oga, Kuwanoki Falls trail	D.T. Vasques & A. Ebihara	OP432109	OP432172	TI
DV2021010B	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Wakayama, Shingu-shi, Oga, Kuwanoki Falls trail	D.T. Vasques & A. Ebihara	OP432110	OP432173	TI
DV2021011	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Wakayama, Shingu-shi, Oga, Kuwanoki Falls trail	D.T. Vasques & A. Ebihara	OP432111	OP432174	TI
DV2021047	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Kagoshima, Yakushima, Yakusugi Land	D.T. Vasques, A. Ebihara & Saito, T.	OP432140	OP432203	TI
DV2021048	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Kagoshima, Yakushima, Yakusugi Land	D.T. Vasques, A. Ebihara & Saito, T.	OP432141	OP432204	TI
DV2021052	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Kagoshima, Yakushima, Yakusugi Land	D.T. Vasques, A. Ebihara & Saito, T.	OP432143	OP432206	TI
DV2021053	Hymenophyllaceae	<i>Hymenophyllum</i>	<i>Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Kagoshima, Yakushima, Yakusugi Land	D.T. Vasques, A. Ebihara & Saito, T.	OP432144	OP432207	TI



DV2021059	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Kagoshima, Yakushima, Miyanoura	D.T. Vasques, A. Ebihara & Saito, T.	OP432146 OP432209	TI
DV2021060	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Kagoshima, Yakushima, Miyanoura	D.T. Vasques, A. Ebihara & Saito, T.	OP432147 OP432210	TI
DV2021074	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Kagoshima, Yakushima, Hananoego-Kosugi	D.T. Vasques, A. Ebihara & Saito, T.	OP432150 OP432213	TI
DV2021075	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['fujisanense']	Kagoshima, Yakushima, Hananoego-Kosugi	D.T. Vasques, A. Ebihara & Saito, T.	OP432151 OP432214	TI
DV2020100	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>mikawanum</i>	Nagano, Iida-shi, Minamishinano, Hyogoe Pass	D.T. Vasques & A. Ebihara	OP432112 OP432175	TI
DV2020101	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>mikawanum</i>	Nagano, Iida-shi, Minamishinano, Hyogoe Pass	D.T. Vasques & A. Ebihara	OP432113 OP432176	TI
DV2020102	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>mikawanum</i>	Nagano, Iida-shi, Minamishinano, Hyogoe Pass	D.T. Vasques & A. Ebihara	OP432114 OP432177	TI
DV2020049	Hymenophyllaceae <i>Hymenophyllum Hymenophyllum oligosorum</i>		Kagoshima, Yakushima	S. Sakaguchi	OP432193 OP432130	TI
DV2020053	Hymenophyllaceae <i>Hymenophyllum Hymenophyllum oligosorum</i>		Kagoshima, Yakushima	S. Sakaguchi	OP432115 OP432178	TI
DV2020095	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['parallellocarpum']	Nagano, Iida-shi, Minamishinano, Hyogoe Pass	D.T. Vasques & A. Ebihara	OP432127 OP432190	TI
DV2020096	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['parallellocarpum']	Nagano, Iida-shi, Minamishinano, Hyogoe Pass	D.T. Vasques & A. Ebihara	OP432128 OP432191	TI
DV2020097	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['parallellocarpum']	Nagano, Iida-shi, Minamishinano, Hyogoe Pass	D.T. Vasques & A. Ebihara	OP432129 OP432192	TI
DV2020111	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['parallellocarpum']	Yamanashi, Aokigahara	D.T. Vasques & A. Ebihara	OP432095 OP432158	TI
DV2020113	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['parallellocarpum']	Yamanashi, Aokigahara	D.T. Vasques & A. Ebihara	OP432096 OP432159	TI
DV2020114	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['parallellocarpum']	Yamanashi, Aokigahara	D.T. Vasques & A. Ebihara	OP432097 OP432160	TI
DV2020115	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['parallellocarpum']	Yamanashi, Aokigahara	D.T. Vasques & A. Ebihara	OP432098 OP432161	TI
DV2020116	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['parallellocarpum']	Yamanashi, Aokigahara	D.T. Vasques & A. Ebihara	OP432099 OP432162	TI
DV2020117	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['parallellocarpum']	Yamanashi, Aokigahara	D.T. Vasques & A. Ebihara	OP432100 OP432163	TI
DV2021049	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['parallellocarpum']	Kagoshima, Yakushima, Yakusugi Land	D.T. Vasques, A. Ebihara & Saito, T.	OP432142 OP432205	TI
DV2021051	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['parallellocarpum']	Kagoshima, Yakushima, Yakusugi Land	D.T. Vasques, A. Ebihara & Saito, T.	OP432094 OP432157	TI
DV2021055	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['parallellocarpum']	Kagoshima, Yakushima, Miyanoura	D.T. Vasques, A. Ebihara & Saito, T.	OP432145 OP432208	TI
DV2021073	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['parallellocarpum']	Kagoshima, Yakushima, Hananoego-Kosugi	D.T. Vasques, A. Ebihara & Saito, T.	OP432149 OP432212	TI
DV2021076	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['parallellocarpum']	Kagoshima, Yakushima, Hananoego-Kosugi	D.T. Vasques, A. Ebihara & Saito, T.	OP432152 OP432215	TI
DV2021080	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['parallellocarpum']	Kagoshima, Yakushima, Hananoego-Kosugi	D.T. Vasques, A. Ebihara & Saito, T.	OP432156 OP432219	TI
DV2020056	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['punctisorum']	Tokyo, Okutama, Unazawa to Ootaki	D.T. Vasques & S. Kurata	OP432131 OP432194	TI
DV2020060	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['punctisorum']	Tokyo, Okutama, Unazawa to Ootaki	D.T. Vasques & S. Kurata	OP432132 OP432195	TI
DV2020068	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['punctisorum']	Shizuoka, Izu, Namesawa Valley	D.T. Vasques & S. Kurata	OP432133 OP432196	TI
DV2020088	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['punctisorum']	Nagano, Takamori, Fudo Falls	D.T. Vasques & A. Ebihara	OP432125 OP432188	TI
DV2020090	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['punctisorum']	Nagano, Takamori, Fudo Falls	D.T. Vasques & A. Ebihara	OP432134 OP432197	TI
DV2020092	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['punctisorum']	Nagano, Takamori, Fudo Falls	D.T. Vasques & A. Ebihara	OP432135 OP432198	TI



DV2020099	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['punctisorum']	Nagano, Iida-shi, Minamishinano, Hyogoe Pass	D.T. Vasques & A. Ebihara	OP432120	OP432183	TI
DV2021072	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['punctisorum']	Kagoshima, Yakushima, Hanayama	D.T. Vasques, A. Ebihara & Saito, T.	OP432148	OP432211	TI
DV2021077	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['punctisorum']	Kagoshima, Yakushima, Hananoego- Kosugi	D.T. Vasques, A. Ebihara & Saito, T.	OP432153	OP432216	TI
DV2021078	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['punctisorum']	Kagoshima, Yakushima, Hananoego- Kosugi	D.T. Vasques, A. Ebihara & Saito, T.	OP432154	OP432217	TI
DV2021079	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	<i>polyanthos</i> ['punctisorum']	Kagoshima, Yakushima, Hananoego- Kosugi	D.T. Vasques, A. Ebihara & Saito, T.	OP432155	OP432218	TI
TNS1265118	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	sp	Nagano, Iida-shi, Minamishinano	K. Ueno	OP432136	OP432199	TNS
TNS1286245	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	sp	Miyagi, Sendai-shi, Okunikkawa	A. Ebihara & Ueno, Y.	OP432137	OP432200	TNS
TNS776967	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	sp	Yamanashi, Nanbu-cho, Nishimata River	M. Uzawa	OP432138	OP432201	TNS
Yu01	Hymenophyllaceae <i>Hymenophyllum Mecodium</i>	sp	Kochi, Tosa-gun, Oookawa-mura, Kamiominagawa	Y. Uka	OP432139	OP432202	TI



**Table S3.** Morphological analysis measurements for 11 parameters. Lamina length (LL), lamina width (LW), petiole length (PL), petiole wing length (WL), petiole wing width (WW), pinnae length (LPL), pinnae width (LPW), pinnae distance (PD), angle between the lamina costa and the lateral pinnae (A), sori involucre length (SL), sori involucre width (SW), and sori constriction index (CI).

Voucher ID	Phylotype	Lamina Length (cm)	Lamina Width (cm)	Petiole Length (cm)	Pinnae Length (cm)	Pinnae Width (cm)	Pinnae distance	Angle	Wing length (mm)	Wing width (mm)	Sori Length (mm)	below sori lamina width (mm)	sori base (mm)	sori width (mm)	CI
DV2020056	punctisorum	6.6	2.7	5.1	1.6	0.9	0.6	75	0	0	0.8	0.87	0.6	0.75	0.69
	punctisorum	4.4	1.2	2.9	1.1	0.8	0.4	62	0	0	0.8	0.82	0.63	0.67	0.77
	punctisorum	5.5	2.9	3.9	1.8	0.9	0.4	75	0	0	1.2	0.7	0.57	0.72	0.81
DV2020060	punctisorum	4	1.9	1.1	0.9	0.6	0.3	90	0	0	1.1	0.9	0.4	1.2	0.44
	punctisorum	3.7	1.9	2.4	1.5	0.8	0.4	90	0	0	0.4	0.4	0.3	0.5	0.75
DV2020068	punctisorum	3.7	1.8	1.2	0.9	0.5	0.2	77	0	0	0.4	0.5	0.4	1.1	0.8
	punctisorum	2.2	1.6	0.9	0.9	0.6	0.1	50	0	0	0.5	0.6	0.4	0.6	0.67
	punctisorum	2.7	1.8	0.9	0.8	0.5	0.1	65	0	0	1	0.6	0.46	0.6	0.77
DV2020096	parallelocarpum	6.7	3.3	2.9	1.5	0.6	0.3	50	0	0	1.1	0.7	0.65	1.2	0.93
	parallelocarpum	4.7	3	2.9	1.3	0.6	0.3	60	0	0	1.2	0.95	0.8	1.1	0.84
	parallelocarpum	5.5	3.1	3.2	1.7	0.8	0.4	50	0	0	0.6	0.75	0.66	0.65	0.88
DV2020097	parallelocarpum	5.6	3.1	4.7	1.4	0.6	0.3	90	25	0.21	0.85	0.7	0.5	0.85	0.71
	parallelocarpum	6.4	2.9	5.7	2	1	0.3	90	14	0.15	1.2	0.83	0.75	1.2	0.9
	parallelocarpum	5.5	3.1	4.4	1.6	0.7	0.3	90	20	0.19	0.93	0.65	0.65	0.83	1
DV2020088	punctisorum	2.9	1.7	0.6	1.1	0.6	0.2	60	0.65	0.09	0.65	0.5	0.45	0.55	0.9
	punctisorum	3.2	2.2	0.7	1.3	0.7	0.2	65	0.7	0.1	0.95	0.6	0.4	0.8	0.67
	punctisorum	1.9	1.8	1.5	0.8	0.8	0.2	65	0.4	0.06	1.1	0.8	0.6	0.9	0.75
DV2020090	punctisorum	4.1	2.4	2.9	1.7	0.7	0.4	55	0.7	0.05	0.85	0.64	0.45	0.8	0.7
	punctisorum	3.4	2.3	2.7	1.3	0.8	0.3	70	0.7	0.05	0.6	0.42	0.36	0.76	0.86
DV2020092	punctisorum	2.9	1.5	1.1	1.1	0.7	0.35	50	0	0	1.3	1	0.7	1.1	0.7
	punctisorum	3.2	1.6	1.1	0.9	0.4	0.2	55	0	0	1	0.63	0.79	0.93	1.25
	punctisorum	3.4	2	1.3	1	0.7	0.2	60	0	0	1.1	0.45	0.43	0.83	0.96
DV2020093	punctisorum	3.4	2	2.8	1.1	0.6	0.3	70	0	0	0.68	0.6	0.38	0.8	0.63
	punctisorum	3.9	1.6	2.3	1.1	0.5	0.3	70	0	0	1.2	0.47	0.47	0.77	1
	punctisorum	4	2	0.9	1.2	0.9	0.35	75	0	0	0.9	0.4	0.3	0.65	0.75
DV2020095	parallelocarpum	3.8	1.6	0.7	0.8	0.5	0.2	65	7	0.15	1.1	0.72	0.7	1	0.97
	parallelocarpum	4	1.9	2.7	1	0.8	0.25	60	27	0.19	1.1	0.8	0.78	1.2	0.98
	parallelocarpum	4.9	2.7	3	1.3	0.8	0.25	65	30	0.16	1.2	1	1	1.2	1
DV2020099	punctisorum	2.6	1.4	0.4	0.7	0.7	0.2	90	0	0	1.4	0.6	0.34	0.78	0.57
	punctisorum	3.8	1.6	0.4	0.9	0.4	0.2	90	0	0	1.3	1	0.6	1	0.6
DV2020110	parallelocarpum	4.1	1.7	1.2	1	0.5	0.3	69	9	0.16	1.2	0.75	0.8	1.05	1.07
	parallelocarpum	3.9	1.7	2	1.2	0.6	0.2	76	6	0.1	0.6	0.43	0.46	0.8	1.07
DV2020111	parallelocarpum	4.3	1.1	1.1	0.6	0.5	0.4	55	9	0.17	1.2	0.7	0.7	1	1
	parallelocarpum	3.7	1.6	1	0.7	0.6	0.3	50	4	0.08	1	0.6	0.5	1	0.83
DV2020113	parallelocarpum	3.7	1.4	1	0.7	0.4	0.3	60	4	0.12	1.2	0.97	0.87	1.2	0.9
DV2020113	parallelocarpum	6.8	2.2	1.8	1.7	0.9	0.3	70	18	0.16	1.4	0.8	0.7	1.1	0.88



