

Sampled material with Accession number, Locality, Collecting date, collector (SM= Stephen Mifsud, OM= Owen Mifsud) and Habitat.

Sample No.	Island	Locality	Toponym	Collection Date	Leg.	Habitat
AS509a	Gozo	Qala	Tac-Cawla	09/05/2014	SM	Steppic to degraded garigue habitat, fields (some abandoned) in close vicinity
AS513a	Malta	St. Julians	Wied Harq Hammiem	13/05/2014	SM	Degraded garigue with many ruderals and steppic communities
AS513b	Malta	St. Julians	Wied Harq Hammiem	13/05/2014	SM	
AS513c	Malta	St. Julians	Wied Harq Hammiem	13/05/2014	SM	
AS514a	Malta	Zurrieq	Wied Diegu	14/05/2014	SM	Garigue very close to the cliffs
AS523a	Gozo	Sannat	Wied Mgarr ix-Xini (north side)	23/05/2014	SM	Rocky valley side with shrubby labiates, Erica multiflora and Euphorbia spp
AS523b	Gozo	Sannat	Wied Mgarr ix-Xini (north side)	23/05/2014	SM	
AS523c	Gozo	Sannat	Wied Mgarr ix-Xini (north side)	23/05/2014	SM	
AS523d	Gozo	Sannat	Wied Mgarr ix-Xini (north side)	23/05/2014	SM	
AS523e	Gozo	Sannat	Wied Mgarr ix-Xini (north side)	23/05/2014	SM	
AS523f	Gozo	Sannat	Wied Mgarr ix-Xini (north side)	23/05/2014	SM	
AS524a	Gozo	San Lawrenz	Ponta ta' Harrux	24/05/2014	SM	Coastal and rupestral rocky ground abundant with Globigerina limestone substrate
AS524b	Gozo	San Lawrenz	Ponta ta' Harrux	24/05/2014	SM	
AS524c	Gozo	San Lawrenz	Ponta ta' Harrux	24/05/2014	SM	Abandoned terraces fields about 150m away from the coast with steppic communities
AS524d	Gozo	San Lawrenz	Ponta ta' Harrux	24/05/2014	SM	
AS524e	Gozo	San Lawrenz	TA' Kurrat	24/05/2014	SM	Disturbed and stoney clayey soil close to the coast
AS524f	Gozo	Fontana	Close to Ghar tal-Hasselin	24/05/2014	SM	Low rocky bank near a small street in shallow soil pockets in karstic rock
AS524g	Gozo	Xlendi	Torri tax-Xlendi	24/05/2014	SM	Disturbed clayey soil on a coastal rocky bank with compact, stoney deep soil
AS524h	Gozo	Xlendi	Torri tax-Xlendi	24/05/2014	SM	
AS524i	Gozo	Munxar	Wied tal-Kantra	24/05/2014	SM	Rocky valley side with clayey and rather deep soil (many ruderals and ermes present)
AS524j	Gozo	Munxar	Sanap Cliffs	24/05/2014	SM	Garigue close to coastal cliffs (c 120m asl) Rock exposed with shallow soil
AS528a	Malta	Zurrieq	Wied Diegu	28/05/2014	SM	Exposed rocky areas with arid and shallow soil in a garrigue dominated with Erica multiflora and labiates
AS528b	Malta	Zurrieq	Wied Diegu	28/05/2014	SM	
AS529a	Malta	Rabat	Tafal Tal-Virtu (l/o Verdala)	29/05/2014	SM	Fields on clay slopes facing North East
AS529b	Malta	Rabat	Tafal Tal-Virtu (l/o Verdala)	29/05/2014	SM	Fields on clay slopes facing North East
AS529c	Malta	Rabat	Tafal Tal-Virtu (l/o Verdala)	29/05/2014	SM	Fields on clay slopes facing North East
AS529d	Malta	Rabat	Tafal Tal-Virtu (l/o Verdala)	29/05/2014	SM	Fields on clay slopes facing North East
AS601a	Malta	Zurrieq	Wied Fulija	01/06/2014	SM	Coastal garigue on cliff margin Rock exposed or with shallow soil prone to wind and rain erosion Flora typically garigue, but degraded and characterised by xerophytic plants
AS601b	Malta	Zurrieq	Wied Fulija	01/06/2014	SM	
AS601c	Malta	Zurrieq	Wied Fulija	01/06/2014	SM	
AS601d	Malta	Zurrieq	Wied Fulija	01/06/2014	SM	Abandoned fields with steppic vegetation
AS601e	Malta	Zurrieq	Wied Babu, l/o Blue Grotto	01/06/2014	SM	Disturbed garigue at the border of coastal cliffs
AS601f	Malta	Zurrieq	Wied Babu, l/o Blue Grotto	01/06/2014	SM	
AS612a	Gozo	Gharb	San Dimitri	12/06/2014	SM	Roadside below rubblewall of a field accompanying by ruderals
AS612b	Gozo	Gharb	San Dimitri	12/06/2014	SM	Abandoned fields with deep clayey soil accompanied with many thistles and steppic species
AS612c	Gozo	Gharb	San Dimitri	12/06/2014	SM	
AS614a	Gozo	San Lawrenz	TA' Kurrat	14/06/2014	SM	
AS614b	Gozo	San Lawrenz	TA' Kurrat	14/06/2014	SM	Coastal cliffs facing north characterised with a mosaic community of garigue and litoral species Soil sandy, loamy, not compact and damp
AS614c	Gozo	San Lawrenz	TA' Kurrat	14/06/2014	SM	
AS614d	Gozo	San Lawrenz	Dwejra chapel	14/06/2014	SM	Arid ground mostly of Globigerina limestone with deep soil
AS614e	Gozo	Gharb	Wied il-Milied	14/06/2014	SM	Steppe within derelict fields close to the coast and a small valley Soil stoney, clayey and quite deep
AS614f	Gozo	Gharb	Wied il-Milied	14/06/2014	SM	
AS614g	Gozo	Gharb	Wied il-Milied	14/06/2014	SM	
AS614h	Gozo	Gharb	Wied il-Milied	14/06/2014	SM	
AS614i	Gozo	Gharb	Wied il-Milied	14/06/2014	SM	
AS617a	Gozo	Xlendi	Xlendi tower	17/06/2014	SM	Coastal habitat, ground rich in globigerina limestone, soil compact, stoney and propably shallow Few vegetation around mostly Limbarda crithmioides (L) Dumort and Salsola melitensis Botschantzev
AS617b	Gozo	Xlendi	Xlendi tower	17/06/2014	SM	
AS617c	Gozo	Xlendi	Xlendi tower	17/06/2014	SM	
AS617d	Gozo	Xlendi	Xlendi tower	17/06/2014	SM	
AO514a	Malta	Mellieha	Red Tower area	14/05/2014	OM	Fallow field with dry and rather shallow soil
AO514b	Malta	Mellieha	Red Tower area	14/05/2014	OM	
AO516a	Malta	Pembroke	Pembroke garigue	16/05/2014	OM	Arid steppe with dry shallow soil and short grass
AO516b	Malta	Pembroke	Pembroke garigue	16/05/2014	OM	
AO517a	Malta	St. Paul's Bay	Qortin	17/05/2014	OM	Steppe
AO517b	Malta	St. Paul's Bay	Qortin	17/05/2014	OM	Steppe
AO518a	Malta	Mosta	Wied Speranza	18/05/2014	OM	Sloped valley bank close to water course with rather deep soil
AO518b	Malta	Mosta	Wied Speranza	18/05/2014	OM	
AO520a	Malta	Naxxar	Tal-Wej	20/05/2014	OM	Fallow fields and dry steppe
AO520b	Malta	Naxxar	Tal-Wej	20/05/2014	OM	
AO524a	Malta	Rabat	Wied il-Qlejgha (fiddien side)	24/05/2014	OM	Rocky valley bank just above valley bed
AO524b	Malta	Rabat	Wied il-Qlejgha (fiddien side)	24/05/2014	OM	
