

Supplementary Material

Evolution of intraspecific floral variation in a generalist-specialist pollination system

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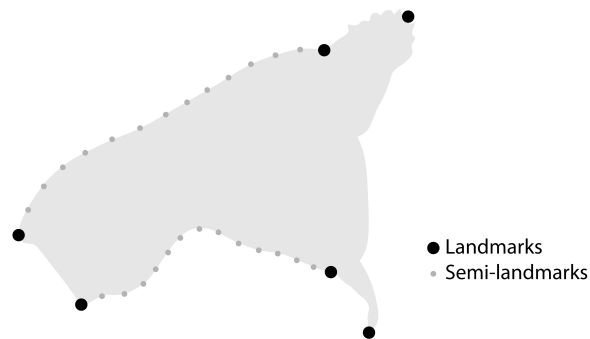


Figure S1: Landmarks (6 large dots) and sliding semi-landmarks (26 small dots) placement to characterise floral shape profiles. Landmarks are placed at the tip of the dorsal and ventral petals, at the intersection between the free and fused parts of the corolla, and at the base of the corolla. Sliding semi-landmarks are placed along the curves of the fused portion of the corolla tube (base of corolla lobes), dorsally and ventrally respectively.

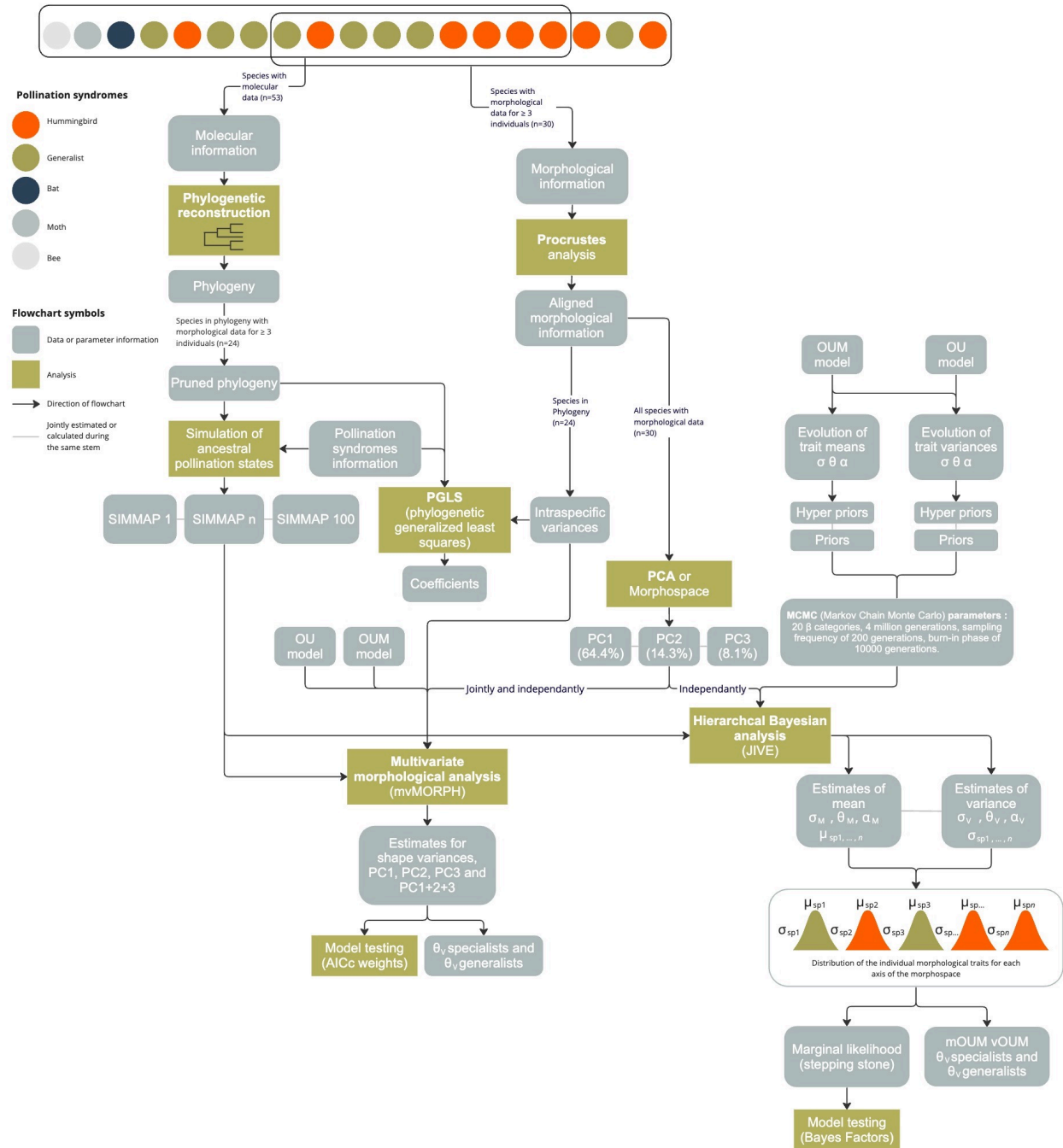






Figure S2: Methods flowchart. Individual flowers and their pollination syndromes are represented at the top of the chart. Downstream analyses are then represented by green squares, and information (molecular, morphological, results, models of evolution, and their parameter values) are represented by grey squares.

Table S1: Number of profiles per species to characterise intraspecific floral shape. Confirmed pollination syndromes are indicated in darker colours and inferred pollination syndromes are indicated in lighter colours: in orange for specialists for hummingbirds and green for mixed-pollination syndrome. Confirmed specialist for hummingbirds syndrome , inferred specialist for hummingbirds syndrome , confirmed mixed-pollination syndrome , inferred mixed-pollination syndrome .































