

Table S1. Taxa included in the phylogenetic analyses, and their subgeneric affiliation, locality data, and voucher depository (data and taxon classification are according to DORCHIN et al. 2018). The two *Protohalonia* species for which new data is added are marked with a double asterisk. Indicated for each taxon, whether the same individual voucher and/or conspecifics were used for the morphological analyses, or in a few cases a closely related surrogate species was selected; taxa for which the type species was used are marked with an asterisk; inapplicable data are marked with (-). Abbreviations of depository institutes: CUIC, Cornell University Insect Collections, Ithaca, NY; NPIC, USDA/ARS, National Pollinating Insects Collection, Logan, Utah.; AMNH, American Museum of Natural History, NYC.

N	Name	Locality	Legit	Collecti on	PolII	NAK	Genbank accession numbers			28S	Morphological analysis
							Opsin	COI	Cytb		
-	<i>Tarsalia persica</i>	(from Genbank)	-	-	KJ784321	KJ784313	KJ784317	BOLD:AAM9933	Missing	KJ784306	<i>Tarsalia</i> <i>hirtipes</i> *
-	<i>Ancyla holtzi anatolica</i>	(from Genbank)	-	-	GU245352	GU245057	GU245235	Missing	Missing	GU244753	<i>Ancyla</i> <i>orientalica</i>
ad50	<i>Florilegus condignus</i> *	Washington DC, Nat. Arboretum	M. Greenston & E. Hren	Dorchin	GU245390	GU245099	MG250804	MG251039	MG250960	GU244791	Same
1101	<i>Martinapis luteicornis</i> *	AZ, 4mi E Willcox	B. Danforth	Packer	DQ069333	GU245090	GU245230	MG251040	MG250961	DQ072147	Conspecific
ad108	<i>M. Melissodes paroselae</i>	AZ, 3mi E Willcox	B. Danforth	CUIC	Missing	Missing	MG250805	MG251041	Missing	Missing	Conspecific
ad109	<i>M. Eumelissodes druriella</i>	NY, 3.2km SW Cortland	A. Dorchin	Dorchin	Missing	Missing	AF091731	MG251043	AF181616	AF181604	Same
485	<i>M. Heliomelissodes desponsa</i> *	NY, Ithaca	B. Danforth	-	GU245384	GU245093	AF344603	MG251044	MG250963	GU244785	Conspecific
865	<i>S. Idiomelissodes duplocincta</i> *	AZ, Tucson	B. Danforth	-	MG250725	Missing	Missing	missing	MG250964	Missing	Conspecific
631	<i>S. Epimelissodes obliqua</i>	NM, 34mi NE Deming	B. Danforth	-	GU245387	GU245096	AF344632	MG251038	Missing	GU244788	Conspecific
ad113	<i>Simanthedon linsleyi</i> *	AZ, Portal	T. Griswold	NPIC	Missing	Missing	MG250807	MG251047	Missing	MG251133	Same
ad93	<i>Protohalonia venusta</i> *	NE, Sheep Mtn.	T. Griswold & E. Ahlstrom	NPIC	MG250727	MG250888	MG250808	MG251048	MG250967	MG251134	Same
ad110	<i>Protohalonia carinata</i> **	CA, 2km NWN Scout Peak	T. Lamperty	NPIC	Missing	Missing	MH426328	MH426330	Missing	Missing	Same
ad111	<i>Protohalonia amoena</i> **	CA, Eureka Dunes, N Creosote	T. Griswold	NPIC	Missing	Missing	MH426329	MH426331	Missing	Missing	Same