AO528a	Malta	Qrendi	Ghar Lapsi	28/05/2014	OM	Dry steppe with dry shallow soil
AO528b	Malta	Qrendi	Ghar Lapsi	28/05/2014	OM	
AO528c	Malta	Qrendi	Wied iz-Zurrieq	28/05/2014	OM	Fallow field with deep soil and only few accompanying vegetation
AO528d	Malta	Qrendi	Wied iz-Zurrieq	28/05/2014	OM	
AO528e	Malta	Qrendi	Wied iz-Zurrieq	28/05/2014	OM	Degraded garigue close to the coast
AO529a	Malta	Rabat	Migra l-Ferha car park area	29/05/2014	OM	Along pathway in a dry disturbed steppe-like garigue
AO529b	Malta	Rabat	Migra l-Ferha car park area	29/05/2014	OM	Near pathway in dry arid steppe
AO529c	Malta	St. Julians	Wied Harq Hammiem	29/05/2014	OM	Karstic rock of coralline limestone garigue which is degraded and overrun by ruderals
AO529d	Malta	St. Julians	Wied Harq Hammiem	29/05/2014	OM	
AO602a	Malta	Attard	Wied Encita	02/06/2014	OM	Degraded garigue close to a valley bank
AO602b	Malta	Attard	Wied Encita	02/06/2014	OM	Steppe
AO602c	Malta	Zebbug	Wied Qirda	02/06/2014	OM	Deep clayey soil of a fallow field
AO604a	Malta	Dingli	near Maddalena chapel	04/06/2014	OM	Steppe or very degraded garigue close to the cliffs

AO604b	Malta	Dingli	near Maddalena chapel	04/06/2014	OM	Cliff edge facing southwest
AO605a	Malta	Gharghur	Wied Anglu	05/06/2014	OM	Steppe in shallow arid soil
AO605b	Malta	Gharghur	Wied Anglu	05/06/2014	OM	
AO607a	Gozo	Iz-Zebbug	Between Wied I-Ghasri and Qbajjar	07/06/2014	OM	Arid, dry, sloping steppe close to the coast with shallow soil
AO607b	Gozo	Iz-Zebbug	Between Wied I-Ghasri and Qbajjar	07/06/2014	OM	
AO616a	Malta	Siggiewi	near San Blas chapel	16/06/2014	OM	Margins of an field with deep soil
AO617a	Malta	Siggiewi	Fawwara	17/06/2014	OM	Karstic rock of a degraded garigue
AO617b	Malta	Qrendi	Wied iz-Zurrieq	17/06/2014	OM	Garigue not far from the coast
AO617c	Malta	Qrendi	Wied iz-Zurrieq	17/06/2014	OM	
BS502a	Sicily	St. Paul's Bay	Selmunett	02/05/2015	SM	Coastal, maritime rocky habitat, ground with compact and rather deep soil
BS502b	Sicily	St. Paul's Bay	Selmunett	02/05/2015	SM	
BS502c	Sicily	St. Paul's Bay	Selmunett	02/05/2015	SM	
BS502d	Sicily	St. Paul's Bay	Selmunett	02/05/2015	SM	
BS502e	Sicily	St. Paul's Bay	Selmunett	02/05/2015	SM	
BS502f	Sicily	St. Paul's Bay	Selmunett	02/05/2015	SM	
BS504a	Comino	Comino	Bungalow area	04/05/2015	SM	Arid coastal steppe, (with remnants of phryganae)
BS504b	Comino	Comino	Bungalow area	04/05/2015	SM	
BS505a	Malta	Mellieha	Cirkewwa (Paradise Bay area)	05/05/2015	SM	Exposed rocky garigue with shallow compact soil close to the coast
BS505a	Malta	Mellieha	Cirkewwa (Paradise Bay area)	05/05/2015	SM	
BS506a	Malta	MarsaScala	Zonqor Point	06/05/2015	SM	Vegetated coastal garigue
BS512a	Gozo	Xewkija	Wied Mgarr ix-Xini	12/05/2015	SM	Exposed garigue with low shrubs
BS512b	Gozo	Xewkija	Wied Mgarr ix-Xini	12/05/2015	SM	
BS512c	Gozo	Xewkija	Wied Mgarr ix-Xini	12/05/2015	SM	Garigue to phryganae
BS513a	Malta	St. Paul's Bay	San Martin	13/05/2015	SM	
BS513b	Malta	Naxxar	Gebel San Pietru	13/05/2015	SM	Exposed arid rocky ground in a habitat dominated by predesert scrub
BS513c	Malta	Naxxar	Gebel San Pietru	13/05/2015	SM	Sloped rocky ground in a garigue (rather degraded)
BS514a	Malta	Naxxar	Wied Anglu	14/05/2015	SM	Arid phrygana-garigue habitat at valley side
BS514b	Malta	Naxxar	Wied Anglu	14/05/2015	SM	
BS515a	Malta	Naxxar	Bahar ic-Caghaq	15/05/2015	SM	Disturbed rocky ground fragmented littoral vegetation very close to the coast
BS515b	Malta	Naxxar	Bahar ic-Caghaq	15/05/2015	SM	Littoral rocky steppe close to the coast
BS515c	Malta	Naxxar	Bahar ic-Caghaq	15/05/2015	SM	
BS518a	Malta	Rabat	Tal-Virtu	18/05/2015	SM	Clayey fields
BS518b	Malta	Rabat	Tal-Virtu	18/05/2015	SM	
BS520a	Malta	Rabat	Mtahleb (valley area)	20/05/2015	SM	Arable fields close to water course
BS520b	Malta	Rabat	Mtahleb (valley area)	20/05/2015	SM	
BS520c	Malta	Rabat	Mtahleb (steppe near church)	20/05/2015	SM	Steppe dominated by grasses and thistles
BS520d	Malta	Rabat	Mtahleb (steppe near church)	20/05/2015	SM	
BS520e	Malta	Rabat	Mtahleb (steppe near church)	20/05/2015	SM	
BS520f	Malta	Dingli	Faqqanija	20/05/2015	SM	Exposed rocky land composed of a mosaic of phryganae and garigue
BS520g	Malta	Dingli	Faqqanija	20/05/2015	SM	
BS523a	Malta	Rabat	Mtahleb	23/05/2015	SM	Valley side with characteristic garigue to pre desert scrub vegetation
BS525a	Gozo	Fontana	Wied il-Lunzjata	25/05/2015	SM	Agricultural waste dumped in valley side Purely casual specimen growing in the wild
BS527a	Gozo	Sannat	Ta' Cenc	27/05/2015	SM	Low garigue
BS527b	Gozo	Sannat	Ta' Cenc	27/05/2015	SM	Low garigue
BS528a	Gozo	Qala	Hondoq ir-Rummien	28/05/2015	SM	Arid low garigue with steppiec interferences
BS601a	Malta	Qrendi	Hagar Qim	01/06/2015	SM	Garigue close to the cliff edge, quite bare, arid and shallow soil
BS601b	Malta	Qrendi	Hagar Qim	01/06/2015	SM	
BS601c	Malta	Qrendi	Mnajdra area	01/06/2015	SM	Garigue close to the cliff edge, quite bare, arid and shallow soil
BS601d	Malta	Qrendi	Mnajdra area	01/06/2015	SM	
BS603a	Gozo	Xewkija	Fields along main road	03/06/2015	SM	Cultivated fields
BS603b	Gozo	Xewkija	Fields along main road	03/06/2015	SM	
BS603c	Gozo	Xewkija	Fields near Mgarr Xini	03/06/2015	SM	
BS603d	Gozo	Xewkija	Fields near Mgarr Xini	03/06/2015	SM	
BS606a	Malta	Qrendi	Wied iz-Zurrieq	06/06/2015	SM	Rocky passage close to a field and bare rocky ground about 200m from the coast
BS606b	Malta	Qrendi	Wied iz-Zurrieq	06/06/2015	SM	Abandoned terraced fields
BS606c	Malta	Qrendi	Wied iz-Zurrieq	06/06/2015	SM	
BS606d	Malta	Qrendi	Wied iz-Zurrieq	06/06/2015	SM	Arid rocky ground in a degraded garigue with few shallow soil pockets