Species	Sample size	Present in phylogeny
 <i>Gesneria acaulis</i> L.	5	Yes
 <i>Gesneria bicolor</i> (Rub.) Simon Joly & J.L.Clark	25	Yes
 <i>Gesneria bracteosa</i> Urb.	4	Yes
 <i>Gesneria citrina</i> Urb.	9	Yes
 <i>Gesneria cuneifolia</i> (DC.) Fritsch	13	Yes
 <i>Gesneria duchartreoides</i> (C. Wright) Urb.	5	No
 <i>Gesneria ekmanii</i> Urb.	4	Yes
 <i>Gesneria flava</i> Lambert, Simon Joly & J.L.Clark	3	Yes
 <i>Gesneria glandulosa</i> (Griseb.) Urb.	9	No
 <i>Gesneria harrisii</i> Urb.	3	No
 <i>Gesneria libanensis</i> Linden ex C. Morren	4	No
 <i>Gesneria nipensis</i> Britton & P. Wilson	3	Yes
 <i>Gesneria pedicellaris</i> Alain	10	Yes
 <i>Gesneria purpurascens</i> Urb.	4	Yes
 <i>Gesneria reticulata</i> (Griseb.) Urb	10	Yes
 <i>Gesneria salicifolia</i> (Griseb.) Urb.	30	Yes
 <i>Gesneria sintenisii</i> Urb.	21	Yes
 <i>Gesneria ventricosa</i> Sw.	8	Yes
 <i>Gesneria viridiflora</i> (Decne.) Kuntze	8	Yes
 <i>Gesneria viridiflora</i> (Decne.) Kuntze subsp. <i>acrochordonanthe</i> L.E.Skog	3	No
 <i>Rhytidophyllum auriculatum</i> Hook.	14	Yes
 <i>Rhytidophyllum berterioanum</i> Mart.	3	Yes
 <i>Rhytidophyllum crenulatum</i> DC.	4	Yes
 <i>Rhytidophyllum exsertum</i> Griseb.	27	Yes
 <i>Rhytidophyllum grandiflorum</i> Xu & L.E.Skog ex Zanoni, & Jiménez Rodr.	3	Yes
 <i>Rhytidophyllum leucomallon</i> Hanst.	7	Yes
 <i>Rhytidophyllum lomense</i> (Urb.) C.V. Morton	4	No
 <i>Rhytidophyllum minus</i> Urb.	10	Yes
 <i>Rhytidophyllum rupincola</i> (Urb.) C.V. Morton	5	Yes
 <i>Rhytidophyllum tomentosum</i> (L.) Mart.	3	Yes

Table S2: Pollination syndrome information for *Gesneria* and *Rhytidophyllum* species

Genus	Species	Pollinator	Confirmed	Reference
<i>Gesneria</i>	<i>acaulis</i>	hummingbird	yes	(Martén-Rodríguez et al., 2009, 2010, 2015)
<i>Gesneria</i>	<i>bicolor</i>	mixed-pollination	yes	(Faure and Joly, 2020)
<i>Gesneria</i>	<i>bracteosa</i>	mixed-pollination	no	(Joly et al., 2018)
<i>Gesneria</i>	<i>citrina</i>	hummingbird	yes	(Martén-Rodríguez and Fenster, 2008; Martén-Rodríguez et al., 2009, 2010, 2015)
<i>Gesneria</i>	<i>cuneifolia</i>	hummingbird	yes	(Martén-Rodríguez and Fenster, 2008; Martén-Rodríguez et al., 2009, 2010, 2015)
<i>Gesneria</i>	<i>duchartreoides</i>	mixed-pollination	no	(Joly et al., 2018)
<i>Gesneria</i>	<i>ekmanii</i>	mixed-pollination	no	(Joly et al., 2018)
<i>Gesneria</i>	<i>flava</i>	mixed-pollination	no	
<i>Gesneria</i>	<i>glandulosa</i>	hummingbird	no	(Joly et al., 2018)
<i>Gesneria</i>	<i>harrisii</i>	hummingbird	no	(Joly et al., 2018)
<i>Gesneria</i>	<i>libanensis</i>	hummingbird	no	(Joly et al., 2018)
<i>Gesneria</i>	<i>nipensis</i>	hummingbird	no	(Joly et al., 2018)
<i>Gesneria</i>	<i>pedicellaris</i>	hummingbird	yes	(Martén-Rodríguez et al., 2009, 2010, 2015)
<i>Gesneria</i>	<i>purpurascens</i>	hummingbird	yes	(Martén-Rodríguez et al., 2015)
<i>Gesneria</i>	<i>reticulata</i>	hummingbird	yes	(Martén-Rodríguez and Fenster, 2008; Martén-Rodríguez et al., 2010, 2015)
<i>Gesneria</i>	<i>salicifolia</i>	hummingbird	no	(Joly et al., 2018)
<i>Gesneria</i>	<i>sintenisii</i>	mixed-pollination	yes	(Martén-Rodríguez and Fenster, 2008; Martén-Rodríguez et al., 2009, 2015)
<i>Gesneria</i>	<i>ventricosa</i>	hummingbird	yes	(Martén-Rodríguez et al., 2009, 2010, 2015)
<i>Gesneria</i>	<i>viridiflora</i> subsp. <i>viridiflora</i>	mixed-pollination	yes	(Martén-Rodríguez et al., 2010, 2015)
<i>Gesneria</i>	<i>viridiflora</i> subsp. <i>acrochordonanthe</i>	mixed-pollination	no	
<i>Rhytidophyllum</i>	<i>auriculatum</i>	mixed-pollination	yes	(Martén-Rodríguez et al., 2009, 2010)
<i>Rhytidophyllum</i>	<i>berteroanum</i>	hummingbird	yes	(Joly et al., 2018)
<i>Rhytidophyllum</i>	<i>crenulatum</i>	mixed-pollination	yes	(Martén-Rodríguez et al., 2010)
<i>Rhytidophyllum</i>	<i>exsertum</i>	mixed-pollination	yes	(Martén-Rodríguez et al., 2015)
<i>Rhytidophyllum</i>	<i>grandiflorum</i>	mixed-pollination	yes	(Martén-Rodríguez et al., 2009, 2010, 2015)
<i>Rhytidophyllum</i>	<i>leucomallon</i>	mixed-pollination	yes	(Martén-Rodríguez et al., 2009, 2010, 2015)
<i>Rhytidophyllum</i>	<i>lomense</i>	hummingbird	no	(Joly et al., 2018)
<i>Rhytidophyllum</i>	<i>minus</i>	mixed-pollination	yes	(Martén-Rodríguez et al., 2009, 2015; Joly et al., 2018)
<i>Rhytidophyllum</i>	<i>rupincola</i>	hummingbird	yes	(Martén-Rodríguez et al., 2010)
<i>Rhytidophyllum</i>	<i>tomentosum</i>	mixed-pollination	yes	(Martén-Rodríguez et al., 2010)

Table S3: Images of flower profiles information and their attributions. The new images added to the data set of Joly et al. (2018) are marked in the last column with a no.

