

Species name Checked on IPNI	Landolt#	Location	GPS	Altitude (m)	<i>psbK-psbI</i>	<i>trnH-psbA</i>	<i>matK</i>	<i>atpF-atpH</i>	<i>rpoB</i>	<i>rpoCI</i>	<i>rbcL</i>
<i>Spirodela intermedia</i>	7125	Uruguay,Canelones, Carrasco	S34° W56°	547	GU454290		GU454125	GU454194	GU454030	GU453933	GU454387
<i>Spirodela intermedia</i>	7178	Argentina,Buenos Aires, Buenos Aires	S34° W58°	548	GU454291		GU454126	GU454195	GU454031	GU453934	GU454388
<i>Spirodela intermedia</i>	7291	Brazil,Amazonas, Manaus, Parana Channel	S3° W60°	550	GU454292	GU454484	GU454127	GU454196	GU454032	GU453935	GU454389
<i>Spirodela intermedia</i>	7355	Surinam,Paramaribo, Charlesburg	N5° W55°	567	GU454293	GU454485	GU454128	GU454197	GU454033	GU453936	GU454390
<i>Spirodela intermedia</i>	7450	India,Delhi, Botanical Garden	N28° E77°	555	GU454294		GU454129	GU454198	GU454034	GU453937	GU454391
<i>Spirodela intermedia</i>	7747	Peru,Lima, San Marcos Bot. Garden	S11° W76°	558	GU454295	GU454486	GU454130	GU454199	GU454035	GU453938	GU454392
<i>Spirodela intermedia</i>	8410	Panama,Panama City	N30° W85°	563	GU454296		GU454131	GU454200	GU454036	GU453939	GU454393
<i>Spirodela polyrhiza</i>	7205	Hong Kong,New Territories, Shatin	N22° E114°	643	GU454297	GU454487	GU454132	GU454201	GU454037	GU453940	GU454394
<i>Spirodela polyrhiza</i>	7212	India,West Bengal, Rajnagar	N23° E87°	1253	GU454298	GU454488	GU454133	GU454202	GU454038	GU453941	GU454395
<i>Spirodela polyrhiza</i>	7222	Malaysia,Selangor, Kuala Lumpur	N3° E101°	646	GU454299	GU454489	GU454134	GU454203	GU454039	GU453942	GU454396
<i>Spirodela polyrhiza</i>	7498	USA,North Carolina, Durham Co., Durham	N35° W78°	658	GU454300	GU454490	GU454135	GU454204	GU454040	GU453943	GU454397
<i>Spirodela polyrhiza</i>	7657	Mexico,Veracruz, Coatzacoalcos	N18° W94°	663	GU454301	GU454491	GU454136	GU454205	GU454041	GU453944	GU454398
<i>Spirodela polyrhiza</i>	8790	Canada,British Columbia, Vanderhoof	N54° W124°	702	GU454302	GU454492	GU454137	GU454206	GU454042	GU453945	GU454399
<i>Spirodela polyrhiza</i>	9203	Colombia,Huila, El Juncal	N6° W72°	1202	GU454303		GU454138	GU454207	GU454043	GU453946	GU454400
<i>Spirodela polyrhiza</i>	SJ	Europe			GU454304	GU454493	GU454139	GU454208	GU454044	GU453947	GU454401
<i>Landoltia punctata</i>	7248	South Africa,Cape, Stellanbosch, Jonkershoek	S33° E18°	589	GU454305	GU454494	GU454140	GU454209	GU454045	GU453948	GU454402
<i>Landoltia punctata</i>	7260	Victoria,Tyrendarra	S38° E141°	590	GU454306	GU454495	GU454141	GU454210	GU454046	GU453949	GU454403
<i>Landoltia punctata</i>	7449	India,Delhi	N28° E77°	597	GU454307	GU454496	GU454142	GU454211	GU454047	GU453950	GU454404
<i>Landoltia punctata</i>	7487	USA,Florida, Polk Co., Plant City	N27° W82°	600	GU454308	GU454497	GU454143	GU454212	GU454048	GU453951	GU454405