		parallelcarpum	4.7	2.4	2.3	1.8	0.7	0.4	60	23	0.12	1	0.8	0.65	1	0.81
DV2020114		parallelcarpum	5.4	2.7	2.9	0.8	0.5	0.3	90	27	0.17	1.2	0.83	0.7	0.9	0.84
		parallelcarpum	4.3	2	2.1	1	0.6	0.2	90	20	0.17	1.6	0.8	0.77	1	0.96
		parallelcarpum	4.7	1.8	1.8	1.9	0.9	0.3	90	18	0.17	0.8	0.75	0.75	1.07	1
DV2020115		parallelcarpum	4	2.4	2.5	1	0.6	0.4	90	25	0.29	1.2	0.5	0.45	0.98	0.9
		parallelcarpum	5.3	2.6	2.2	1.8	0.7	0.4	90	22	0.29	1	0.6	0.6	1	1
		parallelcarpum	4	1.7	1.6	0.9	0.6	0.2	90	16	0.2	1.2	0.7	0.7	0.95	1
DV2020116		parallelcarpum	7.5	1.5	5	1.5	1.5	0.4	90	15	0.15	0.76	1	0.7	0.76	0.7
		parallelcarpum	6.4	4.2	3.6	2.3	1	0.4	70	42	0.22	0.96	0.84	0.6	0.7	0.71
DV2020117		parallelcarpum	5.6	2.5	2.5	1.3	0.9	0.4	70	25	0.21	1.6	0.85	0.6	0.66	0.71
		parallelcarpum	4	2.6	2.4	1.3	0.9	0.3	120	24	0.32	0.6	0.77	0.7	0.85	0.91
		parallelcarpum	5.7	1.7	0.9	1	0.4	0.4	90	9	0.2	1.1	0.6	0.6	0.7	1
KS19		fujisanense	10	4	3.2	2.3	1	0.7	66	32	0.16	1.56	0.73	0.92	1.03	1.26
		fujisanense	7.1	3.5	2.8	2.2	0.9	0.6	52	28	0.15	1.19	0.64	0.76	1.1	1.19
		fujisanense	7.2	3.6	4.3	2.5	1.2	0.7	57	43	0.21	1.26	0.76	0.79	0.92	1.04
UG255		fujisanense	11.3	3.7	3.3	3.2	1.2	0.5	58	33	0.24	1.71	0.62	0.53	1.01	0.85
		fujisanense	9.2	4.7	3.5	2.4	1.1	0.6	62	35	0.29	1.11	0.96	0.83	0.97	0.86
		fujisanense	8.2	3.3	4.7	2.4	1	0.6	54	47	0.23	1.67	0.74	0.65	1.21	0.88
UG258		fujisanense	7.9	3	2.8	1.4	1	0.4	64	28	0.24	1.52	1	0.81	1.23	0.81
		fujisanense	5.9	3.2	3.5	2.2	1	0.5	79	35	0.16	1.22	0.89	0.84	0.98	0.94
		fujisanense	9.4	2.9	3.5	1.6	0.9	0.5	55	35	0.19	1.18	0.97	1.05	1.06	1.08
W17		fujisanense	6.8	4.8	2.3	2.4	1.3	0.5	49	23	0.21	1.27	0.53	0.69	1.2	1.3
		fujisanense	9.4	6.6	4.7	4	2	0.8	55	47	0.27	1.36	0.65	0.66	1.06	1.02
		fujisanense	6.4	4	3	2.2	1	0.6	59	30	0.42	1.14	0.96	0.64	0.98	0.67
Ebihara 991122		fujisanense	7	2.5	3.2	1.7	1	0.4	52	32	0.14	1.51	1.09	1.07	0.93	0.98
DV2021001		fujisanense	12.5	3.2	8.5	3	1.4	0.7	64	4.5	0.1	0.8	0.55	0.5	0.85	0.91
		fujisanense	12.2	3.4	6.3	3.1	1	0.7	63	4	0.1	1	0.45	0.5	0.7	1.11
		fujisanense	15.7	3.5	5.9	3	1.3	0.5	48	5.9	0.1	0.55	0.6	0.7	0.6	1.17
DV2021002		fujisanense	8	4.2	4.5	3.2	1.2	0.5	65	4.5	0.16	1	0.7	0.7	0.95	1
		fujisanense	6.5	4.1	4.7	2.5	1.2	0.5	60	4.7	0.14	1.1	0.55	0.55	0.7	1
		fujisanense	6.6	2.4	2.5	2	0.5	0.3	62	2.5	0.12	1.1	0.45	0.45	0.6	1
DV2021004		fujisanense	6.7	3.4	3.5	2.2	1	0.4	63	3.5	0.2	1.2	0.75	0.75	0.75	1
DV2021005		fujisanense	6.5	2.8	3	2.2	0.9	0.5	60	3	0.12	1.1	0.6	0.6	1.05	1
		fujisanense	9	4	4.6	2.5	0.9	0.5	55	4.6	0.18	1	0.65	0.6	0.95	0.92
		fujisanense	6.5	2.9	4	1.8	0.9	0.4	70	4	0.15	1.05	0.9	0.6	0.6	0.67
DV2021007		fujisanense	16.5	2.6	5	2	0.8	0.9	60	4	0.09	1.25	0.5	0.4	0.87	0.8
		fujisanense	8.5	4.8	6	3.1	1.2	0.5	60	5	0.2	1.4	0.55	0.5	0.85	0.91
		fujisanense	8.5	7	5	3.5	1.7	0.6	70	4.5	0.2	1.1	0.7	0.7	0.9	1
DV2021009A		fujisanense	7.5	2.6	5	2.7	1.5	0.6	45	4.5	0.07	0.95	0.48	0.48	0.8	1
		fujisanense	7.4	3.7	4	2	0.7	0.5	60	4	0.08	0.77	0.7	0.6	0.7	0.86
DV2021009B		fujisanense	10.5	3.7	5	2.1	1	0.4	70	5	0.1	1.4	0.5	0.47	0.9	0.94



DV2021010A	fujisanense	9.5	1.7	5.3	1.4	0.4	0.4	62	4	0.1	1.2	0.44	0.42	0.8	0.95	
	fujisanense	9	1.9	5.5	2	0.7	0.4	70	5.5	0.09	1.3	0.6	0.55	1.1	0.92	
	fujisanense	8.2	3	3	2.5	1.2	0.9	42	3	0.12	0.7	0.4	0.4	0.7	1	
DV2021010B	fujisanense	8.1	3.7	3.7	2.7	1.9	0.5	50	3.7	0.12	1	0.7	0.65	1	0.93	
	fujisanense	14.2	2.5	3.5	2.4	1.3	0.8	40	2.1	0.11	1.05	0.6	0.6	0.93	1	
	fujisanense	7.3	2.8	3.5	1.5	1.1	0.7	50	3.5	0.22	0.6	0.5	0.5	0.6	1	
DV2021011	fujisanense	10	2.5	4.5	1.5	1.1	0.7	40	3.9	0.11	0.8	0.6	0.6	0.85	1	
	fujisanense	10	1.5	1.7	1	0.5	0.3	50	0.7	0.07	1.2	0.8	0.9	1.2	1.13	
	fujisanense	11	1.7	1.5	1	0.8	0.4	50	0.9	0.08	0.8	0.7	0.7	0.8	1	
DV2021047	fujisanense	8	1.8	2.5	1.9	0.7	0.4	40	1.5	0.07	1.1	0.7	0.7	0.95	1	
	fujisanense	5.2	3.4	1.9	1.7	0.7	0.4	70	1.5	0.27	1.28	0.41	0.41	0.82	1	
	fujisanense	7	3.2	2.7	2.6	0.9	0.4	65	2.5	0.29	1.17	0.48	0.54	0.85	1.13	
DV2021048	fujisanense	9	3.9	3.8	2.6	1	0.4	59	2.9	0.21	1.37	0.6	0.49	0.99	0.82	
	fujisanense	6.8	2.7	2.7	2.1	1.2	0.4	63	2.3	0.21	0.99	0.35	0.39	0.88	1.11	
	fujisanense	5.1	2.8	3.3	1.7	1.1	0.4	60	3.1	0.28	1.13	0.49	0.39	0.53	0.8	
DV2021052	fujisanense	4.8	2.6	1.1	1.1	0.8	0.3	65	1	0.19	1.9	0.42	0.46	0.6	1.1	
	fujisanense	4.6	2.5	1.8	1.2	0.9	0.3	70	1.2	0.15	1.16	0.63	0.59	0.88	0.94	
	fujisanense	4.5	2.7	2.9	1.4	1	0.3	65	1.9	0.27	1.45	0.51	0.52	1.08	1.02	
DV2021053	fujisanense	4.2	2.6	2.2	1.8	0.8	0.3	60	1.7	0.13	1.22	0.55	0.49	0.9	0.89	
	fujisanense	4.6	3.4	2.5	1.9	0.8	0.4	67	2.1	0.36	1.37	0.48	0.47	0.94	0.98	
	fujisanense	7.4	3.5	5.2	1.8	1	0.5	70	4.7	0.23	1.01	0.52	0.54	0.78	1.04	
DV2021059	fujisanense	5.3	3.6	3.4	2.2	1	0.4	60	2.9	0.09	1.37	0.47	0.54	1	1.15	
	fujisanense	4.8	2	2.6	0.9	0.6	0.2	70	2.2	0.24	1.15	0.53	0.55	0.81	1.04	
	fujisanense	5.9	3.2	3.1	1.6	1.1	0.35	60	2.5	0.16	0.8	0.68	0.71	0.87	1.04	
DV2021060	fujisanense	4.8	2.7	2.3	1.5	0.8	0.4	60	1.8	0.18	1.11	0.37	0.41	0.69	1.11	
	fujisanense	6.7	4.6	4.2	2.7	1.1	0.4	56	3.8	0.17	1.47	0.46	0.51	1.06	1.11	
	fujisanense	6.5	3.6	2.9	2.2	1.1	0.6	58	2.7	0.2	1.55	0.67	0.62	1.34	0.93	
DV2021074	fujisanense	7.2	3	3.5	1.8	1	0.5	53	3.2	0.17	1.7	0.61	0.64	1.14	1.05	
	fujisanense	4.3	1.8	2.5	1	0.6	0.3	65	1.9	0.13	1.63	0.55	0.36	1.06	0.65	
	fujisanense	4.9	2.2	1.8	1.4	1	0.25	62	1.4	0.19	1.19	0.41	0.44	0.88	1.07	
DV2021075	fujisanense	3.2	2	2.6	1.2	0.7	0.3	60	1.5	0.21	1.29	0.56	0.47	0.91	0.84	
	fujisanense	4.8	2.8	2.2	1.5	0.9	0.3	72	1.8	0.23	0.97	0.69	0.6	0.97	0.87	
	fujisanense	5	2.4	3.2	1.1	0.7	0.3	63	2.5	0.1	1.5	0.59	0.62	1.25	1.05	
DV2021049	fujisanense	4.3	1.7	2	0.8	0.5	0.2	70	1.8	0.25	1.41	0.59	0.54	0.95	0.92	
	parallelocarpum	5.5	2.2	4.4	1.4	0.9	0.3	60	3.5	0.13	0.86	0.56	0.5	0.88	0.89	
	parallelocarpum	5.7	2.5	3.1	1.6	0.9	0.4	60	2.2	0.24	0.78	0.47	0.46	0.79	0.98	
DV2021055	parallelocarpum	4.7	2.9	1.6	1.7	0.9	0.5	60	1.3	0.26	0.91	0.6	0.44	0.89	0.73	
	parallelocarpum	3.6	1.8	2	0.9	0.7	0.3	75	1.8	0.28	1.51	0.36	0.48	1.28	1.33	
	parallelocarpum	7.8	2.2	3.5	1.5	0.6	0.4	50	2.8	0.25	1.54	0.47	0.57	1.14	1.21	
DV2021073	parallelocarpum	8.2	1.5	3.8	1	0.6	0.35	60	2.7	0.17	1.13	0.56	0.62	0.84	1.11	
DV2021073	parallelocarpum	10.6	4.5	2.5	3.8	1.2	0.6	74	2.2	0.39	1.62	0.46	0.54	0.89	1.17	