Species	File name	Attribution	In Joly et al. (2018)
<i>Gesneria acaulis</i>	GES_acaulis_APR72R1_13.jpg		yes
<i>Gesneria acaulis</i>	GES_acaulis_G877_G940_G1238-1.jpg		yes
<i>Gesneria acaulis</i>	GES_acaulis_JLC_11303_02.jpg	John L. Clark	yes
<i>Gesneria acaulis</i>	GES_acaulis_MartenRodriguez_Cuba_sn_indiv.bas.jpg	Silvana Marten-Rodriguez	yes
<i>Gesneria acaulis</i>	GES_acaulis_side_JLC_14532_07.jpg	John L. Clark	no
<i>Gesneria bicolor</i>	RHY_bicolor_2014-001.jpg	Francois Lambert	yes
<i>Gesneria bicolor</i>	RHY_bicolor_JLC_14321_109.jpg	John L. Clark	yes
<i>Gesneria bicolor</i>	RHY_bicolor_JLC_14364_05.jpg	John L. Clark	yes
<i>Gesneria bicolor</i>	RHY_bicolor_JLC_14493_07.jpg	John L. Clark	yes
<i>Gesneria bicolor</i>	RHY_bicolor_side_JLC_14370_10.jpg	John L. Clark	no
<i>Gesneria bicolor</i>	RHY_bicolor_side_JLC_14494_19.jpg	John L. Clark	no
<i>Gesneria bicolor</i>	RHY_bicolor-1_side_img5627.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-10_side_img5662.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-11_side_img5667.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-12_side_img5670.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-13_side_img5678.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-14_side_img5687.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-15-1_side_img5691.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-15-2_side_img5695.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-2_side_img5630.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-3_side_img5634.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-4_side_img5637.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-6_side_img5640.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-7_side_img5648.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-8_side_img5654.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-9_side_img5658.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-grande_Joly_27janv2018-1_side_img5914.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-grande_Joly_27janv2018-2_side_img5916.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-grande_Joly_sn_25janv2018_side_img5842.jpg	Simon Joly	no
<i>Gesneria bicolor</i>	RHY_bicolor-grande_Joly1116-1_img5586.jpg	Simon Joly	no

<i>Gesneria bracteosa</i>	GES_bracteosa_JLC_10567_53.jpg	John L. Clark	yes
<i>Gesneria bracteosa</i>	GES_bracteosa_side_JLC_15442_007.jpg	John L. Clark	no
<i>Gesneria bracteosa</i>	GES_bracteosa_side_JLC_15468_12.jpg	John L. Clark	no
<i>Gesneria bracteosa</i>	GES_bracteosa_side_JLC_15500_27.jpg	John L. Clark	no
<i>Gesneria citrina</i>	GES_citrina_G888_Dec_1965_1.jpg		yes
<i>Gesneria citrina</i>	GES_citrina_IMG_5510_side_PuertoRico.Lambert.jpg	François Lambert	no
<i>Gesneria citrina</i>	GES_citrina_IMG_5532_side_PuertoRico.Lambert.jpg	François Lambert	no
<i>Gesneria citrina</i>	GES_citrina_JLC_10021_07.jpg	John L. Clark	yes
<i>Gesneria citrina</i>	GES_citrina_MartenRodriguez_PuertoRico.sn.jpg	Silvana Marten-Rodriguez	no
<i>Gesneria citrina</i>	GES_citrina_MarteRodriguez_Puerto-Rico_DSC0530.jpg	Silvana Marten-Rodriguez	no
<i>Gesneria citrina</i>	GES_citrina_MarteRodriguez_Puerto-Rico_sn3.jpg	Silvana Marten-Rodriguez	no
<i>Gesneria citrina</i>	GES_citrina_Puerto_Rico_1965_Talpey_SN_01.jpg	Thomas E. Talpey	NA
<i>Gesneria citrina</i>	GES_citrina_urban_2.jpg		no
<i>Gesneria cuneifolia</i>	GES_cuneifolia_APR_72R9_1.jpg		yes
<i>Gesneria cuneifolia</i>	GES_cuneifolia_Cornell_857_Florida_Talpey_SN_01.jpg	Thomas E. Talpey	NA
<i>Gesneria cuneifolia</i>	GES_cuneifolia_Dunn_1.jpg		yes
<i>Gesneria cuneifolia</i>	GES_cuneifolia_G784_G857_1.jpg		yes
<i>Gesneria cuneifolia</i>	GES_cuneifolia_G857_Puerto_Rico_Talpey_1965_2.jpg	Thomas E. Talpey	yes
<i>Gesneria cuneifolia</i>	GES_cuneifolia_G869_G857_G763_1.jpg		yes
<i>Gesneria cuneifolia</i>	GES_cuneifolia_G869_Puerto_Rico_1963_Talpey_10.5_BH.4.jpg	Thomas E. Talpey	yes
<i>Gesneria cuneifolia</i>	GES_cuneifolia_iNaturalist_150193941.jpeg	iNaturalist ©jingyilu	no
<i>Gesneria cuneifolia</i>	GES_cuneifolia_JBM.jpg	Etienne Leveille-Bourret	yes
<i>Gesneria cuneifolia</i>	GES_cuneifolia_july_1980_1.jpg		yes
<i>Gesneria cuneifolia</i>	GES_cuneifolia_Quebradillas_Talpey_1.jpg	Thomas E. Talpey	no
<i>Gesneria cuneifolia</i>	GES_cuneifolia_USBRG_1997_200_2.jpg	US Botanical Research Gardens	no
<i>Gesneria cuneifolia</i>	GES_cuneifolia_USBRG_85_116_4.jpg	US Botanical Research Gardens	no
<i>Gesneria duchartreoides</i>	GES_duchartreoides_JLC_12791_067.jpg	John L. Clark	yes
<i>Gesneria duchartreoides</i>	GES_duchartreoides_side_JLC_15964_07.jpg	John L. Clark	no
<i>Gesneria duchartreoides</i>	GES_duchartreoides_side_JLC_15973_092.jpg	John L. Clark	no
<i>Gesneria duchartreoides</i>	GES_duchartreoides_JLC_14576_68.jpg	John L. Clark	no
<i>Gesneria duchartreoides</i>	GES_duchartreoides_JLC_15034_64.jpg	John L. Clark	no
<i>Gesneria ekmanii</i>	GES_ekmanii_JLC_14525_21.jpg	John L. Clark	no
<i>Gesneria ekmanii</i>	GES_ekmanii_Lambert2014-024-3.jpg	Francois Lambert	no
<i>Gesneria ekmanii</i>	RHY_ekmanii_2014-020.jpg	Francois Lambert	yes