BS606e	Malta	Qrendi	Wied iz-Zurrieq	06/06/2015	SM	
BS606f	Malta	Qrendi	Wied iz-Zurrieq	06/06/2015	SM	Rocky valley bank with garigue vegetation
BS606g	Malta	Qrendi	Wied iz-Zurrieq	06/06/2015	SM	Arid rocky ground in a degraded garigue with few shallow soil pockets
BS608a	Gozo	Zebbug	Wied I-Infern	08/06/2015	SM	Cultivated fields
BS609a	Gozo	Gharb	Wied Mielah	09/06/2015	SM	Abandoned terraced field about 400m from the coast
BS609b	Gozo	Gharb	Wied Mielah	09/06/2015	SM	
BS609c	Gozo	Gharb	Wied Mielah	09/06/2015	SM	
BS612a	Gozo	Xlendi	Torri tax-Xlendi	12/06/2015	SM	Coastal steppe and calcareous rocky ground
BS612b	Gozo	Xlendi	Torri tax-Xlendi	12/06/2015	SM	
BS612c	Gozo	Xlendi	Torri tax-Xlendi	12/06/2015	SM	
BS620a	Gozo	Xlendi	Torri tax-Xlendi	20/06/2015	SM	
BS627a	Sicily	Scicli	Cava d'Aliga	27/06/2015	SM	Littoral rocky steppe very close to the coast Large population of about a thousand specimens fragmented in three metapopulations
BS627b	Sicily	Scicli	Cava d'Aliga	27/06/2015	SM	
BS627c	Sicily	Scicli	Cava d'Aliga	27/06/2015	SM	
BS627d	Sicily	Scicli	Cava d'Aliga	27/06/2015	SM	
BS627e(i)	Sicily	Scicli	Cava d'Aliga	27/06/2015	SM	
BS627e(ii)	Sicily	Scicli	Cava d'Aliga	27/06/2015	SM	
BS627f(i)	Sicily	Scicli	Cava d'Aliga	27/06/2015	SM	
BS627f(ii)	Sicily	Scicli	Cava d'Aliga	27/06/2015	SM	
BS628a	Sicily	Scicli	Arizza	28/06/2015	SM	Very disturbed rocky ground with deep slightly sandy soil between the coast and urban areas
BS628b	Sicily	Scicli	Arizza	28/06/2015	SM	
BS628c	Sicily	Scicli	Arizza	28/06/2015	SM	
BS628d	Sicily	Scicli	Marina di Modica	28/06/2015	SM	Disturbed coastal rocky ground
CO517a	Malta	Marsaxlokk	Kalanka - Delimara	17/05/2016	OM	Very disturbed steppe (with few garigue remnants) close to the coast
CO517b	Malta	Marsaxlokk	Xrobb I-Ghagin	17/05/2016	OM	Coastal garigue with shallow, dry soil
CO517c	Malta	Marsaxlokk	Tas-Silg area	17/05/2016	OM	Along the main road of Delimara
CO524	Malta	Mgarr	Ghajn Tuffieha	24/05/2016	OM	Coastal dry garigue, very few individuals along a pathway
CS625a	Malta	Xghajra	Xatt tax-Xghajra	25/06/2016	SM & OM	Very disturbed steppiec area (almost a wasteground) close to the coast
CS625b	Malta	Xghajra	Xatt tax-Xghajra	25/06/2016	SM & OM	
CS625c	Malta	Xghajra	Xatt tax-Xghajra	25/06/2016	SM & OM	
CS625d	Malta	Xghajra	Xatt tax-Xghajra	25/06/2016	SM & OM	
CS625e	Malta	Xghajra	Xatt tax-Xghajra	25/06/2016	SM & OM	Disturbed coastal rocky ground overrun by alien species
CS625f	Malta	Xghajra	Xatt tax-Xghajra	25/06/2016	SM & OM	
CS625g	Malta	Xghajra	Xatt tax-Xghajra	25/06/2016	SM & OM	

Synoptic table of measured morphological characters.

Sample No.	Plant height (cm)	Sheath colour	Sheath length (mm)	Width of Longest leaf (mm)	Inflorescence height (mm)	Inflorescence width (mm)	Proportion of stem with leaves	Presence of visible papillae on old leaves	Leaf margin (macroscopical examination)	Papillae type on leaf margin	Length of leaf papillae or hyaline margin (µm)	Colour of Tepals (colour index 0-5)	Tepals length (mm)	Tepals Width (mm)	Apex of Tepals	Type of distribution of papillae on tepals	Arrangement of Cusps on Stamens	Length ratio of lateral cusp to median cusp of inner stamens	Ratio of filament lamina to median cusp	Protrusion of anthers from corolla	Bulbet shape	Average length of bulblets (mm)	Length of largest bulblet (mm)
AS509a	100	n.e.	n.e.	14	56	47	¼	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pink (2)	4.5	2	Obtuse	A	A	× 4	× 4	Included or partially exerted	Helmet or subspherical (Type A)	n.e.	n.e.
AS513a	85	n.e.	n.e.	11	38	44	½ – ¼	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	75	Pink (2)	4.5	2	Sub-acute to obtuse	A	A	× 3.5	×3.5	Included or partially exerted	Helmet or subspherical (Type A)	9.5	11.0
AS513b	72	n.e.	n.e.	7	39	44	¼	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	75–100	Pink (2)	4	1.5	Obtuse with a short mucro	A	A	×3.0	×3.0	Included or partially exerted	Helmet or subspherical (Type A)	8.5	10.0
AS513c	30	n.e.	n.e.	3	14	19.5	¼	No	Smooth or subcrenulate with flattened, weathered papillae	B		Purple (3)	4	1.5	Obtuse	A	A	× 4	×2.5	Included or partially exerted	Helmet or subspherical (Type A)	3.5	5.0
AS514a	25	n.e.	n.e.	3	10	13	½ – ¼	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pink (2)	4	2	Sub-acute with a small blunt mucro.	A	A	× 3	×3.0	Included or partially exerted	Helmet or subspherical (Type A)	5.5	7.0
AS523a	63	n.e.	n.e.	8	41	42	¼	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	75	Pink (2)	4.5	2	Obtuse	A	A	× 4	×2.5	Included or partially exerted	Helmet or subspherical (Type A)	7.0	8.0
AS523b	79	n.e.	n.e.	11	50	48	¼	No	Smooth, margin a narrow hyaline lining	A		Pink (2)	4.5	2	Obtuse	A	A	× 3	×2.5	Included or partially exerted	n.e.	n.e.	n.e.
AS523c	28	n.e.	n.e.	5	22	24	½ – ¼	No	Smooth, margin a narrow hyaline lining	A		Pink (2)	4	1.5	Obtuse to subtruncate	A	A	× 2	×3.0	Included or partially exerted	n.e.	n.e.	n.e.
AS523d	17	n.e.	n.e.	3.5	15	18	¼	No	Smooth, margin a narrow hyaline lining	A		Purple (3)	4	2	Subacute - Obtuse	A	A	× 2.5	×3.0	Included or partially exerted	n.e.	n.e.	n.e.
AS523e	38	n.e.	n.e.	5	26	30	¼	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	75–100	Lilac (1) becoming whitish	4.5	2	Obtuse	A	A	× 2	×3.0	Included or partially exerted	Helmet or subspherical (Type A)	4.5	6.5
AS523f	28	n.e.	n.e.	4.5	21	24	¼	No	Smooth, margin a narrow hyaline lining	A		Purple (3)	4.5	2	Obtuse	A	A	-	-	Included or partially exerted	n.e.	n.e.	n.e.
AS524a	80	n.e.	n.e.	14	37	41	¼	No	Smooth, margin a narrow hyaline lining	A		Pink (2)	5	2	Subacute, some with a small blunt	A	A	× 3	×3.0	Included or partially exerted	n.e.	n.e.	n.e.