<i>Landoltia punctata</i>	8721	Queensland,Atherton, the Crater	S17° E145°	616	GU454309	GU454498	GU454144	GU454213	GU454049	GU453952	GU454406
<i>Landoltia punctata</i>	9278	China,Wuhan University	N30° E114°		GU454310	GU454499	GU454145	GU454214	GU454050	GU453953	GU454407
<i>Lemna aequinoctialis</i>	6612	USA,California, Fresno Co., Centerville	N36° W120°	131	GU454311	GU454500	GU454146	GU454215	GU454051	GU453954	GU454408
<i>Lemna aequinoctialis</i>	6746	USA,California, Merced Co., Plainsburg	N37° W121°	132	GU454312	GU454501	GU454147	GU454216	GU454052	GU453955	GU454409
<i>Lemna aequinoctialis</i>	7126	USA,Texas, Travis Co., Austin (university pond)	N30° W97°	136	GU454313	GU454502	GU454148	GU454217	GU454053	GU453956	GU454410
<i>Lemna disperma</i>	7269	Tasmania,Sorell	S42° E147°	273	GU454314	GU454503	GU454149	GU454218	GU454054	GU453957	GU454411
<i>Lemna gibba</i>	7589	USA,California, Los Angeles Co., Covina	N34° W117°	317	GU454315	GU454504	GU454150	GU454219	GU454055	GU453958	GU454412
<i>Lemna gibba</i>	7741	Italy,Sicilia, Siracusa (G3)	N37° E15°	324	GU454316	GU454505	GU454151	GU454220	GU454056	GU453959	GU454413
<i>Lemna gibba</i>	7784	Ethiopia,Shoa, 30 km E of Addis Abeba	N9° E38°	327	GU454317	GU454506	GU454152	GU454221	GU454057	GU453960	GU454414
<i>Lemna gibba</i>	8703	Japan,Honshu Aichi	N36° E138°	344	GU454318	GU454507	GU454153	GU454222	GU454058	GU453961	GU454415
<i>Lemna gibba</i>	JS 6F7-11				GU454319	GU454508	GU454154	GU454223	GU454059	GU453962	GU454416
<i>Lemna gibba</i>	JS parent line				GU454320	GU454509	GU454155	GU454224	GU454060	GU453963	GU454417
<i>Lemna japonica</i>	7182	Japan,Kyushu, Fukuoka, Mizumaki-machi	N33° E130°	357	GU454321	GU454510	GU454156	GU454225	GU454061	GU453964	GU454418

Species name Checked on IPNI	Landolt#	Location	GPS	Altitude (m)	<i>psbK-psbI</i>	<i>trnH-psbA</i>	<i>matK</i>	<i>atpF-atpH</i>	<i>rpoB</i>	<i>rpoC1</i>	<i>rbcL</i>
<i>Lemna minor</i>	7018	Turkey,Anatolia, Erzincan	N39° E39°	9	GU454322	GU454511	GU454157	GU454226	GU454062	GU453965	GU454419
<i>Lemna minor</i>	7136	USA,Illinois, Know Co., Williamstead	N39° W89°	15	GU454323	GU454512	GU454158	GU454227	GU454063	GU453966	GU454420
<i>Lemna minor</i>	7210	South Africa,Cape, Grahamtown, "Rockeby Park"	S33° E26°	21	GU454324	GU454513	GU454159	GU454228	GU454064	GU453967	GU454421
<i>Lemna minor</i>	9016	Japan,Honshu, Hyogo, Akashi	N36° E138°	70	GU454325	GU454514	GU454160	GU454229	GU454065	GU453968	GU454422
<i>Lemna minor</i>	9253	Finland,Uusimaa, Espoo	N60° E24°	1242	GU454326	GU454515	GU454161	GU454230	GU454066	GU453969	GU454423
<i>Lemna minor</i>	9417	Germany,Marburg (original strain of Pirson 1950)	N50° E8°		GU454327	GU454516	GU454162	GU454231	GU454067	GU453970	GU454424