<i>Gesneria ekmanii</i>	RHY_ekmanii_2014-024.jpg	Francois Lambert	yes
<i>Gesneria flava</i>	RHY_espèce_nov_Macaya_side_JLC_14460_027.jpg	John L. Clark	no
<i>Gesneria flava</i>	RHY_espèce_nov_Macaya_side_JLC_14492_06.jpg	John L. Clark	no
<i>Gesneria flava</i>	RHY_nov.sp._2014-010.jpg	Francois Lambert	yes
<i>Gesneria glandulosa</i>	GES_glandulosa_JJLC_15063_21.jpg	John L. Clark	no
<i>Gesneria glandulosa</i>	GES_glandulosa_JLC_12772_023.jpg	John L. Clark	yes
<i>Gesneria glandulosa</i>	GES_glandulosa_JLC_14572_064.jpg	John L. Clark	no
<i>Gesneria glandulosa</i>	GES_glandulosa_side_01_1919_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria glandulosa</i>	GES_glandulosa_side_02_1924_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria glandulosa</i>	GES_glandulosa_side_03_1927_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria glandulosa</i>	GES_glandulosa_side_04_1929_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria glandulosa</i>	GES_glandulosa_side_05_1918_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria glandulosa</i>	GES_glandulosa_side_JLC_15961_069.jpg	John L. Clark	no
<i>Gesneria harrisii</i>	GES_harrisii_Jamaica_Guaco_Rock_3.jpg	Thomas E. Talpey	yes
<i>Gesneria harrisii</i>	GES_harrisii_Jamaica_Nov_05_1964_Talpey_19_Guaco_Rock_07.jpg	Thomas E. Talpey	no
<i>Gesneria harrisii</i>	GES_harrisii_Talpey_1964.jpg	Thomas E. Talpey	yes
<i>Gesneria libanensis</i>	GES_libanensis_JLC_10575_01.jpg	John L. Clark	no
<i>Gesneria libanensis</i>	GES_libanensis_JLC_15057_34.jpg	John L. Clark	no
<i>Gesneria libanensis</i>	GES_libanensis_side_JLC_15957_035.jpg	John L. Clark	no
<i>Gesneria libanensis</i>	GES_libanensis_side_JLC_15978_059.jpg	John L. Clark	no
<i>Gesneria lomensis</i>	RHY_lomense_side_JLC_10466_11.jpg	John L. Clark	no
<i>Gesneria lomensis</i>	RHY_lomensis_JLC_10469_23.jpg	John L. Clark	yes
<i>Gesneria lomensis</i>	RHY_lomensis_JLC_10470_24.jpg	John L. Clark	yes
<i>Gesneria lomensis</i>	RHY_lomensis_JLC_10471_01.jpg	John L. Clark	yes
<i>Gesneria nipensis</i>	GES_nipensis_JLC_10577_30.jpg	John L. Clark	yes
<i>Gesneria nipensis</i>	GES_nipensis_JLC_10578_05.jpg	John L. Clark	yes
<i>Gesneria nipensis</i>	GES_nipensis_side_JLC_15952_089.jpg	John L. Clark	no
<i>Gesneria pedicellaris</i>	GES_pedicellaris_1964_Dominican_Republic_Talpey_SN_01.jpg	Thomas E. Talpey	NA
<i>Gesneria pedicellaris</i>	GES_pedicellaris_405_1.jpg		no
<i>Gesneria pedicellaris</i>	GES_pedicellaris_dunn_1.jpg		no
<i>Gesneria pedicellaris</i>	GES_pedicellaris_G1364_2.jpg		no
<i>Gesneria pedicellaris</i>	GES_pedicellaris_G898_G883_G1231_1.jpg		yes
<i>Gesneria pedicellaris</i>	GES_pedicellaris_JBM.jpg	Etienne Leveille-Bourret	yes
<i>Gesneria pedicellaris</i>	GES_pedicellaris_JLC_10635_04_2.jpg	John L. Clark	no

<i>Gesneria pedicellaris</i>	GES_pedicellaris_JLC.11328_13.jpg	John L. Clark	yes
<i>Gesneria pedicellaris</i>	GES_pedicellaris_JLC.14536_14.jpg	John L. Clark	no
<i>Gesneria pedicellaris</i>	GES_pedicellaris_pauciflora_sacatilis_1.jpg		yes
<i>Gesneria purpurascens</i>	GES_purpurascens_JLC.10564_025.jpg	John L. Clark	no
<i>Gesneria purpurascens</i>	GES_purpurascens_JLC.12769_057.jpg	John L. Clark	no
<i>Gesneria purpurascens</i>	GES_purpurascens_JLC.15061_11.jpg	John L. Clark	no
<i>Gesneria purpurascens</i>	GES_purpurascens_side_JLC.15963_08.jpg	John L. Clark	no
<i>Gesneria reticulata</i>	GES_reticulata_dominicanrepublic_talpey_1972_1.jpg	Thomas E. Talpey	yes
<i>Gesneria reticulata</i>	GES_reticulata_G784_3.jpg		yes
<i>Gesneria reticulata</i>	GES_reticulata_IMG_5465_side_PuertoRico_Lambert.jpg	François Lambert	no
<i>Gesneria reticulata</i>	GES_reticulata_IMG_5470_side_PuertoRico_Lambert.jpg	François Lambert	no
<i>Gesneria reticulata</i>	GES_reticulata_IMG_5472_side_PuertoRico_Lambert.jpg	François Lambert	no
<i>Gesneria reticulata</i>	GES_reticulata_IMG_5480_side_PuertoRico_Lambert.jpg	François Lambert	no
<i>Gesneria reticulata</i>	GES_reticulata_JLC.13762_19.jpg	John L. Clark	no
<i>Gesneria reticulata</i>	GES_reticulata_JLC.14490_55.jpg	John L. Clark	no
<i>Gesneria reticulata</i>	GES_reticulata_side_JLC.15967_029.jpg	John L. Clark	no
<i>Gesneria reticulata</i>	GES_reticulata_USBRG.1997.205.2.jpg	US Botanical Research Gardens	yes
<i>Gesneria salicifolia</i>	GES_salicifolia_JLC.10566_38.jpg	John L. Clark	no
<i>Gesneria salicifolia</i>	GES_salicifolia_JLC.14565_071.jpg	John L. Clark	no
<i>Gesneria salicifolia</i>	GES_salicifolia_JLC.14566_11.jpg	John L. Clark	no
<i>Gesneria salicifolia</i>	GES_salicifolia_JLC.15058_21.jpg	John L. Clark	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_01_1829(Largo)_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_01_1831(Largo)_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_01_2069_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_02_1827(Largo)_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_02_1833(Largo)_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_02_1837(Largo)_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_02_2071_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_02_2072_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_03_1838(Largo)_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_03_1839(Largo)_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_03_1841(Largo)_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_03_2073_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_03_2075_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no

<i>Gesneria salicifolia</i>	GES_salicifolia_side_04_2078_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_04_2080_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_05_2082_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_05_2084.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_06_2086_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_06_2087_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_06_2089_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_07_2093_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_07_2095_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_08_2097_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_08_2099_Cuba_Almarales-Castro.jpg	Abel Almarales-Castro	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_JLC_15960_148.jpg	John L. Clark	no
<i>Gesneria salicifolia</i>	GES_salicifolia_side_JLC_15976_048.jpg	John L. Clark	no
<i>Gesneria sintenisii</i>	GES_sintenisii_20181206_110637_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_20181206_111121_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_20181206_111126_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_IMG_5283_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_IMG_5295_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_IMG_5298_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_IMG_5301_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_IMG_5307_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_IMG_5319_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_IMG_5325_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_IMG_5329_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_IMG_5351_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_IMG_5354_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_IMG_5356_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_IMG_5357_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_IMG_5358_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_IMG_5392_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_IMG_5400_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_IMG_5407_side_PuertoRico_Lambert.jpg	Francois Lambert	no
<i>Gesneria sintenisii</i>	GES_sintenisii_MartenRodriguez1252.jpg	Silvana Marten-Rodriguez	no
<i>Gesneria ventricosa</i>	GES_ventricosa_dunn_4.jpg		yes