	parallelocarpum	5.7	4	3.7	2.9	1.6	0.5	70	3.1	0.28	1.54	0.55	0.67	1.01	1.22
DV2021076	parallelocarpum	7.1	3.5	4.5	2.5	1.2	0.4	60	3.1	0.17	1.63	0.55	0.45	0.95	0.82
	parallelocarpum	9	2.9	2.3	1.7	0.9	0.4	73	2	0.09	1.22	0.5	0.43	1.07	0.86
	parallelocarpum	7	2.2	4.4	1.3	0.5	0.4	65	3.4	0.28	1.28	0.49	0.5	1.09	1.02
DV2021080	parallelocarpum	7.3	2	2.7	1.4	0.7	0.5	70	2.1	0.17	1.21	0.58	0.55	1.15	0.95
	parallelocarpum	3.5	2.8	3.6	1.4	1.1	0.3	65	2.6	0.2	1.45	0.69	0.57	1.09	0.83
	parallelocarpum	4	3.5	4.7	1.7	1.4	0.4	70	3.6	0.24	1.1	0.34	0.39	0.86	1.15
	parallelocarpum	7.4	4.1	4.7	2.6	1.2	0.5	90	3	0.3	1.16	0.62	0.56	0.95	0.9
DV2021072	punctisorum	2.7	2.1	2	0.9	0.7	0.2	80	0.6	0	0.84	0.44	0.31	0.91	0.7
	punctisorum	2.6	1.9	2	0.9	0.7	0.3	70	0	0	0.71	0.55	0.4	0.8	0.73
	punctisorum	2.7	1.9	1.5	0.9	0.8	0.2	85	0.4	0	0.68	0.56	0.33	0.95	0.59
DV2021077	punctisorum	4.1	2.9	2.4	1.5	1.3	0.3	90	0.9	0.08	1.03	0.65	0.27	0.95	0.42
	punctisorum	3.5	2.3	1.6	1.3	1	0.3	90	0	0	0.33	0.46	0.33	0.39	0.72
	punctisorum	2.6	2.5	1.4	1.2	0.9	0.2	90	0	0	0.4	0.42	0.27	0.42	0.64
DV2021078	punctisorum	2.3	1.5	0.9	0.8	0.5	0.1	82	0	0	1.08	0.47	0.34	0.83	0.72
	punctisorum	2.8	1.7	1.2	0.8	0.5	0.2	70	0	0	0.87	0.45	0.33	0.78	0.73
	punctisorum	2.5	1.7	0.8	1	0.8	0.1	90	0	0	0.73	0.38	0.67	0.71	1.76
DV2021079	punctisorum	2.8	2.2	1.1	1.2	0.7	0.2	85	0	0	0.47	0.54	0.28	0.49	0.52
	punctisorum	2.5	1.9	1.1	1	0.7	0.2	80	0	0	0.74	0.59	0.32	0.63	0.54
	punctisorum	2.6	2.1	0.9	1	0.7	0.2	75	0	0	0.66	0.64	0.33	0.51	0.52

Table S4. Distribution and morphological data for the TNS herbarium specimens of *H. polyanthos* in Japan.

ID	Species inference	latitude	longitude	altitude (m)	Lamina Length (cm)	Lamina Width (cm)	Wing (absence: 0; presence: 1)	Petiole Length (cm)	Pinnae Length (cm)	Pinnae Width (cm)	Pinnae distance (cm)	Sori Length (mm)	below sori lamina width (mm)	sori base (mm)	sori width (mm)	CI
TNS1147712	parallelocarpum	35.9373	139.026	371.2	5.523	2.627	1	2.488	1.672	0.934	0.396	1.44	0.36	0.34	0.79	0.94
TNS1031690	fujisanense	33.7592	133.7516	1395.9	6.806	4.395	1	4.097	2.889	0.996	0.58	0.94	0.43	0.35	0.93	0.81
TNS1200485	fujisanense	32.5063889	131.417778	438	6.984	3.66	1	2.182	1.92	1.249	0.406	1.01	0.69	0.51	0.8	0.74
TNS454452	fujisanense	36.2988	140.1437	691.2	7.079	3.559	1	4.496	1.838	1.077	0.512	1.18	0.34	0.38	0.93	1.12
TNS1147759	fujisanense	35.962	138.7373	1372.3	7.619	4.109	1	2.012	2.622	1.229	0.364	1.18	0.59	0.4	1.2	0.68
TNS987884	fujisanense	30.3779	130.5724	712	7.632	2.527	1	2.017	1.203	0.493	0.311	1.42	0.45	0.46	1.03	1.02
TNS1031634	fujisanense	33.6178	133.7266	63.1	9.004	2.949	1	3.637	2.006	0.849	0.401	1.03	0.45	0.3	0.63	0.67
TNS588003	fujisanense	36.06725	138.75423	680.6	9.362	3.396	1	5.333	2.225	0.842	0.345	0.85	0.76	0.59	0.93	0.78
TNS803228	parallelocarpum	30.30108	130.41972	308.1	5.551	2.825	1	2.341	1.563	0.775	0.459	1.15	0.54	0.56	0.76	1.04
TNS803224	parallelocarpum	35.4906	138.6082	899	5.631	4.601	1	5.851	2.598	1.498	0.457	1.4	0.71	0.57	1.1	0.80
TNS553421	fujisanense	33.1846	132.7443	284.5	5.687	3.23	1	2.465	2.142	0.905	0.437	1.05	0.34	0.35	0.68	1.03
TNS1101378	fujisanense	31.9547	130.7798	704	5.876	3.832	1	5.037	2.005	1.051	539	1	0.75	0.78	1.06	1.04
TNS778176	fujisanense	31.1423	130.9533	402.7	5.913	3.501	1	2.912	2.709	1.019	0.467	0.78	0.63	0.75	0.52	1.19
TNS927481	fujisanense	30.3519	130.579	648.8	6.116	2.118	1	1.918	1.211	0.864	0.437	0.63	0.35	34	0.59	97.14
TNS927474	fujisanense	30.3519	130.579	648.8	6.122	6.114	1	7.093	2.664	1.235	0.631	1.15	0.71	0.77	0.96	1.08
TNS139536	fujisanense	35.0266	137.832	577.2	6.266	3.417	1	3.966	2.458	1.211	0.441	1.04	0.5	0.45	0.83	0.90
TNS463097	fujisanense	30.3386	130.6335	615.7	6.267	3.958	1	3.683	2.311	1.291	0.424	1.32	0.34	0.4	1.02	1.18
TNS965061	parallelocarpum	30.3779	130.5724	712	6.305	2.234	1	1.849	1.477	0.915	0.471	1.32	0.5	0.51	1.17	1.02
TNS538151	fujisanense	34.30897	136.40916	254	6.545	3.38	1	4.347	1.992	0.772	0.341	1.06	0.44	0.44	0.73	1.00
TNS406410	fujisanense	31.17658	130.53064	677.6	6.691	3.238	1	4.084	2.205	0.827	0.437	1.31	0.45	0.71	1.03	1.58
TNS521705	fujisanense	32.39672	131.53416	26.2	6.741	3.738	1	4.36	1.851	0.89	0.363	1.52	0.65	0.71	0.76	1.09
TNS1114507	fujisanense	28.2979556	129.321736	676	6.754	3.515	1	2.186	2.067	0.992	0.506	1.11	0.54	0.51	0.71	0.94
TNS741466	parallelocarpum	35.02589	137.66425	327	6.786	2.847	1	2.689	1.739	1.049	0.388	1.25	0.61	0.51	0.81	0.84
TNS449875	fujisanense	34.99458	137.735	590.5	6.842	3.265	1	3.173	1.84	1.126	0.588	0.79	0.4	0.34	0.59	0.85
TNS1217077	fujisanense	32.3241667	131.537222	113	6.853	4.713	1	4.944	2.823	1.154	0.336	0.82	0.57	0.57	0.86	1.00
TNS1031664	fujisanense	32.4988	131.0746	546.5	6.864	4.218	1	6.958	3.053	1.125	0.43	1.37	0.47	0.36	0.9	0.77
TNS294468	fujisanense	33.5619	133.1331	200.2	6.925	3.346	1	2.84	2.43	0.78	0.406	0.96	0.45	0.36	0.98	0.80
TNS1045825	fujisanense	30.2567	130.5642	863.8	6.937	3.239	1	2.994	1.998	1.202	0.483	1.02	0.63	0.53	0.81	0.84
TNS1199359	fujisanense	31.7422222	131.379167	255	6.939	3.434	1	3.296	1.834	1.105	0.451	0.84	0.31	0.3	0.66	0.97
TNS522615	fujisanense	31.24592	131.00764	480.7	6.971	3.548	1	3.576	1.995	0.973	0.429	1.32	0.51	0.69	0.87	1.35
TNS449876	fujisanense	35.13861	137.86444	340.8	7.157	3.415	1	2.914	2.286	0.792	0.265	1.07	0.63	0.65	0.82	1.03
TNS1045823	fujisanense	30.2766	130.5764	627.7	7.206	4.124	1	6.611	2.382	0.836	0.422	1.11	0.26	0.28	0.76	1.08
TNS1200487	fujisanense	32.4338889	131.381389	489	7.26	2.537	1	2.55	1.84	1.01	0.452	1.55	0.8	0.72	1.11	0.90
TNS553424	fujisanense	33.61064	133.991	221.2	7.262	3.756	1	3.299	2.286	1.032	0.481	1.46	0.33	0.32	0.84	0.97
TNS803262	fujisanense	35.1363	137.8771	914.6	7.316	3.788	1	3.845	2.448	1.036	0.415	0.86	0.23	0.21	0.75	0.91
TNS803268	fujisanense	31.1645	130.9701	17	7.348	3.638	1	2.841	2.034	0.706	0.345	1.04	0.57	0.54	0.82	0.95
TNS449873	fujisanense	35.0355	137.7257	254.6	7.483	2.421	1	2.058	1.706	0.832	0.49	1.13	0.55	0.47	1.01	0.85