<i>Lemna minuta</i>	7284	Uruguay,Montevidео, Canelones, Carrasco	S34° W56°	1219	GU454328	GU454517	GU454163	GU454232	GU454068	GU453971	GU454425
<i>Lemna minuta</i>	7726	Chile,Valparaiso, Limache	S33° W71°	97	GU454329	GU454518	GU454164	GU454233	GU454069	GU453972	GU454426
<i>Lemna minuta</i>	8065	USA,Texas, Brazoria Co., Old Ocean	N29° W95°	99	GU454330	GU454519	GU454165	GU454234	GU454070	GU453973	GU454427
<i>Lemna obscura</i>	7856	USA,Louisiana, East Baton Rouge Par., L.S.U.	N30° W91°	1177	GU454331	GU454520	GU454166	GU454235	GU454071	GU453974	GU454428
<i>Lemna trisulca</i>	7579	Canada,Ontario, York Co., Ajax	N43° W79°	429	GU454332	GU454521	GU454167	GU454236	GU454072	GU453975	GU454429
<i>Lemna trisulca</i>	8137	USA,California, San Bernardino Co., Big Bear L.	N35° W115°	440	GU454333	GU454522	GU454168	GU454237	GU454073	GU453976	GU454430
<i>Lemna trisulca</i>	UTCC 399				GU454334	GU454523	GU454169	GU454238	GU454074	GU453977	GU454431
<i>Lemna turionifera</i>	8339	China,Kiangsu, Nanking, Lake Sans-souci	N32° E118°	362	GU454335	GU454524	GU454170	GU454239	GU454075	GU453978	GU454432
<i>Lemna turionifera</i>	8760	Czech.,Natolice	N49° E15°	1239	GU454336	GU454525	GU454171	GU454240	GU454076	GU453979	GU454433
<i>Lemna valdiviana</i>	7288	Brazil,Amazonas, Manaus, Rio Negro	S1° W63°	500	GU454337	GU454526	GU454172	GU454241	GU454077	GU453980	GU454434
<i>Lemna valdiviana</i>	8634	Jamaica,Manchester Par., Hole River	N18° W77°	106	GU454338	GU454527	GU454173	GU454242	GU454078	GU453981	GU454435
<i>Lemna valdiviana</i>	9229	Ecuador,Pichincha, Rio Chiche	S0° W78°	1257	GU454339	GU454528	GU454174	GU454243	GU454079	GU453982	GU454436
<i>Lemna valdiviana</i>	9232	Ecuador,Pichincha, between Tandapi and Aloag	S0° W78°	1258	GU454340	GU454529	GU454175	GU454244	GU454080	GU453983	GU454437
<i>Wolffiella denticulata</i>	8221	South Africa,Natal, Sordwana Bay	S28° E30°	984	GU454341	GU454530	GU454176	GU454245	GU454081	GU453984	GU454438
<i>Wolffiella gladiata</i>	7595	USA,Virginia, Prince George Co., Brandon	N37° W77°	990	GU454342	GU454531	GU454177	GU454246	GU454082	GU453985	GU454439
<i>Wolffiella gladiata</i>	7852	USA,Louisiana, East Baton Rouge Par., 15 km S of LSU	N30° W91°	991	GU454343	GU454532	GU454178	GU454247	GU454083	GU453986	GU454440
<i>Wolffiella gladiata</i>	8066	USA,Texas, Matagorda Co., Old Ocean to Cedar Lane	N28° W96°	992	GU454344	GU454533	GU454179	GU454248	GU454084	GU453987	GU454441
<i>Wolffiella gladiata</i>	8261	USA,Pennsylvania, Crawford Co., Conneaut L.	N41° W80°	993	GU454345	GU454534		GU454249	GU454085	GU453988	GU454442
<i>Wolffiella gladiata</i>	8350	USA,Illinois, Union Co, Pine Hills Swamps	N39° W88°	994	GU454346	GU454535		GU454250	GU454086	GU453989	GU454443
<i>Wolffiella hyalina</i>	8640	Tanzania,Arusha, Amboseli	S2° E36°	1003	GU454347	GU454536	GU454180	GU454251	GU454087	GU453990	GU454444