<i>Gesneria ventricosa</i>	GES_ventricosa_G940_3.jpg		yes
<i>Gesneria ventricosa</i>	GES_ventricosa_iNaturalist_22293191.jpeg	iNaturalist ©Elizabeth Haber	no
<i>Gesneria ventricosa</i>	GES_ventricosa_iNaturalist_43872598.jpeg	iNaturalist ©reefguard	no
<i>Gesneria ventricosa</i>	GES_ventricosa_JBM.jpg	Etienne Leveille-Bourret	yes
<i>Gesneria ventricosa</i>	GES_ventricosa_JLC_13076_04.jpg	John L. Clark	no
<i>Gesneria ventricosa</i>	GES_ventricosa_JLC_14534_13.jpg	John L. Clark	no
<i>Gesneria ventricosa</i>	GES_ventricosa_JLC_6545_2.jpg	John L. Clark	yes
<i>Gesneria viridiflora</i> subsp. <i>acrochordonanthe</i>	GES_viridiflora_acrochordonanthe_2014-028.jpg	Francois Lambert	yes
<i>Gesneria viridiflora</i> subsp. <i>acrochordonanthe</i>	GES_viridiflora_acrochordonanthe_JLC_14467_090.jpg	John L. Clark	no
<i>Gesneria viridiflora</i> subsp. <i>acrochordonanthe</i>	GES_viridiflora_acrochordonanthe_JLC_14522_045.jpg	John L. Clark	no
<i>Gesneria viridiflora</i> subsp. <i>viridiflora</i>	GES_viridiflora_JLC_10509_35.jpg	John L. Clark	yes
<i>Gesneria viridiflora</i> subsp. <i>viridiflora</i>	GES_viridiflora_JLC_10509_91.jpg	John L. Clark	no
<i>Gesneria viridiflora</i> subsp. <i>viridiflora</i>	GES_viridiflora_JLC_10540_01.jpg	John L. Clark	yes
<i>Gesneria viridiflora</i> subsp. <i>viridiflora</i>	GES_viridiflora_JLC_10552_21.jpg	John L. Clark	yes
<i>Gesneria viridiflora</i> subsp. <i>viridiflora</i>	GES_viridiflora_JLC_10554_20.jpg	John L. Clark	yes
<i>Gesneria viridiflora</i> subsp. <i>viridiflora</i>	GES_viridiflora_JLC_10555_29.jpg	John L. Clark	yes
<i>Gesneria viridiflora</i> subsp. <i>viridiflora</i>	GES_viridiflora_JLC_12797_14.jpg	John L. Clark	yes
<i>Gesneria viridiflora</i> subsp. <i>viridiflora</i>	GES_viridiflora_side_JLC_15984_248.jpg	John L. Clark	no
<i>Rhytidophyllum auriculatum</i>	RHY_auriculatum_2014-014.jpg	Francois Lambert	yes
<i>Rhytidophyllum auriculatum</i>	RHY_auriculatum_2014-025.jpg	Francois Lambert	yes
<i>Rhytidophyllum auriculatum</i>	RHY_auriculatum_iNaturalist_33974904.jpeg	iNaturalist ©Martin Reith	no
<i>Rhytidophyllum auriculatum</i>	RHY_auriculatum_JBM.jpg	Etienne Leveille-Bourret	yes
<i>Rhytidophyllum auriculatum</i>	RHY_auriculatum_JLC_14319_34.jpg	John L. Clark	yes
<i>Rhytidophyllum auriculatum</i>	RHY_auriculatum_JLC_14387_37.jpg	John L. Clark	yes
<i>Rhytidophyllum auriculatum</i>	RHY_auriculatum_JLC_14434_01.jpg	John L. Clark	yes
<i>Rhytidophyllum auriculatum</i>	RHY_auriculatum_JLC_14499_10.jpg	John L. Clark	yes
<i>Rhytidophyllum auriculatum</i>	RHY_auriculatum_JLC_14523_028.jpg	John L. Clark	yes
<i>Rhytidophyllum auriculatum</i>	RHY_auriculatum_USBRG_97_113_1.jpg	US Botanical Research Gardens	yes
<i>Rhytidophyllum auriculatum</i>	RHY_auriculatum-Macaya_Joly1112-1_img5547.jpg	Simon Joly	no
<i>Rhytidophyllum auriculatum</i>	RHY_auriculatum-Macaya_Joly1112-2_img5557.jpg	Simon Joly	no
<i>Rhytidophyllum auriculatum</i>	RHY_auriculatum-Macaya_Joly1112-4_img5561.jpg	Simon Joly	no
<i>Rhytidophyllum auriculatum</i>	RHY_auriculatum-Macaya_Joly1112-5_img5567.jpg	Simon Joly	no
<i>Rhytidophyllum berterioanum</i>	RHY_berterioanum_77_227_4.jpg		yes
<i>Rhytidophyllum berterioanum</i>	RHY_berterioanum_G1398_G1257_G841_1.jpg		yes

<i>Rhytidophyllum berterioanum</i>	RHY_berterioanum_JUL81W5_16.jpg		yes
<i>Rhytidophyllum crenulatum</i>	RHY_crenulatum_JLC_10042_38.jpg	John L. Clark	yes
<i>Rhytidophyllum crenulatum</i>	RHY_crenulatum_JLC_10580_10.jpg	John L. Clark	yes
<i>Rhytidophyllum crenulatum</i>	RHY_crenulatum_JLC_10582_02.jpg	John L. Clark	yes
<i>Rhytidophyllum crenulatum</i>	RHY_crenulatum_JLC_12803_09.jpg	John L. Clark	yes
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_JBM.jpg	Etienne Leveille-Bourret	yes
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_JLC_10508_12.jpg	John L. Clark	yes
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_JLC_10538_07.jpg	John L. Clark	yes
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_JLC_10546_07.jpg	John L. Clark	yes
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_JLC_10551_03.jpg	John L. Clark	yes
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_JLC_10565_08.jpg	John L. Clark	yes
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_JLC_10569_05.jpg	John L. Clark	yes
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_JLC_10571_07.jpg	John L. Clark	no
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_JLC_10579_01.jpg	John L. Clark	yes
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_JLC_10585_18.jpg	John L. Clark	yes
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_JLC_12770_23.jpg	John L. Clark	yes
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_JLC_12787_14.jpg	John L. Clark	yes
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_side_JLC_10557_30.jpg	John L. Clark	no
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_side_JLC_14559_15.jpg	John L. Clark	no
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_side_JLC_14569_23.jpg	John L. Clark	no
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_side_JLC_14577_33.jpg	John L. Clark	no
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_side_JLC_14594_36.jpg	John L. Clark	no
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_side_JLC_15036_18.jpg	John L. Clark	no
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_side_JLC_15056_13.jpg	John L. Clark	no
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_side_JLC_15059_08.jpg	John L. Clark	no
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_side_JLC_15060_26.jpg	John L. Clark	no
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_side_JLC_15496_21.jpg	John L. Clark	no
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_side_JLC_15547_17.jpg	John L. Clark	no
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_side_JLC_15954_064.jpg	John L. Clark	no
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_side_JLC_15974_15.jpg	John L. Clark	no
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_side_JLC_15977_021.jpg	John L. Clark	no
<i>Rhytidophyllum exsertum</i>	RHY_exsertum_side_JLC_15985_011.jpg	John L. Clark	no
<i>Rhytidophyllum grandiflorum</i>	RHY_grandiflorum_1965_Dominican_Republic_Talpey_SN_02.jpg	Thomas E. Talpey	NA
<i>Rhytidophyllum grandiflorum</i>	RHY_grandiflorum_APR72r9_8.jpg		yes