AS524b	67	n.e.	n.e.	9	49	45	¼	No	Smooth or subcrenulate with flattened, weathered papillae	B		Light pink - lilac (1)	4.5	2	Broadly acute to subtruncate	A	A	× 3	×2.5	Included or partially exerted	Helmet or subspherical (Type A)	6.5	5.5
AS524c	87	n.e.	n.e.	16	61	63	¼	No	Smooth, margin a narrow hyaline lining	A		Lilac	4.5	2	Obtuse	A	A	× 2.5	×2.0	Included or partially exerted	n.e.	n.e.	n.e.
AS524d	80	n.e.	n.e.	12	48	47	¼	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	50–75	Pink (2)	4.5	2	Obtuse	A	A	× 3	×2.5	Included or partially exerted	n.e.	9.8	10.5
AS524e	37	n.e.	n.e.	8	24	29	¼	No	Smooth, margin a narrow hyaline lining	A		Lilac	5	1.5	Subacute	A	A	× 3	×3.0	Included or partially exerted	n.e.	n.e.	n.e.
AS524f	40	n.e.	n.e.	6	22	28	¼	No	Smooth, margin a narrow hyaline lining	A		Pink	4	2	Subacute, few with a small tiny blunt tip	A	A	× 2.5	×3.0	Included or partially exerted	n.e.	n.e.	n.e.
AS524g	65	n.e.	n.e.	9.5	39	37	¼	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pink	4.5	2	Obtuse. Few tepals with a small tiny	A	A	× 3	×3.5	Included or partially exerted	Helmet or subspherical (Type A)	7.5	7.0
AS524h	69	n.e.	n.e.	13	45	44	½ – ¼	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pink	4	2	Subacute	A	A	× 3	×3.5	Included	n.e.	n.e.	n.e.
AS524i	83	n.e.	n.e.	10	57	51	¼	No	Smooth, margin a narrow hyaline lining	A		Pink (2)	4.5	2	Subacute to obtuse	A	A	× 3	×3.0	Included or partially exerted	n.e.	n.e.	n.e.
AS524j	28	n.e.	n.e.	5	15	20	¼	No	Smooth, margin a narrow hyaline lining	A		Lilac (1)	4.5	2	Obtuse with a short blunt tip	A	A	× 3	×3.0	Included or partially exerted	n.e.	n.e.	n.e.
AS528a	22	n.e.	n.e.	3	17	22	¼	No	Smooth, margin a narrow hyaline lining	A		Lilac (1)	4	1.5	Obtuse	A	A	× 2.5	×3.5	Included or partially exerted	n.e.	n.e.	n.e.

AS528b	79	n.e.	n.e.	11	50	48	½	No	Smooth, margin a narrow hyaline lining	A		Lilac (1)	4.5	2	Obtuse	A	A	× 2.5	x3.5	Included or partially exerted	Helmet or subspherical (Type A)	6.5	6.0
AS529a	100	n.e.	n.e.	-	65	58	½	No	Leaf not available	-		Pale pink (1)	4.5	2	Obtuse - subacute	A	A	× 2.5	x3.5	Included or partially exerted	n.e.	n.e.	n.e.
AS529b	95	n.e.	n.e.	-	58	50	½	No	Leaf not available	-		Purple-pink (2)	4.5	2	Obtuse - subacute	A	A	× 3.5	x3.0	Included or partially exerted	Helmet or subspherical (Type A)	7.5	9.0
AS529c	100	n.e.	n.e.	13	70	60	½	No	Smooth or subcrenulate with flattened, weathered papillae	B		Purple-pink (2)	4.5	2	Obtuse - subacute	A	A	× 3	x3.0	Included or partially exerted	Helmet or subspherical (Type A)	10.5	9.5
AS529d	105	n.e.	n.e.	-	60	58	½	No	Leaf not available	-		Pale pink (1)	4.5	2	Obtuse	A	A	× 4	x3.0	Included or partially exerted	Helmet or subspherical (Type A)	10.5	9.0
AS601a	18	n.e.	n.e.	3	13	18	½	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pale pink (1)	4	2	Obtuse to subacute in some tepals	A	A	× 4	x2.5	Included or partially exerted	n.e.	n.e.	n.e.
AS601b	28	n.e.	n.e.	3.5	15	20	½	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pale pink (1)	4	2	Obtuse	A	A	× 3	x2.5	Included or partially exerted	Helmet or subspherical (Type A)	5.0	7.0
AS601c	26	n.e.	n.e.	5	22	25	½	No	Smooth or subcrenulate with flattened, weathered papillae	B		Purple-pink (2)	4	2	Subacute	A	A	× 2.5	x3.5	Included or partially exerted	n.e.	n.e.	n.e.
AS601d	43	n.e.	n.e.	8	31	29	½	No	Smooth, margin a narrow hyaline lining	A		Pale pink (1)	4	1.5	Obtuse to subacute in some tepals	A	A	× 2	x3.0	Included or partially exerted	n.e.	n.e.	n.e.
AS601e	111	n.e.	n.e.	20	54	55	½	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	F	200–250	Purple, rather dark (3)	3.5	1.7	Acute (sub-truncate) with a small blunt	C	B	× 2	× 1.5	Fully exerted by 2–3mm	Helmet or subspherical (Type A)	12.0	15.0
AS601f	145	n.e.	n.e.	20	69	71	½	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Purple, rather dark (3)	3.5	2	Acute (sub-truncate) with a small blunt	C	A + B	× 3.5	× 1.6	Fully exerted by 2–3mm	n.e.	n.e.	n.e.
AS612a	90	n.e.	n.e.	13	50	53	½ – ¾	No	Smooth, margin a narrow hyaline lining	A	200–250	Lilac (1)	3.5	1.5	Obtuse to blunt (sub-acute)	A	A	× 3	× 2.1	Included	n.e.	n.e.	n.e.
AS612b	100	n.e.	n.e.	20.5	52	50	½	No	Smooth or subcrenulate with flattened, weathered papillae	B	200–250	Pink (2)	4	2	Obtuse, sometimes sub-acute or	A	A	× 3	x2.5	Included or partially exerted	Helmet or subspherical (Type A)	7.0	9.0
AS612c	40	n.e.	n.e.	5	26	24	½ – ¾	No	Leaf not available	X	200–250	Lilac (1)	4	2	Subacute	A	A	× 3.5	x2.5	Included or partially exerted	n.e.	n.e.	n.e.
AS614a	140	n.e.	n.e.	31	49	54	½	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Purple-mauve (3)	3.5	2	Subacute	C	C	× 3.5	x1.2	Fully exerted	n.e.	n.e.	n.e.
AS614b	135	n.e.	n.e.	26	46	50	½	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Purple-mauve (3)	4	2	Subacute	B/C	C	× 4.5	x1.2	Fully exerted	n.e.	n.e.	n.e.
AS614c	122	n.e.	n.e.	18	43	47	½	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Purple-mauve (3)	4	2	Subacute	B	C	× 3.2	x1.3	Fully exerted	Helmet or subspherical (Type A)	12.0	16.0
AS614d	164	n.e.	n.e.	34	71	72	½	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Purple-mauve (3)	4	2	Acute	C	C	×2.7	x0.8 (lamina shorter from cusp)	Fully exerted	n.e.	n.e.	n.e.
AS614e	139	n.e.	n.e.	21	51	54	½	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Purple-mauve (3)	3.5	2	Subacute	B	C	× 4.0	x1.6	Fully exerted	n.e.	n.e.	n.e.
AS614f	134	n.e.	n.e.	21	51	56	½	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Purple-mauve (3)	4	2	Subacute	B	C	× 2.8	x1.2	Fully exerted	n.e.	n.e.	n.e.
AS614g	122	n.e.	n.e.	19.5	45	48	½	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Purple-mauve (3)	4	2	Subacute	B	C	× 2.9	x1.1	Fully exerted	n.e.	n.e.	n.e.