ad56	<i>E. Eucera morio</i>	Israel, Tel Yizhaq S NR	A. Dorchin	Dorchin	MG250728	MG250889	MG250809	MG251049	MG250968	MG251135	<i>E. Cubitalia</i> <i>boyadjiani</i>
ad13	<i>E. Eucera parvicornis</i> *	Israel, Tel Yizhaq S NR	A. Dorchin	Dorchin	MG250729	MG250890	MG250810	MG251050	MG250969	MG251136	Same
ad3	<i>E. Eucera bidentata</i> *	Israel, Sha'ar Poleg NR	A. Dorchin	Dorchin	MG250730	MG250891	MG250811	MG251051	MG250970	MG251137	Same
ad4	<i>E. Eucera gaullei</i>	Israel, Tiv'on	A. Dorchin	Dorchin	MG250732	MG250893	MG250813	MG251053	MG250972	MG251139	Same
ad37	<i>E. Eucera decipiens</i>	Israel, Modi'in	A. Dorchin	Dorchin	MG250735	MG250896	MG250817	Missing	Missing	MG251143	Same
ad6	<i>E. Eucera algira</i>	Israel, Nes Ziyvona	A. Dorchin	Dorchin	MG250738	MG250899	MG250820	MG251060	MG250976	MG251146	Same
ad24	<i>E. Eucera syriaca</i>	Israel, 'En Perat	A. Dorchin	Dorchin	MG250741	Missing	MG250823	MG251063	MG250979	MG251149	Same
ad21	<i>E. Eucera curvitaris</i>	Israel, Tiv'on	A. Dorchin	Dorchin	MG250742	Missing	MG250824	MG251064	MG250980	MG251150	Same
ad8	<i>E. Eucera albofasciata</i>	Israel, Yaqum	A. Dorchin	Dorchin	MG250745	MG250905	MG250828	MG251068	MG250984	MG251154	Same
ad25	<i>Eucera aeolopus</i>	Israel, Tiv'on	A. Dorchin	Dorchin	MG250746	MG250906	MG250829	MG251069	MG250985	MG251155	Same
ad26	<i>E. Eucera kullenbergi</i>	Israel, 'En Perat	A. Dorchin	Dorchin	MG250747	MG250907	MG250830	MG251070	MG250986	MG251156	Same
ad17	<i>E. Eucera cypria</i>	Israel, Sha'ar Poleg NR	A. Dorchin	Dorchin	MG250748	MG250908	MG250831	MG251071	Missing	MG251157	Same
ad19	<i>E. Eucera nigrilabris</i>	Israel, Nes Ziyvona	A. Dorchin	Dorchin	MG250751	MG250911	MG250834	MG251074	MG250989	MG251160	Same
ad30	<i>E. Eucera laxiscopa</i>	Israel, Tiv'on	A. Dorchin	Dorchin	MG250754	MG250913	MG250837	MG251077	MG250992	MG251163	Same
ad9	<i>E. Eucera pseudeucnemidae</i>	Israel, Sha'ar Poleg NR	A. Dorchin	Dorchin	MG250757	MG250916	MG250840	MG251080	MG250995	MG251166	Same
ad39	<i>E. Synhalonia plumigera</i>	Israel, Sha'ar Poleg NR	A. Dorchin	Dorchin	MG250760	MG250919	MG250843	MG251083	MG250997	MG251169	Same
ad72	<i>E. Synhalonia acerba</i>	CA, Yusemita NP	T. Griswold	NPIC	MG250766	MG250925	MG250849	MG251089	Missing	MG251175	Same
ad74	<i>E. Synhalonia actiosa</i>	UT, Baxter Ridge	T. Griswold	NPIC	MG250767	MG250926	MG250850	MG251090	Missing	MG251176	Same

ad76	<i>E. Synhalonia nipponensis</i>	China, Shanghai, Shenzen Bot. Garden	N. Vereecken	Dorchin	MG250769	MG250928	MG250853	MG251093	MG251004	MG251178	Same
ad59	<i>E. Syntrichalonia fuliginea</i>	Mexico, Puebla	L. Packer	Dorchin	MG250770	MG250929	MG250854	MG251094	MG251005	MG251179	Same
