



1 Article – Supplementary Materials

2 Structural features of carnivorous plant (*Genlisea*, 3 *Utricularia*) tubers as abiotic stress resistance organs

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20 **Table S1.** Data used for the phylogenetic analyses. “-” denotes missing data. *Pinguicula* species were
21 used as outgroup.

Species	matK/trnK	rbcL
<i>Genlisea africana</i>	FN641702	-
<i>Genlisea aurea</i>	NC037078	NC037078
<i>Genlisea barthlottii</i>	FN641704	-
<i>Genlisea filiformis</i>	NC037079	NC037079
<i>Genlisea glabra</i>	FN641692	-
<i>Genlisea glandulosissima</i>	FN641700	-
<i>Genlisea guianensis</i>	FN641696	AY128631
<i>Genlisea hispidula</i>	FN641705	-
<i>Genlisea lobata</i>	FN641711	-
<i>Genlisea margaretae</i>	HG530134	HG530134
<i>Genlisea pygmaea</i>	NC037080	NC037080
<i>Genlisea repens</i>	NC037081	NC037081
<i>Genlisea roraimensis</i>	AF531817	-
<i>Genlisea sanariapoana</i>	FN641698	-

<i>Genlisea staphii</i>	AF531818	-
<i>Genlisea subglabra</i>	FN641706	-
<i>Genlisea subviridis</i>	FN641703	-
<i>Genlisea tuberosa</i>	NC037082	NC037082
<i>Genlisea uncinata</i>	AF531819	-
<i>Genlisea violacea</i>	NC037083	NC037083
<i>Utricularia adpressa</i>	MF765548	AF482527
<i>Utricularia alpina</i>	AF531822	AF482528
<i>Utricularia amethystina</i>	MN223721	MN223721
<i>Utricularia arcuata</i>	MF765518	-
<i>Utricularia arenaria</i>	MF765500	MF991480
<i>Utricularia arnhemica</i>	MF765494	
<i>Utricularia asplundii</i>	MF765551	-
<i>Utricularia aurea</i>	KX604176	MF991481
<i>Utricularia aureomaculata</i>	MF765532	-
<i>Utricularia australis</i>	AF531823	MF572257
<i>Utricularia babui</i>	MF765516	-
<i>Utricularia benjaminiiana</i>	MF765539	-
<i>Utricularia bifida</i>	MF765522	MF991483
<i>Utricularia biloba</i>	MF765534	-
<i>Utricularia bisquamata</i>	MF765503	-
<i>Utricularia blanchetii</i>	AF531841	-
<i>Utricularia bremii</i>	MF765536	MF991484
<i>Utricularia breviscapa</i>	MF765537	MF991487
<i>Utricularia caerulea</i>	MF765507	MH292762
<i>Utricularia calycifida</i>	AF531824	MF991489
<i>Utricularia capilliflora</i>	MF765495	-
<i>Utricularia chrysanthia</i>	MF765527	-
<i>Utricularia cornigera</i>	KY689699	-
<i>Utricularia cornuta</i>	MF765524	MK526851
<i>Utricularia costata</i>	-	AY128628
<i>Utricularia cucullata</i>	-	MF991493
<i>Utricularia dichotoma</i>	AF531826	MK959214
<i>Utricularia dimorphantha</i>	KX604186	MF991495
<i>Utricularia dunlopii</i>	MF765493	-
<i>Utricularia endresii</i>	MF765543	-
<i>Utricularia erectiflora</i>	MF765514	-
<i>Utricularia firmula</i>	MF765501	-
<i>Utricularia flaccida</i>	AF531830	-
<i>Utricularia floridana</i>	MF765541	KY627462
<i>Utricularia foliosa</i>	MF765538	MF991499