TNS1031643	fujisanense	31.4711	130.814	1022.4	7.5	3.52	1	2.922	2.334	0.995	0.365	1.24	0.56	0.56	0.99	1.00
TNS1031596	fujisanense	33.6178	133.7266	63.1	7.508	2.537	1	5.282	1.579	0.733	0.384	1.11	0.41	0.45	0.82	1.10
TNS521697	fujisanense	32.3459	131.1655	955.9	7.525	2.042	1	2.848	1.631	1.052	0.374	1.52	0.54	0.55	1.11	1.02
TNS1200482	fujisanense	32.7341667	131.793611	280	7.598	3.698	1	2.65	2.15	0.746	0.307	1.45	0.55	0.45	0.87	0.82
TNS803223	fujisanense	35.4906	138.6082	899	7.613	1.934	1	2.768	1.357	0.762	0.321	1.14	0.42	0.73	1.1	1.74
TNS553436	fujisanense	33.49353	133.22514	257.7	7.653	3.664	1	4.668	2.147	0.76	0.345	1.07	0.51	0.54	0.77	1.06
TNS803254	fujisanense	35.7517	136.9683	234.9	7.654	2.656	1	4.992	2.171	0.776	0.336	0.87	0.35	0.36	0.77	1.03
TNS741551	fujisanense	35.4839	138.6544	979	7.661	2.071	1	2.566	1.299	0.585	0.315	1.2	0.47	0.49	0.63	1.04
TNS310253	fujisanense	28.29225	129.3232	463.8	7.684	3.287	1	2.519	2.031	1.112	0.388	1.29	0.45	0.47	0.67	1.04
TNS521713	fujisanense	32.2803	131.13234	552.6	7.696	3.399	1	4.226	2.043	0.819	0.333	1	0.28	0.34	0.97	1.21
TNS553420	fujisanense	33.50658	133.95287	80.4	7.727	3.884	1	1.049	2.3	1.096	0.457	1.13	0.61	0.58	1.13	0.95
TNS522571	fujisanense	31.1281	130.8848	877.8	7.765	3.646	1	3.706	2.513	1.228	0.543	0.98	0.61	0.48	0.73	0.79
TNS463096	fujisanense	31.17939	130.78995	271.6	7.772	3.475	1	4.301	2.55	1	0.425	0.95	0.31	0.39	0.67	1.26
TNS803226	fujisanense	35.4906	138.6082	899	7.899	2.949	1	7.257	2.085	1.105	0.476	1.04	0.55	0.6	0.95	1.09
TNS803251	fujisanense	34.0058	136.2335	354.5	7.961	2.696	1	2.299	1.951	1.045	0.43	0.93	0.44	0.36	0.65	0.82
TNS247720	fujisanense	35.1363	137.8771	914.6	8.122	2.335	1	3.286	1.521	0.771	0.258	0.96	0.6	0.71	0.97	1.18
TNS742429	fujisanense	31.9572	130.4299	120.7	8.215	3.478	1	2.864	2.64	0.97	0.361	1.22	0.45	0.47	1.04	1.04
TNS803258	fujisanense	34.9358	137.6363	216.4	8.231	1.954	1	3.124	1.377	0.684	0.413	1.04	0.63	0.85	0.89	1.35
TNS324702	fujisanense	32.49561	130.76091	397.2	8.267	2.458	1	2.42	1.59	0.913	0.507	1.35	0.77	0.7	1.06	0.91
TNS277855	fujisanense	33.128	132.6784	205.3	8.285	3.042	1	2.848	1.847	0.799	0.403	1.77	0.55	0.44	1.22	0.80
TNS1231847	fujisanense	32.1257	130.9129	673.6	8.286	3.448	1	2.811	2.104	0.989	0.373	1.22	0.59	0.5	0.95	0.85
TNS1031631	fujisanense	33.8835	136.0899	178.1	8.355	2.668	1	3.154	2.549	0.835	0.609	0.7	0.44	0.31	0.59	0.70
TNS1113185	fujisanense	31.10006	130.83447	172.5	8.433	3.28	1	3.166	3.351	0.993	0.363	1.08	0.3	0.46	0.82	1.53
TNS276571	fujisanense	31.1036	130.8322	306.1	8.439	4.618	1	3.189	2.94	1.515	58	0.72	0.36	0.35	0.64	0.97
TNS553162	fujisanense	32.8577	132.8467	866.7	8.486	2.862	1	4.032	1.866	1.164	0.595	1.12	0.54	0.58	0.94	1.07
TNS252873	fujisanense	33.5585	133.13564	117.3	8.497	3.533	1	4.692	2.24	0.817	0.332	1.16	0.36	0.3	0.89	0.83
TNS1031599	fujisanense	33.816	133.5907	1465.1	8.507	3.621	1	6.073	1.788	1.032	0.521	0.99	0.53	0.46	1.03	0.87
TNS538199	fujisanense	33.9097	136.0654	144.3	8.512	3.871	1	3.933	2.315	1.244	0.418	0.84	0.42	0.37	0.62	0.88
TNS803231	fujisanense	35.48736	138.61133	903.8	8.523	3.013	1	2.323	1.123	0.631	0.48	1.14	0.51	0.43	0.98	0.84
TNS930818	fujisanense	34.1193	131.5384	84.7	8.532	1.573	1	1.6	2.044	0.942	0.406	1.53	0.77	0.93	1.19	1.21
TNS1031675	fujisanense	31.6574	131.2219	366.6	8.56	4.385	1	4.927	2.324	1.338	0.613	1.14	0.61	0.42	0.83	0.69
TNS456720	fujisanense	32.82058	131.54828	366.7	8.617	4.343	1	5.359	2.685	1.03	0.415	0.7	0.36	0.33	0.73	0.92
TNS1219908	fujisanense	32.0802778	130.871389	366	8.625	3.28	1	6.829	1.783	1.054	0.399	1.21	0.54	0.52	1.06	0.96
TNS455311	fujisanense	32.3117	131.1011	1704.1	8.671	3.403	1	4.812	2.063	0.958	0.505	1.14	0.69	0.67	1.27	0.97
TNS741489	fujisanense	34.183	132.0525	39.8	8.676	2.243	1	4.319	1.765	0.925	0.564	1.07	0.48	0.42	0.96	0.88
TNS803193	fujisanense	34.0303	136.2164	634	8.707	2	1	3.276	1.329	0.556	0.473	1.05	0.53	0.48	0.62	0.91
TNS455314	fujisanense	32.49217	130.73433	558.7	8.747	2.034	1	2.695	1.881	0.824	0.357	1.31	0.79	0.57	1.41	0.72
TNS1200483	fujisanense	32.6402778	131.608333	279	8.765	7.462	1	3.084	1.689	0.793	0.467	1.21	0.57	0.51	0.96	0.89
TNS930816	fujisanense	35.6837	136.8124	275	8.785	3.324	1	3.729	1.788	0.711	0.33	1.31	0.84	0.55	0.93	0.65
TNS1031648	fujisanense	31.1645	130.9701	17	8.809	3.784	1	3.986	2.738	1.246	0.454	1.09	0.46	0.32	0.78	0.70
TNS803272	fujisanense	30.3996	130.4387	119.4	8.887	2.396	1	5.565	1.885	0.929	0.462	0.96	0.44	0.35	0.7	0.80



TNS553167	fujisanense	33.5705	134.18066	460.1	8.905	3.691	1	4.223	2.649	1.159	0.821	0.75	0.49	0.36	0.78	0.73
TNS1031683	fujisanense	35.2112	137.9305	663.1	8.942	2.31	1	4.072	2.727	1.194	0.48	1.41	0.55	0.57	1.09	1.04
TNS741533	fujisanense	34.9358	137.6363	216.4	8.979	3.948	1	4.747	2.484	1.134	0.404	1.28	0.59	0.79	0.81	1.34
TNS1231846	fujisanense	32.475	131.279167	526	8.985	4.011	1	4.315	2.113	1.244	0.643	1.2	0.51	0.53	1.01	1.04
TNS1031691	fujisanense	33.8835	136.0899	178.1	9.035	2.44	1	3.432	1.076	0.444	0.518	0.79	0.43	0.35	0.58	0.81
TNS803247	fujisanense	34.0632	136.1703	80.2	9.054	3.797	1	4.108	2.59	1.22	0.455	1.03	0.43	0.45	0.9	1.05
TNS1031708	fujisanense	31.9185	130.8629	1140.2	9.101	3.749	1	4.214	2.498	1.143	0.461	0.89	0.41	0.3	0.72	0.73
TNS734349	fujisanense	32.09864	130.65134	462.2	9.136	3.575	1	7.562	2.38	0.861	0.444	1	0.29	0.33	0.97	1.14
TNS535527	fujisanense	35.13861	137.86444	340.8	9.158	3.293	1	2.935	2.335	0.746	0.522	0.68	0.51	0.34	0.64	0.67
TNS1031661	fujisanense	31.8559	131.2938	168	9.202	4.46	1	7.19	3.492	1.382	0.415	1.12	0.45	0.42	0.97	0.93
TNS1031632	fujisanense	32.3117	131.1011	1704.1	9.222	4.606	1	4.39	2.581	1.19	0.406	1.35	0.53	0.57	1.04	1.08
TNS567772	fujisanense	34.8758	138.07753	413.1	9.237	3.103	1	3.974	2.737	1.373	0.562	0.59	0.34	0.25	0.5	0.74
TNS522601	fujisanense	32.16056	130.5985	501.3	9.348	3.899	1	9.612	3.488	3.13	1.177	1.41	0.54	0.49	1.14	0.91
TNS1101302	fujisanense	31.9772	130.3995	162.2	9.39	3.916	1	6.129	1.943	1.088	0.287	1.48	0.69	0.68	1.11	0.99
TNS553437	fujisanense	33.61561	134.1124	564.1	9.439	3.517	1	2.995	2.196	1.392	0.441	0.82	0.53	0.4	0.7	0.75
TNS522602	fujisanense	32.1263	130.4984	454	9.468	2.3077	1	8.34	2.452	1.057	0.383	1.17	0.89	0.7	1.14	0.79
TNS803230	fujisanense	35.1241	137.862	247.7	9.476	4.189	1	2.839	4.331	1.292	0.384	1.34	0.46	0.5	1.03	1.09
TNS456722	fujisanense	32.83553	131.4781	1369.4	9.493	4.253	1	4.256	2.64	0.864	0.453	1.03	0.59	0.57	0.96	0.97
TNS449882	fujisanense	34.9467	137.8028	432.6	9.495	3.295	1	2.626	2.462	1.23	0.592	1.55	0.42	0.35	0.69	0.83
TNS455318	fujisanense	32.49561	130.76091	397.2	9.622	2.534	1	2.334	1.815	0.979	0.558	1.24	0.57	0.59	1	1.04
TNS1200486	fujisanense	32.4205556	131.233056	628	9.769	4.034	1	4.25	2.758	1.204	0.514	1.26	0.65	0.45	0.86	0.69
TNS1031658	fujisanense	34.0744	136.1834	56.6	9.783	2.458	1	2.194	1.713	0.882	0.63	1.29	0.72	0.72	0.91	1.00
TNS742432	fujisanense	31.9572	130.4299	120.7	9.808	4.229	1	2.246	2.81	1.518	0.547	1.3	0.49	0.46	1.08	0.94
TNS1199358	fujisanense	32.0488889	131.1	407	9.881	3.97	1	3.382	3.528	1.364	0.519	1	0.33	0.32	0.8	0.97
TNS735829	fujisanense	31.9808	130.3676	1057.3	9.883	2.409	1	3.744	1.282	0.848	0.391	0.79	0.25	0.27	0.61	1.08
TNS1393	fujisanense	33.3776	133.1757	840	9.892	3.378	1	4.053	1.767	0.726	0.373	0.98	0.4	0.28	0.67	0.70
TNS1031610	fujisanense	33.7075	133.4893	610	9.905	3.217	1	4.94	2.997	1.166	0.0845	1.3	0.64	0.45	0.77	0.70
TNS538212	fujisanense	33.97464	136.05931	257.3	10.122	3.779	1	5.516	3.175	0.827	0.58	1.66	0.81	0.93	1.12	1.15
TNS965056	fujisanense	34.05186	136.11186	687.3	10.272	5.338	1	4.824	2.937	1.451	0.488	1.36	0.76	0.62	0.92	0.82
TNS1031651	fujisanense	30.3519	130.579	648.8	10.318	3.413	1	2.906	1.873	1.198	0.429	1.22	0.8	0.8	1.14	1.00
TNS510192	fujisanense	34.9505	137.6456	318.1	10.37	5.238	1	3.213	3.606	1.336	0.553	1.19	0.36	0.33	0.86	0.92
TNS521710	fujisanense	32.29583	131.429	1180.6	10.411	4.093	1	3.808	2.627	1.163	0.489	1	0.49	0.51	0.93	1.04
TNS522563	fujisanense	31.59047	130.84425	372.9	10.438	3.851	1	5.96	2.611	1.556	0.454	1.1	0.73	0.54	1.06	0.74
TNS803235	fujisanense	30.3776	130.4475	212.8	10.544	3.766	1	2.916	2.193	1.266	0.596	0.93	0.38	0.32	0.67	0.84
TNS741541	fujisanense	34.98644	137.6425	266.3	10.677	3.165	1	4.555	2.831	1.274	0.406	1.17	0.42	0.39	0.74	0.93
TNS803273	fujisanense	30.3058	130.5704	1051.3	10.744	4.124	1	4.501	3.027	0.986	0.464	1.36	0.51	0.53	1.46	1.04
TNS803229	fujisanense	30.3058	130.5704	1051.3	10.755	3.578	1	7.344	2.184	1.026	0.523	1.15	0.38	0.27	0.7	0.71
TNS1110227	fujisanense	31.1249	130.8685	913.9	10.767	2.593	1	2.638	1.753	0.911	0.587	1.35	0.51	0.44	0.95	0.86
TNS803239	fujisanense	33.9097	136.0654	144.3	10.79	3.326	1	3.784	2.277	1.028	0.454	1.08	0.6	0.38	0.81	0.63
TNS1031647	fujisanense	31.1645	130.9701	17	10.803	5.681	1	3.66	2.935	1.085	0.555	1.14	0.73	0.55	1.16	0.75
TNS567780	fujisanense	35.02731	137.72316	403.4	10.875	2.976	1	3.883	2.573	0.841	0.432	0.69	0.48	0.4	0.54	0.83