AS614h	138	n.e.	n.e.	22	47	50	½	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Purple-mauve (3)	4	2	Subacute	B	C	× 2.6	x0.8 (lamina shorter from cusp)	Fully exerted	n.e.	n.e.	n.e.
AS614i	147	n.e.	n.e.	24.5	64	68	½ – ¾	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Purple-mauve (3)	4	2	Subacute	C	C	× 3.0	x1.2	Fully exerted	Helmet or subspherical (Type A)	13.0	16.0
AS617a	82	n.e.	n.e.	18	40	44	½	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Purple-mauve (3)	3.5	1.5	Subacute ending with a short mucro	B	C	× 4.0	x1.4	Fully exerted	n.e.	n.e.	n.e.
AS617b	106	n.e.	n.e.	25	44	48	½	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Purple-mauve (3)	4	2	Subacute, ending with a short mucro	B	C	× 3.1	x1.0	Fully exerted	Helmet or subspherical (Type A)	12.0	15.0
AS617c	121	n.e.	n.e.	18	44	49	½	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Purple-mauve (3)	4	2	Subacute, ending with a short mucro	C	C	× 4.0	x1.2	Fully exerted	n.e.	n.e.	n.e.
AS617d	165	n.e.	n.e.	27	72	75	½	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Purple-mauve (3)	4	2	Subacute, ending with a short mucro	B	C	×3.5	x1.0	Fully exerted	Helmet or subspherical (Type A)	10.0	14.0
AO514a	53	n.e.	n.e.	4	29	32	¾	No	Smooth or subcrenulate with flattened, weathered papillae	B	200–250	Pink	4	2	Obtuse	A	A	x2	x4	Included or partially exerted	n.e.	n.e.	n.e.
AO514b	51	n.e.	n.e.	-	33	38	-	No	Smooth or subcrenulate with flattened, weathered papillae	B	200–250	Pink	4	2	Obtuse	A	A	x2	x4	Included or partially exerted	Helmet or subspherical (Type A)	6.0	7.0

AO516a	47	n.e.	n.e.	6	43	21	¼	No	Smooth or subcrenulate with flattened, weathered papillae	B	200–250	Pink	5	2	Obtuse	A	A	x2	x4	Included or partially exerted	n.e.	n.e.	n.e.
AO516b	39	n.e.	n.e.	4	39	30	¼	No	Smooth or subcrenulate with flattened, weathered papillae	B	200–250	Pink	5	2	Obtuse	A	A	x2	x4	Included or partially exerted	Helmet or subspherical (Type A)	5.0	7.0
AO517a	56	n.e.	n.e.	7	42	35	¼	No	Smooth or subcrenulate with flattened, weathered papillae	B	200–250	Pink	4	2	Obtuse	A	A	x2	x4	Included or partially exerted	n.e.	n.e.	n.e.
AO517b	29	n.e.	n.e.	3	21	26	¼	No	Smooth or subcrenulate with flattened, weathered papillae	B	200–250	Pink	5	2	Obtuse	A	A	x2	x4	Included	Helmet or subspherical (Type A)	6.0	7.0
AO518a	90	n.e.	n.e.	11	47	56	½ – ¾	No	Smooth or subcrenulate with flattened, weathered papillae	B	75–250	Pink	4.5	2	Obtuse	A	A	x2	x4	Included or partially exerted	Helmet or subspherical (Type A)	8.0	10.0
AO518b	95	n.e.	n.e.	12.5	43	51	-	No	Smooth or subcrenulate with flattened, weathered papillae	B	75–250	Pink	5	2	Obtuse	A	A	x2	x4	Included or partially exerted	n.e.	n.e.	n.e.
AO520a	70	n.e.	n.e.	7	40	48	¼	No	Smooth or subcrenulate with flattened, weathered papillae	B	200–250	Pink	4	2	Obtuse	A	A	x2	x4	Included or partially exerted	Helmet or subspherical (Type A)	5.5	8.0
AO520b	88	n.e.	n.e.	9	35	47	½ – ¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pink	4	2	Obtuse	A	A	x2	x4	Included or partially exerted	n.e.	n.e.	n.e.
AO524a	88	n.e.	n.e.	-	75	31	-	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pink	4.5	2	Obtuse	A	A	x2	x4	Included or partially exerted	n.e.	n.e.	n.e.
AO524b	50	n.e.	n.e.	9	57	26	¼	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pink	4.5	1.5	Obtuse	A	A	x2	x4	Included or partially exerted	n.e.	n.e.	n.e.
AO528a	32	n.e.	n.e.	4	21	28	¼	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pink	4.5	2	Obtuse	A	A	x2	x4	Included or partially exerted	n.e.	n.e.	n.e.
AO528b	31	n.e.	n.e.	4	26	25	½ – ¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pink	5	2	Obtuse	A	A	x2	x4	Included	Helmet or subspherical (Type A)	4.0	6.0
AO528c	137	n.e.	n.e.	18	53	52	¼	Yes	Scabrid margin composed of mixed types of papillae: short knobby papillae (75–100 long) and cylindrical to finger-shaped papillae (250). Distribution of papillae	F	150–250	Dark purple (4)	4.5	2	Obtuse	C	A + B	x2.2	x1.5	Fully exerted by 2–3mm	n.e.	n.e.	n.e.
AO528d	177	n.e.	n.e.	25	67	65	¼ – ¾	Yes	Scabrid margin composed of mixed types of papillae: short knobby papillae (75–100 long) and cylindrical to finger-shaped papillae (250). Distribution of papillae	F	100–250	Dark purple (4)	4.5	2	Obtuse	C	A	n.e.	n.e.	Fully exerted by 2–3mm	n.e.	n.e.	n.e.
AO528e	107	n.e.	n.e.	26	47	43	-	Yes	Scabrid margin composed of mixed types of papillae: short knobby papillae (75–100 long) and cylindrical to finger-shaped papillae (250). Distribution of papillae	F	75–200	Dark purple (4)	4.5	2	Obtuse	C	A	n.e.	n.e.	Fully exerted by 2–3mm	Mixed shapes (Type C)	12.0	14.0
AO529a	86	n.e.	n.e.	14	52	43	-	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	50	Pink	4	2	Obtuse	A	A	x2	x4	Fully exerted	n.e.	n.e.	n.e.
AO529b	53	n.e.	n.e.	6	45	33	¼	No	Smooth, margin a narrow hyaline lining	A		Pink	5	2	Obtuse	A	A	x2	x4	Included or partially exerted	Helmet or subspherical (Type A)	4.0	5.0
AO529c	91	n.e.	n.e.	11	61	62	¼	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pink	4	2	Obtuse	A	A	x2	x4	Included or partially exerted	n.e.	n.e.	n.e.
AO529d	52	n.e.	n.e.	5	45	40	½ – ¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	50–75	Pink	5	2	Obtuse	A	A	x2	x4	Included or partially exerted	Helmet or subspherical (Type A)	4.0	5.5
AO602a	99	n.e.	n.e.	20.5	52	56	½ – ¾	No	Smooth, margin a narrow hyaline lining	A		Pink	5	2	Obtuse	A	A	x2	x3	Included or partially exerted	n.e.	n.e.	n.e.
AO602b	58	n.e.	n.e.	7	36	38	½ – ¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pink	4	2	Obtuse	A	A	x2	x4	Included or partially exerted	Helmet or subspherical (Type A)	n.e.	8.0
AO602c	63	n.e.	n.e.	6	31	22	-	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pink	4	2	Subacute	A	A	x1.5	x4	Included or partially exerted	n.e.	n.e.	n.e.
AO604a	27	n.e.	n.e.	0	24	21	¼	No	Leaf not available	-		Pink	4	2	Obtuse	A	A	x2	x4	Included or partially exerted	n.e.	n.e.	n.e.
AO604b	46	n.e.	n.e.	6	28	31	¼	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	75	Pink	4	2	Obtuse	A	A	x2	x4	Included	n.e.	n.e.	n.e.