<i>Utricularia foveolata</i>	AF531850	-
<i>Utricularia fulva</i>	MF765526	-
<i>Utricularia furcellata</i>	KY490353	-
<i>Utricularia geminiloba</i>	KX604216	-
<i>Utricularia geminiscapa</i>	-	MG223028
<i>Utricularia gibba</i>	KC997777	KC997777
<i>Utricularia graminifolia</i>	MH292757	MH292763
<i>Utricularia heterochroma</i>	MF765533	-
<i>Utricularia hirta</i>	MF765509	MH292769
<i>Utricularia hispida</i>	AF531829	MF991504
<i>Utricularia humboldtii</i>	AF531836	-
<i>Utricularia hydrocarpa</i>	KX604190	MF991508
<i>Utricularia inflexa</i>	-	MF991509
<i>Utricularia intermedia</i>	AF531839	MG222643
<i>Utricularia involvens</i>	MF765550	-
<i>Utricularia jamesoniana</i>	MF765547	-
<i>Utricularia juncea</i>	AF531832	AY128630
<i>Utricularia kamienskii</i>	MF765499	-
<i>Utricularia kimberleyensis</i>	MF765492	-
<i>Utricularia laciniata</i>	KX604228	MF991513
<i>Utricularia lateriflora</i>	MF765504	MF991514
<i>Utricularia laxa</i>	MF765521	MF991568
<i>Utricularia leptorhyncha</i>	MF765498	-
<i>Utricularia livida</i>	AF531833	MF991569
<i>Utricularia lloydii</i>	MF765549	-
<i>Utricularia longifolia</i>	AF531834	MF991515
<i>Utricularia macrorhiza</i>	H803177	MF991517
<i>Utricularia mannii</i>	MF765520	-
<i>Utricularia menziesii</i>	-	MF991573
<i>Utricularia meyeri</i>	KX604231	MF991570
<i>Utricularia minor</i>	MF765554	MF572258
<i>Utricularia minutissima</i>	MF765510	MH292770
<i>Utricularia monanthos</i>	-	MF991519
<i>Utricularia moniliformis</i>	MF765508	-
<i>Utricularia multifida</i>	AF531848	MF991571
<i>Utricularia nana</i>	AF531837	MF991520
<i>Utricularia nelumbifolia</i>	MF765544	MF991521
<i>Utricularia neottiooides</i>	KX604195	MF991522
<i>Utricularia nephrophylla</i>	AF531827	-
<i>Utricularia nervosa</i>	MF765552	MF991525
<i>Utricularia nigrescens</i>	MF765529	-

<i>Utricularia novaezelandiae</i>	MF765490	-
<i>Utricularia ochroleuca</i>	-	MF991528
<i>Utricularia oliveriana</i>	MF765530	-
<i>Utricularia parthenopipes</i>	AF531842	-
<i>Utricularia paulineae</i>	MF765488	-
<i>Utricularia petertaylorii</i>	MF765485	-
<i>Utricularia polygaloides</i>	MH292760	MH292764
<i>Utricularia praelonga</i>	AF531843	MF991572
<i>Utricularia praeterita</i>	MH292761	MG966528
<i>Utricularia praetermissa</i>	KY689698	-
<i>Utricularia prehensilis</i>	MF765519	-
<i>Utricularia pubescens</i>	AF531844	AY128629
<i>Utricularia purpurea</i>	AF531845	MG222116
<i>Utricularia purpureocaerulea</i>	MF765511	-
<i>Utricularia pusilla</i>	MF765531	MF991532
<i>Utricularia quelchii</i>	AF531846	-
<i>Utricularia quinquesidentata</i>	MF765496	-
<i>Utricularia radiata</i>	KX604185	KX397996
<i>Utricularia reflexa</i>	MF765540	MF991534
<i>Utricularia reniformis</i>	KT336489	KT336489
<i>Utricularia resupinata</i>	MF765542	MK526854
<i>Utricularia rigida</i>	AF531838	-
<i>Utricularia salwinensis</i>	-	MF786622
<i>Utricularia sandersonii</i>	AF531847	MF991542
<i>Utricularia scandens</i>	MF765523	MH292768
<i>Utricularia simmonsii</i>	MF765525	-
<i>Utricularia simplex</i>	MF765505	-
<i>Utricularia simulans</i>	MF765513	MF991543
<i>Utricularia singeriana</i>	MF765489	-
<i>Utricularia spiralis</i>	AF531851	-
<i>Utricularia stellaris</i>	KX604182	-
<i>Utricularia striata</i>	-	MF991546
<i>Utricularia striatula</i>	KY490354	MF786551
<i>Utricularia stygia</i>	MF765535	MF991547
<i>Utricularia subulata</i>	AF531821	KY627581
<i>Utricularia tenuissima</i>	MF765512	-
<i>Utricularia terraereginae</i>	MF765497	-
<i>Utricularia tortilis</i>	MF765515	-
<i>Utricularia tricolor</i>	KX604210	MF991554
<i>Utricularia tridentata</i>	AF531825	MF991566
<i>Utricularia triloba</i>	MF765528	AF482530