TNS553432	fujisanense	33.3776	133.1757	840	10.883	2.781	1	3.709	1.87	0.885	0.566	1.35	0.53	0.55	1.28	1.04
TNS1031606	fujisanense	33.4735	134.0746	159.5	11.476	1.766	1	3.287	1.462	0.513	0.357	0.88	0.33	0.28	0.61	0.85
TNS1031722	fujisanense	33.2931	133.1978	589.9	11.516	2.346	1	4.116	2.027	0.721	0.492	0.95	0.6	0.46	0.73	0.77
TNS803249	fujisanense	30.3776	130.4475	212.8	11.524	2.968	1	6.36	2.182	1.141	0.613	0.98	0.53	0.51	0.9	0.96
TNS1031633	fujisanense	33.3776	133.1757	840	11.581	2.193	1	4.619	1.191	0.934	0.549	1.36	0.5	0.44	0.89	0.88
TNS459090	fujisanense	32.29583	131.429	1180.6	11.653	2.123	1	1.901	1.364	0.858	0.62	1.24	0.7	0.57	0.96	0.81
TNS965072	fujisanense	33.96769	136.10419	389.3	11.807	4.48	1	3.994	3.809	1.643	0.561	0.98	0.5	0.49	0.74	0.98
TNS522612	fujisanense	30.26861	130.42619	34	12.146	4.999	1	3.352	3.18	1.32	0.447	0.9	0.37	0.36	0.77	0.97
TNS293573	fujisanense	32.3839	130.6821	229.9	13.138	2.651	1	4.008	1.992	0.868	0.466	0.8	0.58	0.39	0.74	0.67
TNS741563	fujisanense	35.6817	137.2184	898.3	13.687	2.723	1	6.64	2.177	0.998	0.462	1.19	0.68	0.73	1.14	1.07
TNS1031712	fujisanense	31.9185	130.8629	1140.2	13.767	2.609	1	4.654	1.958	0.822	0.546	0.76	0.33	0.38	0.62	1.15
TNS553431	fujisanense	33.6622	134.1352	630.6	15.818	3.54	1	5.567	2.936	1.15	0.833	1.25	0.43	0.53	0.86	1.23
TNS1031597	fujisanense	33.8648	134.0352	1597.8	4.761	2.138	1	1.265	1.854	0.832	0.422	1.08	0.3	0.43	0.85	1.43
TNS965080	fujisanense	33.67742	135.88539	461.1	5.03	3.776	1	2.32	2.047	1.364	0.48	0.98	0.42	0.38	0.68	0.90
TNS803213	fujisanense	33.758	135.6891	562.2	5.111	3.141	1	1.725	1.941	1.129	0.366	1.2	0.5	0.57	0.98	1.14
TNS803216	fujisanense	33.6651	135.4147	20	5.364	2.522	1	1.284	1.509	1.14	0.471	1.36	0.68	0.94	1.13	1.38
TNS803182	fujisanense	33.8788	139.6049	754.8	6.579	4.425	1	3.493	3.227	1.078	0.549	0.76	0.23	0.17	0.56	0.74
TNS1031729	fujisanense	33.8815	139.6012	711	6.672	4.609	1	3.363	2.384	1.087	0.425	0.75	0.66	0.56	1.02	0.85
TNS1031702	fujisanense	33.644	135.6925	296.8	6.702	2.27	1	2.166	1.606	0.686	0.507	1.26	0.6	0.52	0.92	0.87
TNS803185	fujisanense	33.8788	139.6049	754.8	6.719	3.783	1	2.936	1.883	0.914	0.496	1.17	0.32	0.32	0.6	1.00
TNS1031710	fujisanense	33.644	135.6925	296.8	6.89	2.49	1	3.555	1.686	0.891	0.376	0.97	0.35	0.45	0.8	1.29
TNS741530	parallelocarpum	33.7117	134.3901	726.7	6.991	2.144	1	2.432	1.192	0.891	0.405	0.75	0.53	0.39	0.64	0.74
TNS741529	fujisanense	33.88183	134.41606	263	7.135	4.276	1	2.204	3.111	1.367	0.478	0.89	0.36	0.26	0.6	0.72
TNS803211	fujisanense	33.758	135.6891	562.2	7.428	2.834	1	2.958	2.145	1.004	0.437	0.99	0.39	0.42	0.69	1.08
TNS663433	fujisanense	33.669	135.8912	305.6	7.513	4.029	1	2.863	2.5	1.173	0.453	0.86	0.38	0.35	0.6	0.92
TNS1031697	fujisanense	33.644	135.6925	296.8	7.712	3.685	1	3.642	2.156	1.106	0.387	0.67	0.49	0.51	0.75	1.04
TNS598836	fujisanense	33.7	135.95	341	7.91	2.562	1	3.86	1.749	0.886	0.472	1.17	0.49	0.55	1.03	1.12
TNS245557	fujisanense	33.7149	135.8638	961.6	8.161	3.157	1	4.379	1.807	1.215	0.489	1.08	0.32	0.36	0.69	1.13
TNS803210	fujisanense	33.758	135.6891	562.2	8.211	2.601	1	3.546	1.783	0.982	0.395	1.1	0.6	0.57	0.97	0.95
TNS1031698	fujisanense	33.644	135.6925	296.8	8.306	3.449	1	5.975	2.531	0.986	0.452	1.37	0.75	0.64	1.09	0.85
TNS1031707	fujisanense	33.669	135.8912	305.6	8.348	2.763	1	3.082	1.844	0.895	0.367	1.14	0.4	0.45	0.92	1.13
TNS1031673	fujisanense	33.669	135.8912	305.6	8.368	3.481	1	3.471	1.604	0.777	0.481	1.19	0.44	0.45	0.75	1.02
TNS803184	fujisanense	33.8788	139.6049	754.8	8.384	3.021	1	2.212	2.034	1.114	0.44	1.48	0.39	0.4	1.18	1.03
TNS803214	fujisanense	33.7411	135.5781	350.3	8.499	2.473	1	3.149	1.372	0.93	0.631	1.14	0.57	0.59	0.82	1.04
TNS803220	fujisanense	35.4382	138.0543	993	8.508	3.928	1	4.285	2.619	1.108	0.448	0.42	0.3	0.31	0.44	1.03
TNS583726	fujisanense	34.05233	135.79855	453.7	8.574	1.888	1	1.968	1.356	0.882	0.877	1.29	0.5	0.46	0.82	0.92
TNS1031699	fujisanense	33.644	135.6925	296.8	8.781	5.122	1	4.14	3.047	1.16	0.575	1.05	0.52	0.44	0.78	0.85
TNS583721	fujisanense	34.0404	135.9745	214.3	8.814	2.98	1	4.119	2.201	1.421	0.733	1.46	0.49	0.45	1.23	0.92
TNS583724	fujisanense	33.87639	135.86359	34.9	8.928	4.189	1	5.933	2.661	1.761	0.531	0.92	0.45	0.47	0.77	1.04
TNS586610	fujisanense	33.78611	135.44231	248.4	9.041	3.443	1	4.016	2.172	0.891	0.352	0.95	0.44	0.53	1.17	1.20
TNS965060	fujisanense	34.31364	136.03304	421.7	9.174	2.951	1	5.09	1.82	1.209	0.476	0.094	0.54	0.62	0.98	1.15



TNS741454	fujisanense	33.8552	134.0958	1936.7	9.321	3.79	1	2.76	2.354	0.97	0.366	1.09	0.66	0.36	0.95	0.55
TNS803188	fujisanense	33.8788	139.6049	754.8	9.459	1.694	1	4.08	1.349	0.905	0.559	0.97	0.45	0.4	0.86	0.89
TNS132741	fujisanense	33.669	135.8912	305.6	9.51	3.022	1	4.342	2.287	0.952	0.344	1.2	0.47	0.55	0.88	1.17
TNS112585	fujisanense	33.893	135.5336	414.6	9.627	2.902	1	3.534	2.635	1.113	0.475	0.7	0.36	0.32	0.59	0.89
TNS1031686	fujisanense	33.669	135.8912	305.6	9.642	3.53	1	3.561	1.99	0.979	0.45	1.16	0.58	0.59	0.85	1.02
TNS285481	fujisanense	33.64556	134.22989	421.2	9.957	3.315	1	3.576	2.652	1.055	0.49	1.3	0.48	0.46	0.73	0.96
TNS803218	fujisanense	33.6651	135.4147	20	10.124	2.751	1	3.424	1.873	1.056	0.566	1.32	0.62	0.44	1.1	0.71
TNS1265711	fujisanense	35.2946	137.9258	532.1	10.227	2.695	1	2.496	1.53	1.053	0.522	0.83	0.59	0.48	0.96	0.81
TNS305518	fujisanense	33.7676	133.2165	1099.4	10.297	2.785	1	4.119	2.147	1.592	0.441	0.99	0.35	0.26	0.69	0.74
TNS1031717	fujisanense	33.644	135.6925	296.8	10.374	2.232	1	6.454	2.363	0.736	0.293	0.83	0.45	0.43	0.76	0.96
TNS1031687	fujisanense	33.669	135.8912	305.6	10.411	2.959	1	3.37	1.621	0.801	0.398	1.04	0.34	0.41	0.67	1.21
TNS583731	fujisanense	34.23311	136.07573	588.4	10.425	4.941	1	5.371	3.829	1.594	0.58	1.12	0.32	0.39	1.07	1.22
TNS803252	fujisanense	33.64556	134.22989	421.2	10.601	3.844	1	4.975	2.063	0.868	0.371	1.22	0.45	0.45	0.99	1.00
TNS583725	fujisanense	33.93386	135.702	509.8	11.013	2.925	1	3.557	2.324	0.709	0.463	1.24	0.59	0.64	1.03	1.08
TNS926561	fujisanense	33.7001	135.4407	18.3	11.204	1.937	1	2.639	1.42	0.717	0.626	0.87	0.66	0.55	0.77	0.83
TNS803221	fujisanense	35.4382	138.0543	993	11.205	2.554	1	4.438	1.762	1.085	0.521	1.1	0.47	0.47	0.97	1.00
TNS741532	fujisanense	33.68675	134.37206	211.8	11.23	2.785	1	5.041	1.353	0.994	0.378	0.92	0.4	0.29	0.59	0.73
TNS583727	fujisanense	34.09322	135.92778	804.4	11.257	5.562	1	5.426	3.378	1.336	0.39	1.39	0.46	0.42	0.86	0.91
TNS766417	fujisanense	33.72917	135.91255	124.5	11.265	4.401	1	4.285	2.866	1.198	0.459	0.92	0.54	0.37	0.72	0.69
TNS803212	fujisanense	33.758	135.6891	562.2	11.347	3.948	1	7.382	2.161	0.882	0.439	0.89	0.7	0.71	1.19	1.01
TNS741500	fujisanense	33.60275	134.19711	530.7	11.603	2.783	1	3.462	1.424	0.575	0.325	0.99	0.42	0.58	0.72	1.38
TNS9508436	fujisanense	34.2438	136.0648	642.1	11.972	3.908	1	5.49	2.245	1.175	0.465	1.09	0.61	0.4	1.1	0.66
TNS1031624	fujisanense	33.7	134.254	313.6	12.184	5.364	1	5.779	3.403	1.113	0.415	0.94	0.43	0.39	0.73	0.91
TNS1031645	fujisanense	33.7	134.254	313.6	12.206	2.17	1	5.487	2.124	0.947	0.577	0.82	0.37	0.28	0.53	0.76
TNS1225225	fujisanense	33.780283	134.355618	217.3	12.208	5.097	1	3.905	3.052	1.473	0.543	1.22	0.31	0.28	0.71	0.90
TNS1031605	fujisanense	33.7007	134.3118	328.5	12.56	3.785	1	5.367	4.57	1.437	0.489	1.1	0.39	0.33	0.91	0.85
TNS1031640	fujisanense	33.8154	134.2701	362.5	12.77	3.381	1	6.001	3.093	1.077	0.545	1.12	0.37	0.46	0.7	1.24
TNS57986	fujisanense	35.1329	135.1493	542.2	13.215	3.021	1	6.568	1.742	0.785	0.447	0.94	0.43	0.43	0.83	1.00
TNS585859	fujisanense	33.80772	135.85713	206.5	14.349	1.898	1	5.518	1.405	0.614	0.44	1.2	0.76	0.78	1.33	1.03
TNS1147721	punctisorum	35.8721	139.0872	1448.8	4.221	2.192	0	2.103	1.424	0.884	0.395	1.2	0.59	0.47	0.97	0.80
TNS132921	punctisorum	36.6861	138.7768	679.4	4.934	2.101	0	3.045	1.399	0.958	0.394	0.55	0.59	0.5	0.97	0.85
TNS741553	punctisorum	35.8558	138.72258	1732.5	5.272	2.03	0	3.963	1.527	0.794	0.447	0.81	0.42	0.28	1.01	0.67
TNS492715	punctisorum	36.028	138.3594	2408.5	4.802	1.742	0	1.097	1.079	0.706	0.391	1.27	0.56	0.56	0.9	1.00
TNS1147732	punctisorum	35.9428	138.735	1981.5	4.733	1.632	0	1.642	0.953	0.654	0.394	1.32	0.36	0.27	1.09	0.75
TNS1031682	punctisorum	35.92706	138.96594	523	4.813	2.962	0	5.598	1.846	1.141	0.756	0.65	0.44	0.37	0.79	0.84
TNS1296957	punctisorum	36.0235	138.8412	1692.5	5.256	1.646	0	0.289	1.11	0.592	0.257	0.79	0.29	0.31	0.69	1.07
TNS1031654	punctisorum	35.9065	138.9893	764.7	5.456	2.918	0	3.402	1.624	0.956	0.384	0.55	0.24	0.27	0.68	1.13
TNS1147781	punctisorum	35.8984	139.0842	542.3	6.101	4.126	0	2.92	2.789	1.173	0.356	1.23	0.78	0.5	1.29	0.64
TNS9500055	punctisorum	36.4092	137.6815	1374.7	3.912	1.634	0	2.448	0.984	0.782	0.251	0.97	0.5	0.42	1.05	0.84
TNS1031713	punctisorum	35.7054	138.3058	2659.5	4.222	2.389	0	1.87	1.339	0.761	0.266	1.22	0.56	0.44	0.98	0.79
TNS457155	punctisorum	37.3138	140.9504	134.6	4.841	2.608	0	3.466	1.561	0.898	0.315	0.65	0.18	0.17	0.68	0.94