AO605a	25	n.e.	n.e.	5	13	11	¼	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pink	3.5	2	Obtuse	A	A	x2	x4	Included or partially exerted	n.e.	n.e.	n.e.
AO605b	32	n.e.	n.e.	4	18	26	½ – ¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pink	4	2	Subacute	A	A	x1.5	x4	Included or partially exerted	n.e.	n.e.	n.e.
AO607a	60	n.e.	n.e.	10	45	32	¼	No	Smooth, margin a narrow hyaline lining	A		Pink	5	2	Obtuse	A	A	x1.5	x4	Included or partially exerted	n.e.	n.e.	n.e.
AO607b	50	n.e.	n.e.	8	45	36	¼	No	Smooth or subcrenulate with flattened, weathered papillae	B		Very pale pink	4.5	2	Obtuse	A	A	x0.75	x1.5	Included or partially exerted	Helmet or subspherical (Type A)	n.e.	6.0
AO616a	68	n.e.	n.e.	12	43	37	¼	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pink	4.5	2	Obtuse	A	A	x1.5	x4	Included or partially exerted	n.e.	n.e.	n.e.

AO617a	38	n.e.	n.e.	5	35	29	½ – ¾	No	Smooth, margin a narrow hyaline lining	A		Pink	4	2	Obtuse	A	A	x1.5	x4	Included or partially exerted	n.e.	n.e.	n.e.
AO617b	181	n.e.	n.e.	24	91	77	¼-¾	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	n.e.	Light violet	4	2	Obtuse	A	A	n.e.	n.e.	Fully exerted	Helmet or subspherical (Type A)	n.e.	12.5
AO617c	163	n.e.	n.e.	18	70	75	¼-¾	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	n.e.	Light violet	4	2	Obtuse	A	A	n.e.	n.e.	Fully exerted	n.e.	n.e.	n.e.
BS502a	35	Maroon	38	9	23	26	¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	75–100	White (0)	4	2	Obtuse	A	A	x2.5	x3	Included or partially exerted	Helmet or subspherical (Type A)	6.0	7.0
BS502b	82	Maroon, turning green towards the	30	14	49	55	¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Lilac-white (1)	4.5	2	Obtuse (to almost truncate) with	A	A	x2.2	x2	Included or partially exerted	Helmet or subspherical (Type A)	10.0	11.0
BS502c	46	Maroon	n.e.	6	26	29	¾	No	Smooth, margin a narrow hyaline lining	A		Pale Purple (2)	4.5	2	Obtuse to almost truncate.	A	A	x2	x2	Included or partially exerted	n.e.	n.e.	n.e.
BS502d	42	Maroon	n.e.	12	30	35	¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	75–100	Lilac-white (1)	5	2	Obtuse with a short blunt subcuspidate	A	A	x2.5	x3.2	Included or partially exerted	Helmet or subspherical (Type A)	7.0	8.0
BS502e	65	Maroon	n.e.	12	47	50	¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	75	Lilac-white (1)	4.5	2	Obtuse with a short blunt subcuspidate	A	A	x2	x2	Included or partially exerted	Helmet or subspherical (Type A)	n.e.	n.e.
BS502f	28	Maroon	n.e.	10	20	20	¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	50	Lilac-white (1)	4.5	2	Subacute	A	A	x2	x1.8	Included or partially exerted	n.e.	n.e.	n.e.
BS504a	65	Maroon	n.e.	10	25	35	½ – ¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Lilac-white (1)	4.5	2	Subacute to obtuse	A	A	x3	x2.5	Included or partially exerted	Helmet or subspherical (Type A)	8.5	10.0
BS504b	75	Maroon	n.e.	10.5	39	45	½ – ¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	50–75	Lilac-white (1)	4.5	2	Subacute to obtuse	A	A	x2.5	x2.2	Included or partially exerted	n.e.	9.0	10.0
BS505a	50	Maroon	n.e.	8.5	25	34	½ – ¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Lilac-white (1)	4.5	2	Subacute	A	A	x2	x2.5	Included or partially exerted	Helmet or subspherical (Type A)	7.5	8.5
BS505b	35	Maroon	n.e.	7	22	28	½ – ¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Lilac-white (1)	4	2	Subacute	A	A	x1.8	x2	Included or partially exerted	Helmet or subspherical (Type A)	6.5	7.0
BS506a	105	Maroon	55	17	60	66	¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	75–100	Lilac-white (1)	4.5	2	Obtuse ending with a small pointed	A	A	x2	x2.2	Included or partially exerted	Helmet or subspherical (Type A)	11.0	11.5
BS512a	32	Maroon	n.e.	5	20	24	¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Lilac (2)	4	2	Obtuse	A	A	x2	x3.5	Included or partially exerted	Helmet or subspherical (Type A)	4.5	5.0
BS512b	30	Maroon, turning green towards the	n.e.	5	15	24	¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Purple (3)	4.5	2	Acute	A	A	x2.5	x3.5	Included	Helmet or subspherical (Type A)	5.0	6.0
BS512c	27	Maroon	n.e.	5	16	25	¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Purple (3)	5	2	Acute	A	A	x2	x3	Included or partially exerted	Helmet or subspherical (Type A)	5.0	6.0
BS513a	67	Maroon, turning green towards the	n.e.	9	26	37	¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Lilac (2)	4.5	2	Acute	A	A	x2.5	x3	Included or partially exerted	Helmet or subspherical (Type A)	8.0	10.0
BS513b	30	Maroon	25	4	17	18	¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		White (0)	4	2	Sub-acute	A	A	x2.5	x3	Included or partially exerted	Helmet or subspherical (Type A)	4.0	5.0
BS513c	28	Maroon	n.e.	6	27	28	¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Lilac-White (1)	4.5	2	Obtuse ending with a small pointed	A	A	x2	x2.2	Included or partially exerted	Helmet or subspherical (Type A)	10.0	11.0
BS514a	35	Maroon	n.e.	5	20	24	¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	50–75	Lilac-White (1)	4	2	Obtuse ending with a small pointed	A	A	x2.2	x3	Included	Helmet or subspherical (Type A)	5.5	7.0
BS514b	70	Maroon	n.e.	13	52	58	¾	No	Smooth, margin a narrow hyaline lining	A		Pale purple-mauve (2)	5	2	Subacute	A	A	x2	x3	Included or partially exerted	Helmet or subspherical (Type A)	10.0	11.0
BS515a	25	Maroon	n.e.	3	19	20	¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	50	White (0)	5	2	Subacute, some ending with a very	A	A	x2.5	x2.5	Included or partially exerted	Helmet or subspherical (Type A)	n.e.	n.e.
BS515b	72	Maroon	28	13	36	41	½ – ¾	No	Smooth, margin a narrow hyaline lining	A		Light purple (2)	4.5	2.2	Obtuse (to almost truncate)	A	A	x2.2	x2.2	Included or partially exerted	n.e.	n.e.	n.e.
BS515c	85	Maroon	25	16	46	47	¾	No	Smooth, margin a narrow hyaline lining	A		Lilac (1)	4.5	2	Obtuse to subacute	A	A	x2	x2.5	Included or partially exerted	n.e.	n.e.	n.e.
BS518a	100	Maroon	n.e.	14	63	60	½ – ¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Purple (3)	4.5	2	Obtuse	A	A	x3.0	x2.2	Included or partially exerted	Helmet or subspherical (Type A)	10.0	11.0
BS518b	80	Maroon	n.e.	10	41	45	¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pale purple (2)	5	2	Obtuse with a short mucronate	A	A	x2.5	x2.5	Included or partially exerted	Helmet or subspherical (Type A)	8.0	9.0
BS520a	80	Maroon	n.e.	18	32	38	½ – ¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pale purple (2)	4.5	2	Acute	A	A	x3.0	x2.5	Included or partially exerted	n.e.	n.e.	n.e.