<i>Utricularia uliginosa</i>	AF531849	MH292767
<i>Utricularia uniflora</i>	MF765491	MF991563
<i>Utricularia violacea</i>	MF765486	-
<i>Utricularia volubilis</i>	KX604227	MF991564
<i>Utricularia vulgaris</i>	AF531831	MG224009
<i>Utricularia warburgii</i>	MF765506	-
<i>Utricularia welwitschii</i>	MF765502	-
<i>Utricularia wightiana</i>	MH292773	MH292765
<i>Pinguicula acuminata</i>	DQ010652	-
<i>Pinguicula agnata</i>	AF531782	AY128627
<i>Pinguicula albida</i>	LC348432	-
<i>Pinguicula alpina</i>	AF531783	-
<i>Pinguicula antarctica</i>	DQ010653	-
<i>Pinguicula benedicta</i>	LC348433	-
<i>Pinguicula bissei</i>	LC348434	-
<i>Pinguicula bohemica</i>	LC348435	-
<i>Pinguicula calyprata</i>	FM200225	-
<i>Pinguicula colimensis</i>	LC348436	-
<i>Pinguicula conzattii</i>	LC348437	-
<i>Pinguicula corsica</i>	AF531784	-
<i>Pinguicula crassifolia</i>	LC348438	-
<i>Pinguicula crystallina</i>	DQ010654	-
<i>Pinguicula cubensis</i>	LC348439	-
<i>Pinguicula cyclosecta</i>	LC348440	-
<i>Pinguicula debbertiana</i>	LC348441	-
<i>Pinguicula dertosensis</i>	LC348442	-
<i>Pinguicula ehlersiae</i>	HG803178	AF482523
<i>Pinguicula elongata</i>	FM200224	-
<i>Pinguicula emarginata</i>	AF531785	-
<i>Pinguicula esseriana</i>	DQ010656	-
<i>Pinguicula filifolia</i>	AF531786	MF991475
<i>Pinguicula fiorii</i>	AF531787	-
<i>Pinguicula fontqueriana</i>	AF531788	-
<i>Pinguicula gigantea</i>	AF531789	-
<i>Pinguicula gracilis</i>	AF531790	AF482524
<i>Pinguicula grandiflora</i>	AF531791	AF482525
<i>Pinguicula gypsicola</i>	LC348444	AF482526
<i>Pinguicula hemiepiphytica</i>	LC348445	-
<i>Pinguicula ibarrae</i>	LC348446	-
<i>Pinguicula immaculata</i>	LC348447	-
<i>Pinguicula involuta</i>	FM200226	-

<i>Pinguicula ionantha</i>	DQ010658	-
<i>Pinguicula jackii</i>	LC348449	-
<i>Pinguicula jaumavensis</i>	LC348450	-
<i>Pinguicula kondoi</i>	LC348451	-
<i>Pinguicula laueana</i>	DQ010659	-
<i>Pinguicula leptoceras</i>	AF531792	-
<i>Pinguicula lilacina</i>	LC348452	-
<i>Pinguicula longifolia</i>	DQ010660	-
<i>Pinguicula lusitanica</i>	DQ010661	-
<i>Pinguicula lutea</i>	DQ010662	-
<i>Pinguicula macroceras</i>	AF531796	-
<i>Pinguicula macrophylla</i>	LC348453	-
<i>Pinguicula medusina</i>	LC348454	-
<i>Pinguicula mirandae</i>	LC348455	-
<i>Pinguicula moctezumae</i>	AF531797	-
<i>Pinguicula moranensis</i>	DQ010657	HQ384871
<i>Pinguicula mundi</i>	AF531800	-
<i>Pinguicula nevadensis</i>	DQ010664	-
<i>Pinguicula nivalis</i>	LC348456	-
<i>Pinguicula oblongiloba</i>	LC348457	-
<i>Pinguicula planifolia</i>	LC348458	-
<i>Pinguicula poldinii</i>	AF531804	-
<i>Pinguicula potosiensis</i>	LC348459	-
<i>Pinguicula pumila</i>	LC348460	-
<i>Pinguicula ramosa</i>	DQ010667	-
<i>Pinguicula rectifolia</i>	AF531801	-
<i>Pinguicula rotundiflora</i>	AF531802	-
<i>Pinguicula sharpii</i>	AF531803	-
<i>Pinguicula vallisneriifolia</i>	AF531805	-
<i>Pinguicula variegata</i>	DQ010668	-
<i>Pinguicula villosa</i>	DQ010669	JN965726
<i>Pinguicula vulgaris</i>	AF531806	MK526348
<i>Pinguicula zecheri</i>	LC348461	-