<i>Wolffiella lingulata</i>	7289	Brazil,Amazonas, Manaus, Rio Negro	S1° W63°	1007	GU454348	GU454537		GU454252	GU454088	GU453991	GU454445
<i>Wolffiella lingulata</i>	7464	Venezuela,Yaracuy, Marin	N10° W66°	1011	GU454349	GU454538	GU454181	GU454253	GU454089	GU453992	GU454446
<i>Wolffiella lingulata</i>	7655	Mexico,Tabasco, Villahermosa	N18° W92°	1013	GU454350	GU454539	GU454182	GU454254		GU453993	GU454447
<i>Wolffiella lingulata</i>	7725	Argentina,Corrientes, Mburucuya, "Santa Teresa"	S28° W58°	1015	GU454351	GU454540	GU454183	GU454255	GU454090	GU453994	GU454448
<i>Wolffiella lingulata</i>	8742	Argentina,Corrientes, San Cosme	S27° W58°	1023	GU454352	GU454541			GU454091	GU453995	GU454449
<i>Wolffiella neotropica</i>	7290	Brazil,Amazonas, Neptunia, Rio Negro	S1° W63°	1056	GU454353	GU454542	GU454184	GU454256	GU454092	GU453996	GU454450
<i>Wolffiella neotropica</i>	7609	Brazil,Espirito-Santo, Heliofila	S19° W40°	1057	GU454354	GU454543	GU454185	GU454257	GU454093	GU453997	GU454451

Species name Checked on IPNI	Landolt#	Location	GPS	Altitude (m)	<i>psbK-psbI</i>	<i>trnH-psbA</i>	<i>matK</i>	<i>atpF-atpH</i>	<i>rpoB</i>	<i>rpoC1</i>	<i>rbcL</i>
<i>Wolffiella neotropica</i>	8848	Brazil,Rio de Janeiro, Barra do Marico	S23° W43°	1058	GU454355	GU454544	GU454186	GU454258	GU454094	GU453998	GU454452
<i>Wolffiella oblonga</i>	7164	USA,Louisiana, Oreleans Par., New Orleans	N29° W90°	1063	GU454356	GU454545	GU454187	GU454259	GU454095	GU453999	GU454453
<i>Wolffiella oblonga</i>	7201	Argentina,Buenos Aires, Arroyo Burgueno	S34° W58°	1065	GU454357	GU454546		GU454260	GU454096	GU454000	GU454454
<i>Wolffiella oblonga</i>	7343	Argentina,Tucuman, El Capital	S34° W58°	1066	GU454358	GU454547		GU454261	GU454097	GU454001	GU454455
<i>Wolffiella oblonga</i>	8072	USA,Texas, Matagorda Co., Old Ocean to Cedar Lane	N28° W96°	1075	GU454359	GU454548		GU454262	GU454098	GU454002	GU454456
<i>Wolffiella oblonga</i>	9136	Brazil,Mato Grosso, Corumba	S17° W57°	1086	GU454360	GU454549	GU454188	GU454263	GU454099	GU454003	GU454457
<i>Wolffiella rotunda</i>	9072	Zimbabwe,Mana Pools Nat. Park, NW of Mana Pools	S19° E29°	1285	GU454361	GU454550	GU454189	GU454264	GU454100	GU454004	GU454458
<i>Wolffiella rotunda</i>	9121	Zimbabwe,Urungwe Safari Area, SE of Chirundu	S16° E28°	1216	GU454362	GU454551	GU454190	GU454265	GU454101	GU454005	GU454459
<i>Wolffia angusta</i>	7476	Victoria,Shepparton, Bunbartha	S36° E145°	711	GU454363	GU454552		GU454266	GU454102	GU454006	GU454460
<i>Wolffia arrhiza</i>	8872	Hungary,Szarvas	N46° E20°	753	GU454364	GU454553		GU454267	GU454103	GU454007	GU454461
<i>Wolffia australiana</i>	7733	South Australia,Mount Lofty Range, Torrens Gorge	S34° E138°	766	GU454365	GU454554	GU454191	GU454268	GU454104	GU454008	GU454462