BS520b	85	Maroon	45	12	42	42	½ – ¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	75	Pale purple (2)	4	2	Subacute with a mucronate tip	A	A	x1.8	x2.2	Included or partially exerted	Helmet or subspherical (Type A)	9.0	10.0

BS520c	75	Maroon	n.e.	8	29	30	½ – ¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pale purple (2)	4	1.8	Subacute	A	A	x2	x2.5	Included or partially exerted	Helmet or subspherical (Type A)	6.5	7.0
BS520d	22	Maroon	50	3	16	18	¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	50	Lilac-white (1)	4	2	Subacute	A	A	x1.8	x2.0	Included or partially exerted	Helmet or subspherical (Type A)	5.0	6.0
BS520e	55	Maroon	n.e.	6	19	19	¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	50–75	Pale purple (2)	4	1.8	Acute	A	A	x3.5	x2.5	Included or partially exerted	Helmet or subspherical (Type A)	6.0	7.5
BS520f	82	Maroon	n.e.	10	36	42	¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	50–75	Pale purple (2)	5	2	Obtuse with a mucronate tip	A	A	x3	x2.5	Included	Helmet or subspherical (Type A)	10.0	11.0
BS520g	16	Maroon, turning green towards the apex	n.e.	2	10	11	¾	No	Smooth, margin a narrow hyaline lining	A		Pale purple (2)	4	2	Subacute	A	A	x3	x2.5	Included	n.e.	n.e.	n.e.
BS523a	45	Maroon	45	8	31	36	¾	No	Smooth, margin a narrow hyaline lining	A		Purple (3)	4.5	2	Obtuse-truncate	A	A	x3	x2.2	Included or partially exerted	Helmet or subspherical (Type A)	10.0	11.5
BS527a	55	Maroon	n.e.	7	35	32	¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Pale purple (2)	4.5	2	Subacute	A	A	x2	x2.8	Included or partially exerted	Helmet or subspherical (Type A)	9.0	10.0
BS527b	27	Pale green becoming maroon at the apex	32	9	25	22	¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	75	Lilac (1)	4	2	Obtuse to sub-truncate	A	A	x2	x3.0	Included or partially exerted	Helmet or subspherical (Type A)	6.0	7.0
BS528a	37	Maroon	32	6	28	31	¾	No	Smooth or subcrenulate with flattened, weathered papillae	B		Lilac (1)	4	2	Subacute	A	A	x2	x3.2	Included or partially exerted	n.e.	n.e.	n.e.
BS601a	17	Maroon	n.e.	4	18	15	¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	50	Lilac (1)	4	2	Obtuse	A	A	x2	x3	Included or partially exerted	n.e.	n.e.	n.e.
BS601b	26	Maroon	30	6	25	28	½ - ¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	50	Pale purple (2)	4.5	2	Obtuse	A	A	x1.8	x2.5	Included or partially exerted	n.e.	n.e.	n.e.
BS601c	85	Maroon	30	15	50	52	¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	50	Lilac (1)	4.5	2	Obtuse	A	A	x2	x3	Included or partially exerted	Helmet or subspherical (Type A)	n.e.	n.e.
BS601d	25	Maroon, green towards the apex	20	7	22	25	¾	No	Smooth	A		Lilac (1)	4	2	Obtuse with a short blunt tip	A	A	x2	x2.2	Included or partially exerted	Helmet or subspherical (Type A)	6.0	7.0
BS603a	75	n.e.	n.e.	45	55	62	¾	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	G	n.e.	Dark purple (4)	5.5	2.5	Acute to sub-acute	D	A	x1.5	x0.8 to x1.0 (lamina ≤ than cusp)	Fully exerted by >2mm	Hemispherical to helmet shape with short cuspidate ends.	18.0	20.0
BS603b	95	n.e.	n.e.	42	78	82	¾	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	n.e.	n.e.	Purple (3)	5.5	2.5	Subacute with a small blunt tip.	D	A	x1.5	x0.8 to x1.0 (lamina ≤ than cusp)	Fully exerted by >2mm	Hemispherical to helmet shape with short cuspidate ends.	22.0	25.0
BS603c	74	n.e.	n.e.	28	40	48	¾	Yes	Denticulate-hairy margin formed by flattened, finger-shaped papillae (300-350 long), with obtuse, non-swollen tips and slightly broad bases.	G	300–350	Purple (3)	5.5	2.8	Subacute	D	A	x1.5	x1 - x1.2	Fully exerted by >2mm	Hemispherical to helmet shape with short cuspidate ends.	17.0	19.0
BS603d	95	n.e.	n.e.	37	61	55	¾	Yes	Denticulate-hairy margin formed by flattened, finger-shaped papillae up to 350 long), with obtuse, non-swollen tips and slightly broad bases.	G	275–350	Purple (3)	5	2.5	Subacute	D	A	x1.8	x1 - x1.2	Fully exerted by >2mm	Hemispherical to helmet shape with short cuspidate ends.	21.0	24.0
BS606a	180	Membranous, pale green	42	31	68	77	¾	Yes	Scabrid margin composed of mixed types of papillae: short knobby papillae (75–100 long) and cylindrical to finger-shaped papillae (250). Distribution of papillae	F	75–250	Dark purple (4)	4	2	Obtuse	C	A	x2.2	x1.8	Fully exerted by 2–3mm	Mixed shapes (Type C)	14.0	17.0
BS606b	30	Maroon, green towards the apex	n.e.	5	24	26	¾	No	Scabrid margin composed of mixed types of papillae: short knobby papillae (75–100 long) and cylindrical to finger-shaped papillae (250). Distribution of papillae	F	75–250	White (0)	4.5	2	Subacute	A	A	x2.0	x3.0	Partially exerted (0.5–1.0mm)	Helmet or subspherical (Type A)	7.0	8.0
BS606c	80	n.e.	n.e.	12	41	47	½ – ¾	Yes	Scabrid margin composed of mixed types of papillae: short knobby papillae (75–100 long) and cylindrical to finger-shaped papillae (250). Distribution of papillae	F	125–250	Dark purple (4)	4	2	Obtuse, sometimes with a tiny,	B-C	A + B	x2.2	x1.5	Fully exerted by 2–3mm	Mixed shapes (Type C)	12.0	13.0
BS606d	71	n.e.	n.e.	19	45	46	¾	Yes	Scabrid margin composed of mixed types of papillae: short knobby papillae (75–100 long) and cylindrical to finger-shaped papillae (250). Distribution of papillae	G	275–350	Pale purple (2)	4.5	2	Acute to Subacute	D	A	x3.0	x1.5	Fully exerted by >2mm	Hemispherical to helmet shape with short cuspidate ends.	11.0	12.0
BS606e	95	n.e.	n.e.	20	56	58	¾	Yes	Scabrid margin composed of mixed types of papillae: short knobby papillae (75–100 long) and cylindrical to finger-shaped papillae (250). Distribution of papillae	G	300–400	Pale purple (2)	5	2.5	Subacute	D	A	x3.0	x1 - x1.2	Fully exerted by >2mm	Hemispherical to helmet shape with short cuspidate ends.	13.0	15.0
BS606f	138	Membranous, pale green	n.e.	19	67	67	¾	Yes	Scabrid margin composed of mixed types of papillae: short knobby papillae (75–100 long) and cylindrical to finger-shaped papillae (250). Distribution of papillae	F	200–250	Dark purple (4)	4	2.5	Subacute	C	A	x2.5	x1.5	Fully exerted (> 2mm)	Mixed shapes (Type C)	13.0	14.0
BS606g	48	Maroon	n.e.	6	28	32	¾	No	Scabridulous by minute papillae on the terminal part of young leaves, sometimes in an irregular or patchy distribution	C	50	Lilac (1)	4.5	2.5	Obtuse	A	A	x2.0	x2.0	Partially exerted (0.5–1.0mm)	Helmet or subspherical (Type A)	8.0	10.0
BS609a	160	Membranous, pale green	n.e.	26	48	52	¾	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Dark purple (4)	4.5	2	Variable, subacute to acute	B	C	x2.8	x1.2	Fully exerted (> 2mm)	Mixed shapes (Type C)	14.0	16.0
BS609b	142	Membranous, pale green	n.e.	29	45	48	¾	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Dark purple (4)	5	2.5	Acute	B	C	x2.8	x1	Fully exerted (> 2mm)	Mixed shapes (Type C)	n.e.	n.e.