TNS1031671	punctisorum	35.5563	138.1167	2215.4	4.965	2.045	0	3.496	1.368	0.949	0.351	0.94	0.34	0.29	0.8	0.85
TNS454202	punctisorum	36.7557	139.6027	624.2	5.197	2.854	0	2.611	1.481	1.345	0.363	1.02	0.37	0.28	0.89	0.76
TNS737837	punctisorum	35.817	139.1424	284.8	5.841	2.944	0	3.164	1.984	1.225	0.435	0.9	0.36	0.29	0.95	0.81
TNS525381	parallelocarpum	33.48339	132.95074	875.1	4.104	1.383	1	0.699	0.837	0.665	0.242	1.54	0.76	0.63	0.93	0.83
TNS1147742	parallelocarpum	35.9525	138.7702	1299.8	4.264	2.46	1	2.325	1.716	1.012	0.384	0.67	0.37	0.42	0.48	1.14
TNS741545	parallelocarpum	35.155	137.4504	730.6	4.994	2.332	1	3.712	1.369	0.744	0.331	1.12	0.42	0.42	0.93	1.00
TNS741505	parallelocarpum	34.4665	132.2215	750.6	5.517	2.615	1	2.089	1.517	0.743	0.254	0.97	0.39	0.37	0.89	0.95
TNS1200490	parallelocarpum	31.7794444	131.215278	681	5.958	3.714	1	3.304	0.197	0.933	0.369	1.1	1.04	1	1.15	0.96
TNS454201	parallelocarpum	36.9551	139.829	596.2	3.525	1.97	1	1.508	1.151	0.622	0.252	0.72	0.32	0.36	0.79	1.13
TNS1031595	parallelocarpum	33.7592	133.7516	1395.9	2.715	2	1	3.253	1.268	0.671	0.301	1.22	0.47	0.42	0.86	0.89
TNS1166370	parallelocarpum	28.3168	129.3512	203.1	2.76	1.82	1	1.332	0.81	0.539	0.204	1.23	0.45	0.41	0.93	0.91
TNS454332	parallelocarpum	36.78128	140.67505	210.3	3.675	1.545	1	3.323	1.249	0.786	0.323	1.08	0.54	0.45	0.87	0.83
TNS194847	parallelocarpum	35.3092	135.716	358.1	3.788	1.849	1	3.679	1.016	0.597	0.186	1.04	0.38	0.27	0.98	0.71
TNS368584	parallelocarpum	26.7161	128.2181	495.4	3.956	2.149	1	1.277	0.943	0.641	0.346	1.26	0.42	0.46	0.84	1.10
TNS1147783	parallelocarpum	36.0235	138.8412	1692.5	4.046	2.511	1	4.517	1.344	0.572	0.282	0.85	0.3	0.31	0.62	1.03
TNS204690	parallelocarpum	34.2639	129.2496	486.1	4.156	2.536	1	2.59	1.237	0.747	0.181	0.54	0.43	0.45	0.58	1.05
TNS927299	parallelocarpum	31.2642	130.9901	947.1	4.199	3.449	1	3.452	1.882	1.053	0.311	1.22	0.47	0.39	0.65	0.83
TNS460836	parallelocarpum	33.37064	134.1506	232.9	4.456	1.556	1	1.963	1.26	0.594	0.424	1.18	0.84	0.72	0.89	0.86
TNS449853	parallelocarpum	34.9436	137.7269	371.6	4.512	1.85	1	0.872	1.226	0.771	0.331	1.19	0.57	0.54	0.96	0.95
TNS741544	parallelocarpum	35.2146	137.6775	880.2	4.625	1.461	1	2.127	0.786	0.44	0.344	1.09	0.58	0.51	0.99	0.88
TNS1200484	parallelocarpum	32.6608333	131.738056	71	4.694	2.548	1	5.213	1.43	0.553	0.448	1.93	0.57	0.66	1.06	1.16
TNS567756	parallelocarpum	34.9175	137.7643	269.4	4.71	1.846	1	2.374	1.967	0.786	0.255	1.17	0.59	0.63	0.85	1.07
TNS247719	parallelocarpum	35.4839	138.6544	979	4.786	2.613	1	3.208	1.321	0.703	0.318	0.96	0.38	0.29	0.96	0.76
TNS1031659	parallelocarpum	36.02028	138.84436	1623.9	4.836	2.46	1	3.04	1.008	0.654	0.293	1.36	0.54	0.39	1.2	0.72
TNS538156	parallelocarpum	34.1747	136.2518	96.5	4.927	2.286	1	4.812	0.1436	0.789	0.345	0.76	0.51	0.42	0.61	0.82
TNS594618	parallelocarpum	35.0836	135.5566	134.8	5.016	2.241	1	4.867	1.42	0.63	0.125	1.08	0.64	0.48	0.98	0.75
TNS1183260	parallelocarpum	34.5833472	132.052064	352.1	5.066	2.495	1	1.626	0.91	0.623	0.324	0.76	0.35	0.35	0.77	1.00
TNS286439	parallelocarpum	35.0715	137.7954	186.2	5.094	2.414	1	2.739	1.498	0.867	0.347	1.04	0.53	0.58	0.94	1.09
TNS501498	parallelocarpum	34.51208	134.32019	593.7	5.105	2.294	1	5.279	1.444	1.009	0.381	0.92	0.37	0.41	0.76	1.11
TNS449871	parallelocarpum	35.1244	137.9234	514.2	5.14	3.161	1	3.137	1.211	0.771	0.327	1.06	0.47	0.31	0.77	0.66
TNS926552	parallelocarpum	35.206	138.2081	577.6	5.213	2.515	1	2.487	1.796	0.854	0.197	1.14	0.42	0.39	0.8	0.93
TNS741464	parallelocarpum	35.12542	137.30898	295.7	5.227	2.85	1	3.653	1.34	0.92	0.479	1.18	0.53	0.49	1.02	0.92
TNS1031668	parallelocarpum	35.878	138.9573	1753	5.242	2.642	1	3.374	1.447	0.964	0.357	0.94	0.42	0.38	1.08	0.90
TNS741518	parallelocarpum	34.6395	132.2915	424.1	5.281	1.685	1	2.616	0.879	0.585	0.257	1.17	0.41	0.44	0.87	1.07
TNS376496	parallelocarpum	30.3519	130.579	648.8	5.395	3.9	1	4.133	2.1	1.02	0.376	1.46	0.38	0.34	1.05	0.89
TNS553160	parallelocarpum	33.6845	133.676	520.1	5.428	2.394	1	2.967	1.382	0.959	0.24	0.85	0.27	0.28	0.7	1.04
TNS930825	parallelocarpum	34.9893	137.6149	140.6	5.441	2.675	1	3.465	1.519	0.857	0.459	1.16	0.51	0.35	0.96	0.69
TNS930826	parallelocarpum	33.8981	133.4631	619.3	5.483	3.606	1	5.789	2.704	1.132	0.303	0.8	0.33	0.32	0.74	0.97
TNS601234	parallelocarpum	35.471	138.7927	879	5.485	1.854	1	3.385	1.153	0.757	0.29	1	0.67	0.52	0.89	0.78
TNS449877	parallelocarpum	35.1357	137.863	241.9	5.568	2.452	1	1.815	1.244	0.759	0.303	1.31	0.8	0.59	0.81	0.74
TNS1028196	parallelocarpum	24.4257222	124.18125	493.2	5.571	2.387	1	2.794	1.424	0.723	0.359	1.3	0.45	0.38	0.55	0.84



TNS522608	parallelocarpum	30.42861	130.46486	152.9	5.597	2.967	1	4.934	1.255	0.854	0.5	0.88	0.3	0.32	0.7	1.07
TNS1031662	parallelocarpum	32.5624	131.1114	1636.2	5.621	2.443	1	2.251	1.64	0.916	0.388	1.47	0.59	0.47	1.1	0.80
TNS1031663	parallelocarpum	35.8935	138.5921	2185.1	5.687	2.185	1	3.399	1.128	0.643	0.353	1.25	0.5	0.37	0.82	0.74
TNS1031602	parallelocarpum	33.875	133.375	1674	5.869	3.772	1	4.525	1.837	0.79	0.342	1.12	0.49	0.47	1.01	0.96
TNS926555	parallelocarpum	35.4687	138.6189	954.5	5.952	3.226	1	3.106	1.577	0.893	0.422	0.95	0.31	0.27	0.86	0.87
TNS926553	parallelocarpum	35.33797	138.53778	1139.5	5.981	3.567	1	4	1.561	0.732	0.395	1.49	0.56	0.54	0.79	0.96
TNS522607	parallelocarpum	30.34828	130.58128	781.1	5.998	2.858	1	4.242	1.835	1.197	0.51	0.86	0.37	0.32	0.75	0.86
TNS1031649	parallelocarpum	33.8745	139.6019	841.5	6.063	3.27	1	3.081	1.743	0.801	0.412	0.92	0.38	0.33	0.86	0.87
TNS153180	fujisanense	30.27255	130.425583	26.3	6.192	4.28	1	4.137	2.198	1.242	0.479	1.18	0.46	0.29	0.9	0.63
TNS553425	parallelocarpum	33.05867	132.71631	224.7	6.219	2.342	1	2.676	1.689	0.836	0.304	1.01	0.46	0.46	0.78	1.00
TNS305583	parallelocarpum	30.3519	130.579	648.8	6.226	2.447	1	3.101	1.475	0.885	0.387	0.9	0.36	0.39	0.62	1.08
TNS310278	parallelocarpum	28.29225	129.3232	463.8	6.294	3.205	1	3.075	1.697	0.88	0.425	1.03	0.54	0.48	0.73	0.89
TNS276569	parallelocarpum	31.1036	130.8322	306.1	6.383	2.496	1	3.794	1.459	0.832	0.507	0.83	0.68	0.55	0.83	0.81
TNS310346	parallelocarpum	27.7787	128.9832	641.1	6.415	3.608	1	3.858	1.993	1.099	0.403	0.79	0.7	0.62	0.7	0.89
TNS741502	parallelocarpum	34.39464	132.16431	412.2	6.529	2.593	1	3.247	1.557	1.169	0.44	1.23	0.56	0.41	0.98	0.73
TNS803256	parallelocarpum	35.64581	136.70862	316.5	6.656	2.286	1	2.01	1.334	0.624	0.31	0.97	0.82	0.6	0.92	0.73
TNS567755	parallelocarpum	34.95256	137.79836	341	6.672	1.756	1	2.845	1.293	0.601	0.315	0.65	0.42	0.41	0.63	0.98
TNS1031607	parallelocarpum	33.4735	134.0746	159.5	6.716	2.572	1	5.137	1.239	0.722	0.265	0.9	0.44	0.37	0.7	0.84
TNS454336	parallelocarpum	36.6572	140.4509	389.5	6.771	2.592	1	4.828	2.255	0.804	0.286	1.15	0.42	0.29	0.74	0.69
TNS1031630	parallelocarpum	33.816	133.5907	1465.1	6.873	2.609	1	3.967	1.505	0.885	0.328	0.94	0.48	0.42	1.01	0.88
TNS522603	parallelocarpum	31.46417	130.38522	507.1	6.99	2.725	1	3.647	1.558	0.774	0.342	0.77	0.41	0.39	0.51	0.95
TNS1031667	parallelocarpum	33.5722	134.0748	341.6	7.003	2.424	1	2.762	1.646	0.861	0.334	0.89	0.46	0.38	0.66	0.83
TNS1028214	parallelocarpum	24.4257222	124.18125	493.2	7.051	2.122	1	2.308	0.965	0.641	0.392	1.22	0.37	0.31	0.87	0.84
TNS741534	parallelocarpum	35.0081	137.6688	228.7	7.077	2.786	1	4.746	2.014	0.999	0.392	1.29	0.79	0.54	1.17	0.68
TNS1221119	parallelocarpum	35.4882778	137.1996	237.1	7.337	1.991	1	1.466	0.834	0.601	0.317	0.85	0.64	0.73	1.32	1.14
TNS553166	parallelocarpum	33.78122	133.3965	585	7.372	2.878	1	1.725	0.179	1.073	0.387	1	0.7	0.59	0.68	0.84
TNS456721	fujisanense	33.1118	131.298	1393.8	7.384	2.119	1	4.443	2.141	0.592	0.365	0.84	0.31	0.29	0.85	0.94
TNS449854	parallelocarpum	34.9237	137.8112	71.5	7.416	2.553	1	4.003	0.2019	1.105	0.462	1.08	0.67	0.42	0.89	0.63
TNS323374	parallelocarpum	32.367	130.7289	527.2	7.577	3.266	1	6.322	1.9	0.931	0.324	1.05	0.55	0.55	1.1	1.00
TNS803232	parallelocarpum	35.48736	138.61133	903.8	7.638	3.244	1	10.126	1.749	0.666	0.326	1.01	0.49	0.39	0.88	0.80
TNS1031626	parallelocarpum	33.816	133.5907	1465.1	7.717	1.372	1	1.561	1.102	0.728	0.308	1.4	0.67	0.55	1.06	0.82
TNS1199356	parallelocarpum	32.475	130.7899	747.4	7.814	2.357	1	3.351	1.425	0.824	0.369	1.43	0.88	0.81	1.18	0.92
TNS1031676	parallelocarpum	35.9558	139.0435	302.7	7.894	2.603	1	5.609	1.867	0.858	0.387	1.07	0.55	0.37	0.98	0.67
TNS779964	parallelocarpum	31.1801	130.5284	907.5	7.924	1.316	1	5.113	0.672	0.294	0.29	1.39	0.63	0.58	0.97	0.92
TNS282159	fujisanense	33.2018	132.6501	498.9	8.52	2.406	1	4.295	1.198	0.807	0.424	1.1	0.57	0.58	1.01	1.02
TNS455315	parallelocarpum	32.14194	130.78162	385	8.927	2.379	1	10.187	1.463	0.813	0.399	0.76	0.42	0.31	0.75	0.74
TNS1277966	fujisanense	35.6029	136.528	264.6	8.996	2.396	1	3.101	1.422	0.63	0.345	1.07	0.61	0.48	1.16	0.79
TNS459028	parallelocarpum	35.88247	138.2282	951.9	3.255	2.147	1	1.151	1.257	0.996	0.504	0.98	0.67	0.62	1.01	0.93
TNS803217	parallelocarpum	33.6651	135.4147	20	4.241	1.893	1	1.384	1.166	0.862	0.461	0.83	0.65	0.73	0.65	1.12
TNS741527	parallelocarpum	33.84983	134.28786	390	4.351	2.076	1	2.129	1.194	0.895	0.301	1.13	0.8	0.66	1.15	0.83
TNS741525	parallelocarpum	33.87072	134.52251	420.7	4.448	2.659	1	1.578	1.487	0.799	0.399	1	0.83	0.89	1.3	1.07