<i>Rhytidophyllum grandiflorum</i>	RHY_grandiflorum_side_SEP70r9-25.jpg		no
<i>Rhytidophyllum minus</i>	RHY_intermedium_2018_3.jpg		NA
<i>Rhytidophyllum minus</i>	RHY_intermedium_JBM-936-2017.jpg	Jardin Botanique de Montréal	no
<i>Rhytidophyllum minus</i>	RHY_intermedium_JLC_10547_10.jpg	John L. Clark	yes
<i>Rhytidophyllum minus</i>	RHY_intermedium_JLC_10549_12.jpg	John L. Clark	no
<i>Rhytidophyllum minus</i>	RHY_minus_JLC_10500_34.jpg	John L. Clark	yes
<i>Rhytidophyllum minus</i>	RHY_minus_MartenRodriguez_Cuba_sn.jpg	Silvana Marten-Rodriguez	no
<i>Rhytidophyllum minus</i>	RHY_minus_side_JLC_10547_17.jpg	John L. Clark	no
<i>Rhytidophyllum minus</i>	RHY_minus_side_JLC_10549_14.jpg	John L. Clark	no
<i>Rhytidophyllum minus</i>	RHY_minus_side_JLC_14595_11.jpg	John L. Clark	no
<i>Rhytidophyllum minus</i>	RHY_minus_side_JLC_15982_053.jpg	John L. Clark	no
<i>Rhytidophyllum leucomallon</i>	RHY_leucomallon_G1232.1.jpg		yes
<i>Rhytidophyllum leucomallon</i>	RHY_leucomallon_iNaturalist_29524256.jpeg	iNaturalist © Martin Reith	no
<i>Rhytidophyllum leucomallon</i>	RHY_leucomallon_iNaturalist_44060147.jpeg	iNaturalist ©Martin Reith	no
<i>Rhytidophyllum leucomallon</i>	RHY_leucomallon_JLC_14338_031.jpg	John L. Clark	yes
<i>Rhytidophyllum leucomallon</i>	RHY_leucomallon_JLC_14497_09.jpg	John L. Clark	yes
<i>Rhytidophyllum leucomallon</i>	RHY_leucomallon_JLC_14498_10.jpg	John L. Clark	yes
<i>Rhytidophyllum leucomallon</i>	RHY_leucomallon_side_JLC_14363_02.jpg	John L. Clark	no
<i>Rhytidophyllum rupincola</i>	RHY_rupincola_JBM.jpg	Etienne Leveille-Bourret	yes
<i>Rhytidophyllum rupincola</i>	RHY_rupincola_JLC_11308_18.jpg	John L. Clark	yes
<i>Rhytidophyllum rupincola</i>	RHY_rupincola_JLC_11957_36.jpg	John L. Clark	yes
<i>Rhytidophyllum rupincola</i>	RHY_rupincola_side_JLC_11950_013.jpg	John L. Clark	no
<i>Rhytidophyllum rupincola</i>	RHY_rupincola_usbrg_97_117.jpg	US Botanical Research Gardens	no
<i>Rhytidophyllum tomentosum</i>	RHY_tomentosum_iNaturalist_14124900.jpeg	iNaturalist ©Rich Hoyer	no
<i>Rhytidophyllum tomentosum</i>	RHY_tomentosum_JBM.jpg	Etienne Leveille-Bourret	yes
<i>Rhytidophyllum tomentosum</i>	RHY_tomentosum_jlc_10477_06.jpg	John L. Clark	yes

Figure S3: Scree plot of the principal component analysis (PCA), or morphospace. The first three principal components representing 86.6% of the total floral shape variation were selected for downstream analyses.

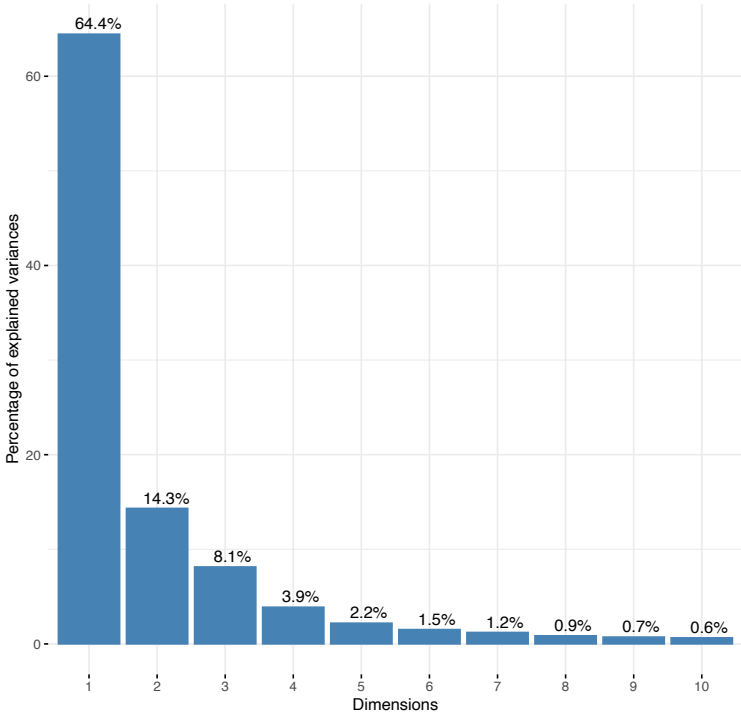


Table S4: Sequences information used in the phylogenetic reconstruction of the Antillean Gesneriaceae phylogeny using five nuclear genes.