ad67	<i>E. Syntrichalonia sp</i>	Guatemala, Antigua	L. Packer	Dorchin	MG250771	MG250930	MG250855	MG251095	MG251006	MG251180	Same
ad60	<i>E. Xenoglossodes salviae</i>	Mexico, N of Huapanapam	L. Packer	Packer	MG250772	MG250931	MG250856	MG251096	MG251007	MG251181	Same
618	<i>E. Xenoglossodes eriocarpi</i>	AZ, Cochise Co., Comm. Rd.	B. Danforth	-	MG250773	Missing	Missing	MG251097	MG251008	Missing	Conspecific
ad45	<i>E. Xenoglossodes albata*</i>	AZ, Wilcox	B. Danforth	CUIC	MG250774	MG250932	MG250857	MG251098	MG251009	MG251182	<i>E. Tetraloniella paenalbata</i>
ad91	<i>E. Xenoglossodes sphaeralceae</i>	AZ, Portal	B. Danforth	CUIC	MG250775	MG250933	MG250858	MG251099	Missing	MG251183	Same
ad46	<i>E. Xenoglossodes lippiae</i>	AZ, Coronado NF	B. Danforth	CUIC	MG250777	MG250935	MG250860	MG251101	MG251011	MG251185	Same
ad68	<i>E. Tetralonia minuta</i>	SA, 50km E Richmond	L. Packer	Dorchin	MG250779	MG250937	MG250862	MG251103	MG251013	MG251187	-
ad33	<i>E. Tetralonia nigriceps</i>	Israel, 'En Qelet	A. Dorchin	Dorchin	MG250783	MG250940	MG250865	MG251107	Missing	MG251190	Same
ad94	<i>E. Tetralonia graja*</i>	Israel, Kefar Menahem	A. Dorchin	Dorchin	MG250784	MG250941	MG250866	MG251108	MG251017	MG251191	Same
ad98	<i>E. Tetralonia alticineta</i>	Turkey, Erzurum	J. Ascher	AMNH	Missing	Missing	MG250869	MG251111	MG251020	MG251194	Same
ad75	<i>E. Tetralonia malvae*</i>	France, Nicole	N. Vereecken	Dorchin	MG250788	MG250945	MG250871	MG251113	MG251022	MG251196	Same
1045	<i>E. Tetralonia cinctula</i>	SA, Alldays	B. Danforth	-	MG250793	GU245089	GU245229	MG251118	MG251027	DQ072157	Conspecific
ad51	<i>E. Tetralonia macrognatha</i>	SA, NW Cape, Setlagole	L. Packer	Dorchin	MG250794	MG250949	MG250876	MG251119	MG251028	MG251201	Same
ad49	<i>E. Cemolobus ipomoeae*</i>	GA, Rabun Co., Calyton	N. Stewart	Dorchin	MG250796	MG250951	MG250878	MG251121	MG251029	MG251203	Same
1104	<i>E. Peponapis pruinosa*</i>	AZ, 5.6mi W Patagonia	B. Danforth	-	GU245382	GU245091	GU245261	MG251122	MG251030	GU244783	Conspecific
ad62	<i>E. Peponapis fervens*</i>	Paraguay, 8 km SW Pirebebuy	E. Willis	Packer	MG250798	MG250954	MG250881	MG251125	Missing	MG251205	Conspecific
ad63	<i>E. Peponapis michelbacherorum</i>	Mexico, Tuxtla Chico	L. Packer & S. Dumesh	Packer	MG250800	MG250956	MG250883	MG251127	MG251034	MG251207	Same
ad64	<i>E. Xenoglossa crassidentata*</i>	Mexico, Tuxtla Chico	L. Packer	Packer	MG250801	MG250957	MG250884	MG251128	Missing	MG251208	Same
ad1	<i>E. Xenoglossa strenua*</i>	AZ, Tucson	R. Minckley	Dorchin	MG250802	MG250958	MG250885	MG251129	MG251035	MG251209	Same
ad71	<i>E. Xenoglossa patricia</i>	NM, Albuquerque Acad.	P. Torchio	NPIC	MG250803	MG250959	MG250886	MG251131	MG251037	MG251210	Same