TNS421573	parallellocarpum	35.5555	138.1419	2592.7	4.454	1.389	1	4.379	1.2	0.736	0.424	0.55	0.42	0.41	0.79	0.98
TNS1031674	parallellocarpum	34.8219	135.3885	48.5	4.977	2.17	1	4.699	1.482	0.891	0.511	0.52	0.34	0.29	0.65	0.85
TNS459119	parallellocarpum	33.89175	139.59592	296	5.067	2.193	1	2.216	1.205	0.745	0.403	1.04	0.52	0.52	0.91	1.00
TNS459121	parallellocarpum	35.8005	139.13681	637.1	5.584	3.144	1	4.937	2.025	1.077	0.489	0.74	0.5	0.45	0.73	0.90
TNS1031628	parallellocarpum	35.7828	139.1495	931.9	5.619	4.368	1	3.059	1.783	0.75	0.355	0.8	0.43	0.47	1.03	1.09
TNS1031635	parallellocarpum	33.8552	134.0958	1936.7	5.959	1.822	1	1.477	0.99	0.699	0.31	1.18	0.67	0.63	1.26	0.94
TNS741459	parallellocarpum	35.3848	135.609	301.4	6.216	2.274	1	4.833	1.379	0.586	0.338	0.98	0.46	0.47	0.9	1.02
TNS803203	parallellocarpum	33.8788	139.6049	754.8	6.338	2.487	1	5.797	1.423	1.075	0.371	1.4	0.37	0.31	0.87	0.84
TNS594919	parallellocarpum	33.4441	130.4304	131.9	6.457	3.562	1	5.848	1.665	0.955	0.379	0.99	0.74	0.57	0.83	0.77
TNS1031653	parallellocarpum	36.5981	139.5805	864	6.632	3.05	1	4.629	2.095	1.185	0.431	1.1	0.41	0.22	1.2	0.54
TNS741501	parallellocarpum	33.6454	134.2905	52.1	6.995	2.068	1	3.204	1.231	0.542	0.288	0.98	0.43	0.42	0.73	0.98
TNS741455	parallellocarpum	33.9382	134.2423	519.4	7.067	3.021	1	2.684	1.819	1.065	0.296	0.88	0.34	0.32	1.02	0.94
TNS459027	parallellocarpum	35.9481	137.8826	1194.1	7.192	2.497	1	5.199	1.396	0.805	0.378	1.11	0.34	0.41	1.05	1.21
TNS1031694	parallellocarpum	33.6501	134.229	152.3	7.201	2.355	1	3.222	1.387	0.731	0.271	0.96	0.28	0.25	0.59	0.89
TNS1210509	fujisanense	33.6761	135.8937	414.3	9.083	2.789	1	5.794	1.722	1.06	0.431	0.91	0.41	0.32	0.98	0.78
TNS421344	parallellocarpum	35.4384	138.0305	1836.5	4.965	1.807	1	1.946	1.232	0.581	0.379	1.03	0.5	0.17	0.75	0.34
TNS777237	punctisorum	32.5795	130.9507	1461.9	3.143	1.684	0	0.869	0.899	0.597	0.31	0.48	0.62	0.22	0.58	0.35
TNS803215	parallellocarpum	35.8432	138.9752	1243.2	4.666	2.786	1	1.628	1.482	0.931	0.45	1	0.53	0.19	0.85	0.36
TNS926551	punctisorum	35.3412	138.5347	1333.2	4.741	2.604	0	3.178	1.796	0.813	0.299	1.23	0.76	0.28	0.71	0.37
TNS538449	punctisorum	40.1455	141.6932	276	5.8819	1.579	0	0.2871	1	0.869	0.67	0.29	0.76	0.29	0.69	0.38
TNS1031755	punctisorum	35.8922	138.7905	2047.6	3.029	1.41	0	2.444	0.639	0.512	0.282	0.54	0.53	0.21	0.44	0.40
TNS1167303	punctisorum	36.737	139.1745	1256.7	3.41	1.902	0	0.993	1.091	0.839	0.378	0.65	0.6	0.25	0.68	0.42
TNS1031681	punctisorum	35.8257	139.0718	613	3.878	1.766	0	1.821	1.045	0.671	0.332	1.15	0.46	0.2	1.01	0.43
TNS1202782	punctisorum	30.3	130.5	1459	2.36	2.125	0	1.098	0.957	0.799	0.14	0.83	0.41	0.18	0.81	0.44
TNS1031703	punctisorum	35.9618	138.6694	1315.1	3.088	1.462	0	1.06	0.949	0.671	0.325	0.79	0.5	0.22	0.66	0.44
TNS1031556	punctisorum	35.9795	138.7121	1724.2	3.681	1.564	0	2.919	0.773	0.517	0.26	0.98	0.59	0.27	0.87	0.46
TNS1147740	punctisorum	35.9525	138.7702	1299.8	4.683	1.667	0	1.034	0.993	0.523	0.314	0.57	0.41	0.19	0.58	0.46
TNS1031611	punctisorum	33.7592	133.7516	1395.9	5.321	3.351	0	3.949	2.633	0.732	0.468	1.16	0.56	0.26	0.59	0.46
TNS458048	punctisorum	35.9109	138.9794	606.8	4.463	2.026	0	1.356	1.098	0.551	0.273	1.32	0.63	0.3	0.93	0.48
TNS741493	punctisorum	35.6473	137.5161	779.9	6.912	2.968	0	5.133	1.678	0.654	0.292	0.98	0.5	0.24	0.58	0.48
TNS1288220	punctisorum	36.4484	138.847	863.2	3.142	2.127	0	3.018	1.164	0.79	0.214	0.87	0.72	0.35	0.96	0.49
TNS1031625	parallellocarpum	33.7676	135.6897	516	5.262	1.501	1	5.971	1.097	0.565	0.319	0.3	0.37	0.18	0.41	0.49
TNS1031685	parallellocarpum	35.19456	137.98061	1542.6	6.815	3.273	1	5.608	1.796	0.821	0.335	0.6	0.41	0.2	0.53	0.49
TNS1198695	parallellocarpum	34.9622	137.7452	337	4.837	2.521	1	3.242	1.481	0.756	0.25	0.54	0.43	0.21	0.45	0.49
TNS223415	punctisorum	35.6675	137.522	1504.4	5.606	2.044	0	1.712	1.319	0.656	0.323	0.38	0.42	0.21	0.46	0.50
TNS1229865	punctisorum	33.5244	132.9578	832.8	3.483	1.859	0	2.188	1.011	0.756	0.21	0.51	0.5	0.25	0.52	0.50
TNS459033	parallellocarpum	35.66078	137.58522	917.8	8.258	2.497	1	5.258	1.818	1.172	0.489	0.74	0.46	0.23	0.56	0.50
TNS1229862	punctisorum	36.9887	139.8878	510.3	4.373	1.699	0	1.799	1.186	0.533	0.312	1.03	0.49	0.25	0.99	0.51
TNS741485	parallellocarpum	34.5164	131.8206	145.9	5.259	2.047	1	1.517	1.006	0.689	0.28	0.59	0.48	0.25	0.4	0.52
TNS1031638	parallellocarpum	33.5665	134.19975	615.6	6.844	2.622	1	1.546	1.369	0.702	0.29	1.26	0.77	0.41	0.97	0.53
TNS930822	fujisanense	34.2148	132.1174	284.6	9.26	1.841	1	3.8	1.098	0.724	0.574	0.98	0.52	0.28	0.69	0.54