<i>Wolffia australiana</i>	8730	New South Wales, Singleton, Doughboy Hollow	S32° E151°	769	GU454366	GU454555	GU454192	GU454269	GU454105	GU454009	GU454463
<i>Wolffia borealis</i>	9123	USA,California, San Diego Co., Lake Hodges Dam	N33° W117°	1207	GU454367	GU454556		GU454270	GU454106	GU454010	GU454464
<i>Wolffia brasiliensis</i>	7150	USA,Texas, Hays Co., San Marcos	N29° W98°	784	GU454368	GU454557		GU454271	GU454107	GU454011	GU454465
<i>Wolffia brasiliensis</i>	7306	Mexico,Mexico City, Mixquic	N19° W99°	786	GU454369	GU454558		GU454272	GU454108	GU454012	GU454466
<i>Wolffia brasiliensis</i>	8743	Argentina,Corrientes, San Cosme	S27° W58°	809	GU454370	GU454559		GU454273	GU454109	GU454013	GU454467
<i>Wolffia columbiana</i>	7310	Mexico,Mexico City, Mixquic	N19° W99°	862	GU454371	GU454560		GU454274	GU454110	GU454014	GU454468
<i>Wolffia columbiana</i>	7972	USA,Alabama, Limestone Co., Beaverdm Creek	N30° W87°	880	GU454372	GU454561		GU454275	GU454111	GU454015	GU454469
<i>Wolffia columbiana</i>	8265	USA,Pennsylvania, Crawford Co., Conneaut L.	N41° W80°	884	GU454373	GU454562		GU454276	GU454112	GU454016	GU454470
<i>Wolffia columbiana</i>	8856	Argentina,Salta, El Rey	S24° W64°	888	GU454374	GU454563		GU454277	GU454113	GU454017	GU454471
<i>Wolffia columbiana</i>	8890	Mexico,S of San Pedro Sula	N15° W88°	890	GU454375	GU454564		GU454278	GU454114	GU454018	GU454472
<i>Wolffia cylindracea</i>	9080	Zimbabwe,Wankie Nat. Park, Ngamo Wind Pump	S19° E29°	913	GU454376	GU454565		GU454279	GU454115	GU454019	GU454473
<i>Wolffia elongata</i>	9188	Colombia,Atlantico, Sabanagrande-Santo Tomas	S10° W74°	1211	GU454377	GU454566		GU454280	GU454116	GU454020	GU454474
<i>Wolffia globosa</i>	8152	USA,California, Fresno Co., Fresno	N36° W120°	1151	GU454378	GU454567		GU454281	GU454117	GU454021	GU454475
<i>Wolffia globosa</i>	8441	Thailand,Bangkok	N13° E100°	949	GU454379	GU454568		GU454282	GU454118	GU454022	GU454476
<i>Wolffia globosa</i>	8691	Japan,Honshu, Oska, Matsubara	N35° E136°	950	GU454380	GU454569		GU454283	GU454119	GU454023	GU454477
<i>Wolffia globosa</i>	8789	Nepal,Bharatpur	N27° E84°	953	GU454381	GU454570		GU454284	GU454120	GU454024	GU454478
<i>Wolffia globosa</i>	8973	Thailand,Prachnap Khiri Khan	N15° E100°	960	GU454382	GU454571		GU454285	GU454121	GU454025	GU454479
<i>Wolffia globosa</i>	9196	Colombia,Cordoba, Lorica	N9° W75°	964	GU454383	GU454572	GU454193	GU454286	GU454122	GU454026	GU454480
<i>Wolffia globosa</i>	9317	India,Rajasthan, Ajmer Lake	N26° E73°		GU454384	GU454573		GU454287	GU454123	GU454027	GU454481
<i>Wolffia microscopica</i>	9276	India,Delhi ?	N28° E77°	1287	GU454385	GU454574		GU454288	GU454124	GU454028	GU454482
<i>Wolffia neglecta</i>	9149	Pakistan,Karachi, Gulshan-e-Iasbah	N24° E67°	969	GU454386	GU454575		GU454289		GU454029	GU454483