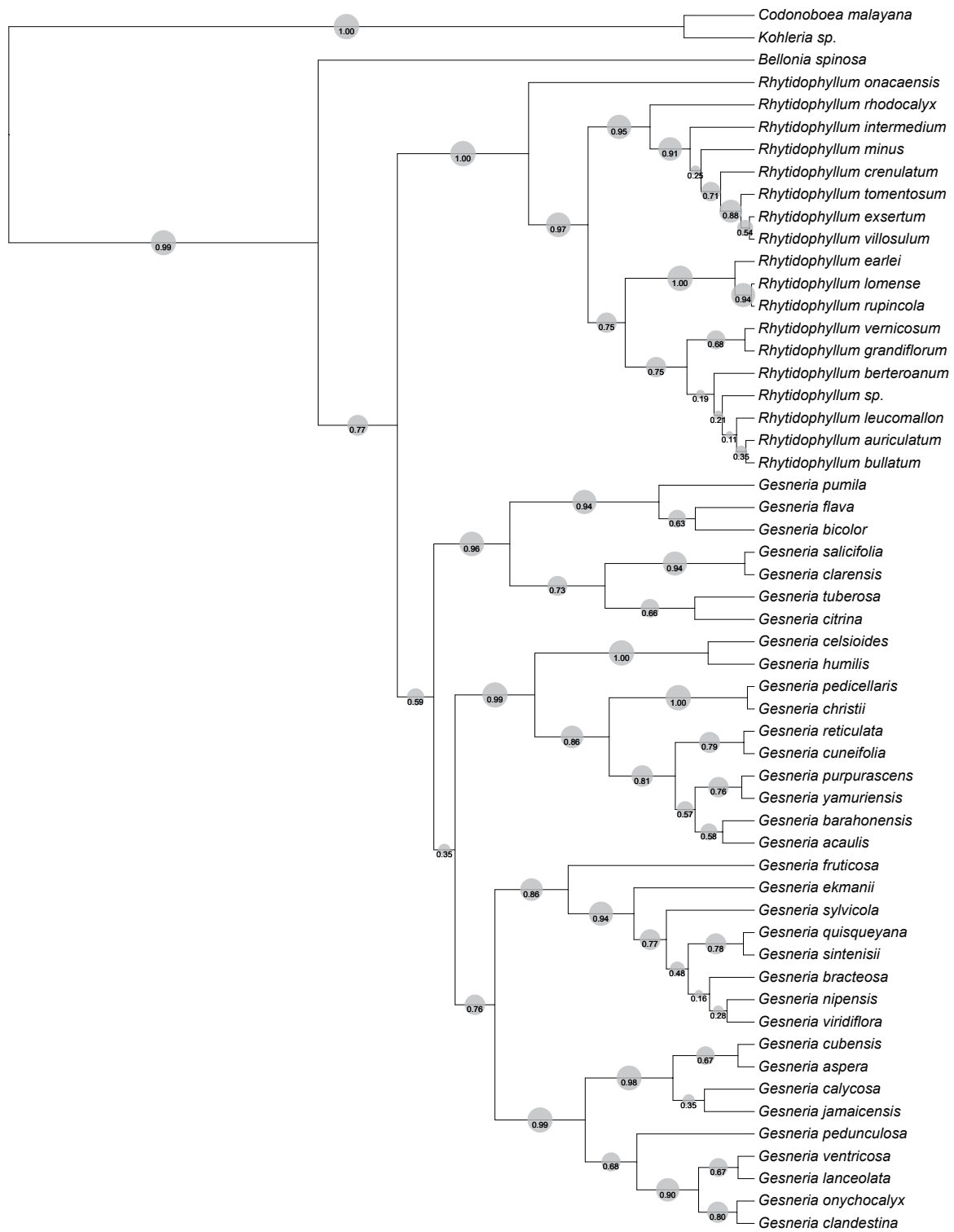
Genus	Species	Collector	Collector number	<i>GCYC</i>	<i>F3H</i>	<i>UF3GT</i>	<i>CHI</i>	<i>GADPH</i>
<i>Bellonia</i>	<i>spinosa</i>	Léveillé-Bourret, Étienne; Alexandre, Hermine; Lambert, François	G8		MF318654	MF318561	MF318807	
<i>Bellonia</i>	<i>spinosa</i>	Clark, J.	10573	MF318728			MF318806	MF318613
<i>Codonoboea</i>	<i>malayana</i>	Léveillé-Bourret, Étienne; Alexandre, Hermine; Lambert, François	G11	MF318772	MF318723		MF318867	
<i>Gesneria</i>	<i>acaulis</i>	Clark, J.	11303	MF318730	MF318715		MF318829	MF318646
<i>Gesneria</i>	<i>acaulis</i>	Marten-Rodriguez, Silvana	1188	GU323229				
<i>Gesneria</i>	<i>aspera</i>	Lambert, F	2014-011	MF318731	MF318682		MF318849	
<i>Gesneria</i>	<i>barahonensis</i>	Marten-Rodriguez, Silvana	1242	sequenced	sequenced	sequenced	sequenced	sequenced
<i>Gesneria</i>	<i>barahonensis</i>	Marten-Rodriguez, Silvana	1239	GU323230				
<i>Gesneria</i>	<i>bicolor</i>	Lambert, F	2014-002	MF318779	MF318698	MF318594	MF318859	MF318623
<i>Gesneria</i>	<i>bicolor</i>	Lambert, F	2014-001	MF318778	MF318697	MF318593	MF318858	MF318621
<i>Gesneria</i>	<i>bracteosa</i>	Clark, J.	10567	MF318732	MF318705	MF318605	MF318869	MF318642
<i>Gesneria</i>	<i>calycosa</i>	Marten-Rodriguez, Silvana	1190	GU323231	sequenced	sequenced	sequenced	sequenced
<i>Gesneria</i>	<i>celsioides</i>	Clark, J.	11981	MF318733	MF318683	MF318600	MF318833	
<i>Gesneria</i>	<i>christii</i>	Léveillé-Bourret, Étienne; Alexandre, Hermine; Lambert, François	G6	MF318735	MF318673	MF318579	MF318839	MF318649
<i>Gesneria</i>	<i>christii</i>	Clark, J.	10025	MF318734	MF318672		MF318838	
<i>Gesneria</i>	<i>christii</i>	Smithsonian Institution living collection	94-507	AY363923				
<i>Gesneria</i>	<i>citrina</i>	Clark, J.	10021	MF318736	MF318679			
<i>Gesneria</i>	<i>citrina</i>	Marten-Rodriguez, Silvana	1248	GU323232				
<i>Gesneria</i>	<i>clandestina</i>	Marten-Rodriguez, Silvana	1197	GU323233	sequenced		sequenced	
<i>Gesneria</i>	<i>clarensis</i>	Clark, J.	10488	MF318737	MF318674	MF318588	MF318860	MF318650
<i>Gesneria</i>	<i>cubensis</i>	Lambert, F	2014-008	MF318738	MF318714		MF318850	
<i>Gesneria</i>	<i>cubensis</i>	Marten-Rodriguez, Silvana	1232	GU323234				
<i>Gesneria</i>	<i>cuneifolia</i>	Marten-Rodriguez, Silvana	1247	GU323235				
<i>Gesneria</i>	<i>ekmanii</i>	Lambert, F	2014-018	MF318797	MF318718	MF318597	MF318863	
<i>Gesneria</i>	<i>ekmanii</i>	Lambert, F	2014-024	MF318742	MF318720		MF318864	
<i>Gesneria</i>	<i>ekmanii</i>	Lambert, F	2014-020	MF318741	MF318719	MF318580	MF318865	MF318643
<i>Gesneria</i>	<i>ekmanii</i>	Acevedo	13892	GU323237				
<i>Gesneria</i>	<i>flava</i>	no voucher	2014-007	MF318793	MF318694	MF318590	MF318855	MF318619