BS609c	118	Membranous, pale green	75	20	40	44	¾	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Dark purple (4)	4.2	2.5	Obtuse	B	C	x3.2	x1.1	Fully exerted (> 2mm)	Mixed shapes (Type C)	13.0	15.0
BS612a	160	Membranous, pale green	45	24	85	90	¾	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	175–225	Dark purple (4)	4.2	2.5	Acute to subacute	B	C	x2.5	x1.2	Fully exerted (> 2mm)	Mixed shapes (Type C)	10.0	13.0
BS612b	110	Membranous, pale green	n.e.	33	60	65	¾	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	200–250	Dark purple (4)	4	2.2	Acute to subacute	B	C	x2.5	x1.1	Fully exerted (> 2mm)	Mixed shapes (Type C)	9.0	13.0

BS612c	145	Membranous, pale green	55	33	80	82	½	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	E	225–250	Dark purple (4)	4.5	2.2	Obtuse	B	C	x2.4	x1.16	Fully exserted (> 2mm)	Mixed shapes (Type C)	11.0	12.5
BS627a	80	Membranous, pale green	35	14	40	42	½ – ¾	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	D	175–225	Pale mauve-purple (2)	4.5	2.5	Obtuse	B	D	x2	x1.4	Fully exserted (> 2mm)	Flattened, ovoid plano-convex, distinctly acuminate. (Type B)	12.0	15.0
BS627b	75	Membranous, pale green	40	13	38	45	¾	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	D	150–200	Pale mauve-purple (2)	5	2.5	Obtuse	B	D	x2	x1.2	Fully exserted (> 2mm)	Flattened, ovoid plano-convex, distinctly acuminate. (Type B)	12.0	14.0
BS627c	60	Membranous, pale green	18	12	32	34	½ – ¾	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	D	150–200	Purple (3)	4.5	2.5	Obtuse to subacute	B	D	x1.8	x1.1	Fully exserted (> 2mm)	Flattened, ovoid plano-convex, distinctly acuminate. (Type B)	10.0	12.0
BS627d	70	Membranous, pale green	50	13	42	40	½ – ¾	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	D	150–225	Pale mauve-purple (2)	4	2.5	Obtuse	B	D	x2.2	x1.1	Fully exserted (> 2mm)	Flattened, ovoid plano-convex, distinctly acuminate. (Type B)	14.0	18.0
BS627f	75	Membranous, pale green	45	15	45	45	½ – ¾	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	D	175–250	Pale mauve-purple (2)	4	2	Obtuse	B	D	x2	x1.2	Fully exserted (> 2mm)	Flattened, ovoid plano-convex, distinctly acuminate. (Type B)	11.0	14.0
BS628a	120	Membranous, pale green	35	24	72	82	¾	Yes	Denticulate-scabrid with distinct papillae visible by the naked eye along entire margin	D	150–225	Pale Purple (2)	4.5	2.5	Obtuse	B	D	x2.2	x1.2	Fully exserted (> 2mm)	Flattened, ovoid plano-convex, distinctly acuminate. (Type B)	13.0	19.0
BS628b	75	Maroon	25	9	35	35	¾	No	Smooth or subcrenulate with flattened, weathered papillae	B	n.e.	n.e.	5	2	Acute to subacute (dried tepals)	A	A	n.e.	n.e.	n.e.	Helmet to subspherical (Type A)	9.0	9.0
BS628c	75	Maroon	n.e.	8	38	36	¾	No	Smooth or subcrenulate with flattened, weathered papillae	B	n.e.	n.e.	4.5	2	subacute with a tiny cuspidate tip	A	A	n.e.	n.e.	n.e.	Helmet to subspherical (Type A)	11.0	12.0
BS628d	120	n.e.	n.e.	18	55	58	¾	Yes	Dispersed small papillae in different sizes, many worn out in lower leaves or proximal parts of upper leaves, 50-150um long, hemispherical or teat-shaped.	n.e.	n.e.	n.e.	4.5	2	Subacute (dried tepals)	C-D	A	n.e.	n.e.	n.e.	Mixed shapes (Type C)	12.0	15.0
CO517a	35	Maroon	n.e.	9	24	21	¾	No	Smooth, margin a narrow hyaline lining	A	n.e.	Lilac (1)	4	2	Subacute	A	A	x 2	x 2.5	Partially exserted	n.e.	n/a	n/a
CO517b	42	Maroon	n.e.	6	31	40	¾	No	Smooth or subcrenulate with flattened, weathered papillae	B	n.e.	Lilac (1)	4	2	Subacute	A	A	x2	x2.5	Partially exserted	Helmet or subspherical (Type A)	8.0	8.0
CO517c	68	Maroon	n.e.	10	38	46	¾	No	Smooth, margin a narrow hyaline lining	A	n.e.	Lilac (1)	4	2	Subacute	A	A	x2	x2.5	Partially exserted	Helmet or subspherical (Type A)	7.0	7.5
CO524a	55	Maroon	n.e.	7	25	30	¾	No	Smooth, margin a narrow hyaline lining	A	n.e.	Lilac (1)	4.5	2	Subacute	A	A	x2	x2.5	Included	Helmet or subspherical (Type A)	9.5	10.0
CS625a	120	Membranous, pale green	160	30	43	50	¾	Yes	Distinct compressed subspherical papillae throughout the entire margin, homogenous	D	125–150	White (0)	4.5	2.5	Obtuse	B	D	x3.3	x1.8	Fully exserted (> 2mm)	Flattened, ovoid plano-convex, long acuminate. (Type B)	20.0	34.0
CS625b	90	Membranous, pale green	120	33	46	55	½ – ¾	Yes	Distinct compressed subspherical papillae throughout the entire margin, widely spaced, homogenous	D	150	White (0)	4	2.5	Obtuse	B	D	x3	x2	Fully exserted (> 2mm)	Flattened, ovoid plano-convex, long acuminate. (Type B)	24.0	32.0
CS625c	100	Membranous, pale green	120	29	52	63	¾	Yes	Distinct compressed subspherical papillae throughout the entire margin, homogenous	D	150–175	White (0)	4	2	Obtuse	B	D	x3.5	x1.6	Fully exserted (> 2mm)	Flattened, ovoid plano-convex, long acuminate. (Type B)	20.0	32.0
CS625d	110	Membranous, pale green	180	27	45	47	½ – ¾	Yes	Distinct compressed subspherical papillae throughout the entire margin, homogenous	D	100-125	White (0)	4.5	2.5	Subacute (blunt)	B	D	x3.2	x2	Fully exserted (> 2mm)	Flattened, ovoid plano-convex, long acuminate. (Type B)	25.0	40.0
CS625e	90	Membranous, pale green	100	28	45	55	¾ – ¾	Yes	Distinct compressed subspherical papillae throughout the entire margin, widely spaced, homogenous	D	125–175	White (0)	4.5	2.5	Subacute (blunt)	B	D	x3.0	x1.9	Fully exserted (> 2mm)	Flattened, ovoid plano-convex, long acuminate. (Type B)	27.0	35.0
CS625f	60	Membranous, pale green	140	22	35	38	¾	Yes	Distinct compressed subspherical papillae throughout the entire margin, homogenous	D	150	White (0)	4.5	2	Obtuse	B	D	n.e.	n.e.	Fully exserted (> 2mm)	Flattened, ovoid plano-convex, long acuminate. (Type B)	19.0	26.0
CS625g	150	Membranous, pale green	160	38	70	60	¾	Yes	Distinct compressed subspherical papillae throughout the entire margin, homogenous	D	150	White (0)	5	3	Obtuse	B	D	n.e.	n.e.	Fully exserted (> 2mm)	Flattened, ovoid plano-convex, long acuminate. (Type B)	28.0	38.0