TNS834522	punctisorum	36.4914	137.7436	955.9	4.928	3.787	0	2.425	2.133	1.345	0.382	1.07	0.35	0.19	0.95	0.54
TNS803265	punctisorum	35.804	139.1141	392.4	5.733	3.009	0	2.855	1.709	1.131	0.373	1.2	0.56	0.32	0.77	0.57
TNS459118	punctisorum	35.8257	139.0718	613	2.369	1.414	0	0.865	0.886	0.558	0.203	0.87	0.62	0.36	0.84	0.58
TNS1031680	punctisorum	35.92706	138.96594	523	4.154	2.069	0	2.183	1.215	0.697	0.333	0.59	0.41	0.24	0.51	0.59
TNS1224635	parallelocarpum	32.7472222	131.517778	1327	6.072	3.066	1	4.422	1.884	0.908	0.211	0.65	0.46	0.27	0.69	0.59
TNS545453	punctisorum	35.4145	138.1801	1356.4	2.521	1.691	0	0.484	0.921	0.562	0.235	0.87	0.71	0.42	0.97	0.59
TNS521704	punctisorum	32.51353	131.12994	1464.2	4.503	1.546	0	2.275	1.47	0.79	0.216	0.6	0.42	0.25	0.56	0.60
TNS1147560	punctisorum	36.0346	138.8331	1483.5	2.894	1.776	0	0.846	0.873	0.46	0.208	1.09	0.8	0.48	1.22	0.60
TNS965057	punctisorum	35.77964	139.15269	835.5	4.714	2.108	0	2.668	1.133	0.589	0.362	1.08	0.45	0.27	0.78	0.60
TNS741491	punctisorum	35.7295	136.8122	436.8	4.146	2.328	0	1.072	1.337	0.674	0.258	0.92	0.51	0.31	0.68	0.61
TNS583729	parallelocarpum	34.20308	135.89586	1151	2.833	1.479	1	1.004	0.906	0.613	0.255	0.91	0.41	0.25	0.71	0.61
TNS86718	punctisorum	35.7828	139.1495	931.9	4.274	2.961	0	3.718	1.911	1.155	0.403	0.89	0.31	0.19	0.94	0.61
TNS522614	parallelocarpum	31.8464	130.6348	666	5.831	2.595	1	2.768	1.607	0.844	0.393	0.8	0.57	0.35	0.77	0.61
TNS930823	punctisorum	37.052	139.888	763.4	4.246	1.609	0	2.328	0.917	0.718	0.342	0.97	0.86	0.54	1.18	0.63
TNS83876	punctisorum	35.7828	139.1495	931.9	5.825	3.03	0	3.983	1.939	1.022	0.413	0.65	0.19	0.12	0.48	0.63
TNS741514	parallelocarpum	32.78992	129.83261	341	4.621	1.626	1	2.165	1.035	0.557	0.321	1.08	0.87	0.55	1.02	0.63
TNS1147711	punctisorum	35.9099	139.0882	488.7	2.296	1.611	0	1.35	0.889	0.666	0.221	1.33	0.66	0.42	0.84	0.64
TNS83874	punctisorum	34.8646	139.0116	1261.9	5.21	2.51	0	1.432	1.412	0.801	0.319	0.36	0.44	0.28	0.34	0.64
TNS803240	parallelocarpum	35.1241	137.862	247.7	4.486	2.393	1	2.828	1.603	0.963	0.315	1.29	0.47	0.3	0.71	0.64
TNS1229879	punctisorum	36.9514417	139.867828	557.4	4.301	2.034	0	1.338	1.116	0.583	0.314	0.79	0.47	0.3	0.94	0.64
TNS943861	parallelocarpum	33.54511	130.98761	393.8	3.111	1.274	1	2.469	0.758	0.427	0.215	0.91	0.79	0.51	1.01	0.65
TNS1147715	parallelocarpum	35.9107	139.016	928.9	5.194	1.816	1	1.999	1.126	0.655	0.187	1.08	0.61	0.4	0.7	0.66
TNS1031705	parallelocarpum	28.296	129.3211	688.5	7.04	3.171	1	2.45	1.79	0.782	0.249	0.78	0.59	0.39	0.56	0.66
TNS1167304	punctisorum	36.5667	139.227	1157.4	1.715	1.536	0	0.497	0.752	0.446	0.131	0.66	0.63	0.43	0.75	0.68
TNS455312	parallelocarpum	32.37906	130.65384	76.1	5.461	2.963	1	2.783	1.563	1.189	0.54	0.87	0.51	0.35	0.7	0.69
TNS1147725	punctisorum	35.9179	138.9476	1307.7	4.081	1.572	0	1.415	0.778	0.564	0.312	0.67	0.58	0.4	0.83	0.69
TNS1147773	punctisorum	35.9362	138.7595	1406.2	3.346	1.689	0	3.034	0.976	0.655	0.24	0.81	0.52	0.36	0.65	0.69
TNS741559	parallelocarpum	35.5739	137.1183	240.1	5.703	3.123	1	1.666	1.911	0.878	0.334	0.68	0.43	0.3	0.6	0.70
TNS741495	parallelocarpum	34.5308	132.1404	645.1	4.218	1.867	1	1.072	0.79	0.689	0.253	0.98	0.61	0.43	0.62	0.70
TNS167066	punctisorum	35.2486	137.836	375.6	3.896	2.143	0	2.324	1.284	0.958	0.303	0.89	0.65	0.46	0.89	0.71
TNS1147753	parallelocarpum	35.9171	139.0156	729.1	3.85	1.818	0	2.287	1.244	0.792	0.369	0.77	0.39	0.28	0.62	0.72
TNS214014	parallelocarpum	34.0632	136.1703	80.2	4.64	2.417	1	2.761	1.194	0.688	0.316	1.13	0.57	0.41	0.76	0.72
TNS741543	punctisorum	35.1948	137.5211	597	4.336	2.857	0	1.792	1.903	0.958	0.239	1.06	0.57	0.42	0.92	0.74
TNS776967	parallelocarpum	35.2793	138.4041	308.6	4.537	2.045	1	2.636	1.095	0.74	0.478	1	0.6	0.45	0.79	0.75
TNS451855	parallelocarpum	34.7841	134.254	81.7	5.893	2.292	1	1.855	1.703	0.655	0.378	0.55	0.37	0.28	0.51	0.76
TNS1031692	parallelocarpum	33.6501	134.229	152.3	6.006	2.355	1	3.85	1.201	0.753	0.347	0.85	0.3	0.23	0.53	0.77
TNS1147738	punctisorum	35.9525	138.7702	1299.8	3.482	1.856	0	1.339	0.983	0.635	0.26	1.05	0.4	0.31	0.74	0.78
TNS741465	punctisorum	35.15081	137.65483	662.4	3.778	2.734	0	1.837	1.567	1.105	0.434	0.44	0.27	0.21	0.36	0.78
TNS1031706	punctisorum	35.9179	138.9476	1307.7	4.056	2.255	0	4.617	1.264	0.915	0.404	0.74	0.36	0.28	0.62	0.78
TNS741511	parallelocarpum	34.7057	133.3631	343.6	6.959	2.482	1	2.255	1.594	0.821	0.331	0.69	0.64	0.5	0.73	0.78
TNS803187	fujisanense	33.8788	139.6049	754.8	5.71	3.069	1	2.835	2.235	1.27	0.471	0.75	0.23	0.18	0.51	0.78



TNS1019207	fujisanense	35.1363	137.8771	914.6	7.152	3.614	1	1.521	2.061	0.817	0.346	0.72	0.42	0.33	0.54	0.79
TNS588006	punctisorum	36.5455	138.8134	501.1	2.279	1.338	0	0.858	0.696	0.478	0.217	1.14	0.4	0.32	0.76	0.80
TNS567768	parallelocarpum	35.12114	137.92642	602.8	3.714	1.194	1	0.504	0.786	0.56	0.33	1.09	0.95	0.76	0.93	0.80
TNS330951	parallelocarpum	33.6932	134.2222	254.7	5.622	1.998	1	2.333	1.593	0.801	0.387	0.94	0.49	0.41	0.79	0.84
TNS1045925	parallelocarpum	33.7298	133.1067	750.1	6.407	1.375	1	0.846	0.99	0.627	0.312	1.03	0.45	0.38	0.57	0.84
TNS803219	parallelocarpum	35.804	139.1141	392.4	4.626	1.619	1	1.833	1.398	0.782	0.364	0.97	0.26	0.22	0.66	0.85
TNS252520	punctisorum	35.4347	138.6787	1372.5	4.165	2.225	0	2.465	1.269	0.71	0.359	0.96	0.93	0.8	0.66	0.86
TNS1221118	parallelocarpum	35.6401389	136.819072	251.5	5.23	1.818	1	1.618	1.473	0.618	0.263	1.09	0.5	0.45	0.72	0.90
TNS449878	parallelocarpum	35.1222	137.8429	724.4	5.944	1.952	1	2.402	1.181	0.677	0.19	0.3	0.22	0.21	0.32	0.95
TNS741483	parallelocarpum	36.5761	139.4088	537.8	4.673	3.219	1	1.951	1.647	1.037	0.387	1.17	0.5	0.31	0.91	0.62
TNS1147789	parallelocarpum	36.0235	138.8412	1692.5	3.898	1.839	1	1.58	0.948	0.669	0.215	1.11	0.77	0.48	1	0.62
TNS121026	parallelocarpum	33.8549	139.6043	50.5	4.236	2.408	1	3.48	1.586	0.808	0.351	0.73	0.59	0.37	0.68	0.63
TNS803198	parallelocarpum	35.1984	138.8077	1179.1	4.578	1.984	1	1.443	1.738	0.909	0.267	0.77	0.52	0.33	0.74	0.63
TNS456717	parallelocarpum	33.14947	131.37862	662.1	8.258	2.504	1	2.531	1.552	0.908	0.388	0.58	0.44	0.28	0.57	0.64
TNS457156	parallelocarpum	37.2379	140.9118	371.7	4.865	2.963	1	3.286	1.566	0.829	0.363	0.8	0.44	0.28	0.77	0.64
TNS1147708	parallelocarpum	35.93317	138.81744	1056.6	4.787	1.684	1	1.605	1	0.542	0.428	1.01	0.43	0.28	0.58	0.65
TNS1031666	parallelocarpum	36.5705	139.5938	405.3	6.156	3.412	1	6.58	2.256	1.003	0.44	0.53	0.32	0.21	0.42	0.66
TNS1147741	parallelocarpum	35.9525	138.7702	1299.8	5.05	2.132	1	2.633	1.469	0.739	0.516	0.46	0.3	0.2	0.43	0.67
TNS741487	parallelocarpum	35.8935	138.5921	2185.1	3.32	1.845	1	1.235	0.97	0.689	0.29	1.18	0.72	0.49	0.92	0.68
TNS1147790	parallelocarpum	36.0235	138.8412	1692.5	3.714	2.219	1	1.932	1.188	0.854	0.287	0.63	0.44	0.3	0.53	0.68
TNS317280	parallelocarpum	36.1837	137.784	727.9	2.959	1.821	1	0.854	0.946	0.632	0.358	0.74	0.44	0.3	0.6	0.68
TNS1031637	parallelocarpum	36.1702	138.6204	763.5	3.958	2.483	1	2.966	1.591	1.059	0.492	1.34	0.63	0.45	0.81	0.71
TNS1031655	parallelocarpum	35.9065	138.9893	764.7	5.071	2.349	1	3.588	1.616	0.74	0.295	0.59	0.39	0.28	0.6	0.72
TNS456716	parallelocarpum	32.81686	131.36583	839.7	3.448	1.83	1	1.136	1.183	0.605	0.26	0.72	0.62	0.45	0.84	0.73
TNS1147737	parallelocarpum	35.9247	138.9912	1406.8	4.582	2.378	1	3.816	1.687	1.272	0.371	0.54	0.48	0.35	0.61	0.73
TNS587950	parallelocarpum	35.98328	138.83772	637.3	4.459	2.314	1	1.655	1.489	0.701	0.378	1.57	0.45	0.34	0.64	0.76
TNS1031684	parallelocarpum	35.915	139.0873	607.8	4.576	1.145	1	2.356	1.22	0.79	0.376	0.49	0.27	0.21	0.6	0.78
TNS1147702	parallelocarpum	35.9594	138.7432	1256.7	3.901	2.045	1	1.319	1.261	0.975	0.325	1.03	0.61	0.48	0.81	0.79
TNS1147723	parallelocarpum	35.9171	139.0156	729.1	3.498	1.169	1	3.075	0.695	0.237	0.253	0.74	0.33	0.26	0.87	0.79
TNS1147697	parallelocarpum	36.0011	138.8675	669.9	4.894	2.624	1	2.518	1.459	0.672	0.297	0.28	0.29	0.23	0.27	0.79
TNS63410	parallelocarpum	31.1801	130.5284	907.5	5.776	1.7	1	2.101	0.889	0.727	0.245	0.87	0.45	0.36	0.6	0.80
TNS1221112	parallelocarpum	35.516275	136.4404	821.9	1.452	1.061	1	0.742	0.681	0.451	0.165	0.99	0.63	0.51	1.03	0.81
TNS1031620	parallelocarpum	36.2301	138.7277	437.7	2.903	1.488	1	1.686	1.007	0.488	0.315	0.76	0.58	0.47	0.64	0.81
TNS421561	parallelocarpum	35.5673	137.8519	757	3.754	1.527	1	1.204	1.298	0.612	0.261	0.7	0.53	0.43	0.52	0.81
TNS1147777	parallelocarpum	35.9025	138.9716	761.4	5.294	3.449	1	2.408	1.624	0.743	0.316	0.112	0.59	0.49	0.84	0.83
TNS545454	parallelocarpum	35.4018	138.5575	846.9	4.903	2.185	1	2.383	1.363	0.722	0.249	0.71	0.42	0.35	0.68	0.83
TNS1147727	parallelocarpum	35.9594	138.7432	1256.7	3.451	2.168	1	1.704	1.022	0.763	0.251	0.99	0.33	0.28	0.75	0.85
TNS1147722	parallelocarpum	35.9353	139.0957	1239.2	3.363	1.086	1	1.558	0.924	0.445	0.433	0.8	0.3	0.26	0.61	0.87
TNS1031537	parallelocarpum	35.9428	138.735	1981.5	2.925	1.382	1	1.223	0.84	0.434	0.279	1.02	0.46	0.43	0.71	0.93
TNS1147750	parallelocarpum	36.0418	138.7681	1426.1	3.618	1.843	1	2.384	1.22	0.849	0.37	0.63	0.52	0.49	0.68	0.94
TNS1031660	parallelocarpum	35.9065	138.9893	764.7	4.557	2.133	1	4.314	1.193	0.609	0.317	0.49	0.19	0.18	0.41	0.95



TNS1221117	parallelocarpum	35.4077361	137.202111	342.7	5.661	2.164	1	2.532	1.311	0.874	0.408	0.59	0.36	0.35	0.52	0.97
TNS1031627	parallelocarpum	35.9618	138.6694	1315.1	4.046	1.447	1	1.677	0.914	0.546	0.328	0.74	0.24	0.25	0.59	1.04
TNS1031594	parallelocarpum	35.9421	139.2436	308.9	4.22	1.718	1	1.519	1.069	0.597	0.337	0.44	0.22	0.24	0.57	1.09
TNS1147703	parallelocarpum	35.9594	138.7432	1256.7	2.145	1.557	1	0.466	0.753	0.462	0.202	0.72	0.43	0.47	0.61	1.09