<i>Gesneria</i>	<i>flava</i>	Lambert, F	2014-010	MF318795	MF318696	MF318592	MF318857	MF318622
<i>Gesneria</i>	<i>flava</i>	Lambert, F	2014-009	MF318794	MF318695	MF318591	MF318856	MF318620
<i>Gesneria</i>	<i>fruticosa</i>	Marten-Rodriguez, Silvana	1227	GU323238	sequenced	sequenced	sequenced	sequenced
<i>Gesneria</i>	<i>fruticosa</i>	Lambert, F	2014-012	MF318743	MF318711	MF318581	MF318851	MF318644
<i>Gesneria</i>	<i>humilis</i>	Clark, J.	10626	MF318747	MF318684	MF318603	MF318836	MF318615
<i>Gesneria</i>	<i>humilis</i>	Clark, J.	10040	MF318744	MF318699	MF318601	MF318834	MF318614
<i>Gesneria</i>	<i>humilis</i>	Clark, J.	10472	MF318745	MF318700	MF318602	MF318835	MF318616
<i>Gesneria</i>	<i>humilis</i>	Clark, J.	10574	MF318746			MF318837	
<i>Gesneria</i>	<i>humilis</i>	Chautems, A.	1179	AY423156				
<i>Gesneria</i>	<i>jamaicensis</i>	Marten-Rodriguez, Silvana	1193	GU323239	sequenced	sequenced	sequenced	sequenced
<i>Gesneria</i>	<i>lanceolata</i>	Marten-Rodriguez, Silvana	1238	sequenced	sequenced	sequenced	sequenced	sequenced
<i>Gesneria</i>	<i>nipensis</i>	Clark, J.	10577	MF318748	MF318710			
<i>Gesneria</i>	<i>onychocalyx</i>	Marten-Rodriguez, Silvana	1195	GU323240	sequenced		sequenced	
<i>Gesneria</i>	<i>pedicellaris</i>	Clark, J.	10635	MF318749	MF318675	MF318612	MF318840	
<i>Gesneria</i>	<i>pedicellaris</i>	Marten-Rodriguez, Silvana	1229	GU323241				
<i>Gesneria</i>	<i>pedunculosa</i>	Clark, J.	10644	MF318750	MF318701	MF318582	MF318852	
<i>Gesneria</i>	<i>pedunculosa</i>	Marten-Rodriguez, Silvana	1251	GU323242				
<i>Gesneria</i>	<i>pumila</i>	Marten-Rodriguez, Silvana	1194	GU323244	sequenced	sequenced		sequenced
<i>Gesneria</i>	<i>purpurascens</i>	Clark, J.	10564	MF318751	MF318716	MF318587	MF318831	MF318647
<i>Gesneria</i>	<i>quisqueyana</i>	no voucher	ADN-1298	MF318753	MF352014			
<i>Gesneria</i>	<i>quisqueyana</i>	no voucher	ADN-1299	MF318754	MF318707	MF318606		
<i>Gesneria</i>	<i>quisqueyana</i>	no voucher	ADN1297	MF318752				
<i>Gesneria</i>	<i>quisqueyana</i>		LAH400-10		MF318703			
<i>Gesneria</i>	<i>quisqueyana</i>		LAH454-12		MF318704			
<i>Gesneria</i>	<i>quisqueyana</i>	Marten-Rodriguez, Silvana	1230	GU323245				
<i>Gesneria</i>	<i>reticulata</i>	Clark, J.	10558	MF318755	MF318680	MF318598	MF318832	
<i>Gesneria</i>	<i>reticulata</i>	Marten-Rodriguez, Silvana	1221	GU323246				
<i>Gesneria</i>	<i>salicifolia</i> var. <i>salicifolia</i>	Clark, J.	10566	MF318757	MF318676		MF318862	MF318645
<i>Gesneria</i>	<i>salicifolia</i> var. <i>ferruginea</i>	Clark, J.	10627	MF318756		MF318589	MF318861	MF318651
<i>Gesneria</i>	<i>sintensisii</i>	Clark, J.	13757	MF318759	MF318708	MF318611	MF318841	
<i>Gesneria</i>	<i>sintensisii</i>	Martén-Rodríguez, Silvana	1252	GU323250		MF352012		
<i>Gesneria</i>	<i>sintensisii</i>	Monsegur-Rivera, Omar A.; Sanchez, B	863	MF318760		MF318607		
<i>Gesneria</i>	<i>sylicola</i>	Lambert, F	2014-027	MF318764	MF352013	MF352011	MF318842	
<i>Gesneria</i>	<i>sylicola</i>	Hahn, L.; Clase, Theodoro S.; De Los Santos, Carlos	447	MF352015		MF318608		
<i>Gesneria</i>	<i>sylicola</i>	Lambert, F	2014-028	MF318765	MF318722	MF318585	MF318843	

<i>Gesneria</i>	<i>tuberosa</i>	Peguero, B.	4717	GU323248					
<i>Gesneria</i>	<i>ventricosa</i> subsp. <i>ventricosa</i>	Léveillé-Bourret, Étienne; Alexandre, Hermine	G4	MF318762	MF318712	MF318583	MF318853	MF318640	
<i>Gesneria</i>	<i>ventricosa</i>	Clark, J.	6545	MF318761	MF318677			MF318617	
<i>Gesneria</i>	<i>ventricosa</i>	Marten-Rodriguez, Silvana	1112A	GU323249					
<i>Gesneria</i>	<i>viridiflora</i> subsp. <i>viridiflora</i>	Clark, J.	10561	MF318770	MF318725	MF318586	MF318866		
<i>Gesneria</i>	<i>viridiflora</i> subsp. <i>viridiflora</i>	Clark, J.	10041	MF318766		MF318610	MF318845		
<i>Gesneria</i>	<i>viridiflora</i> subsp. <i>acrochordonanthe</i>	Clark, John L.; Cinea, William; Henrys, I.; Despagne, M.; Sturla, M.	14467	MF318763	MF318702		MF318846		
<i>Gesneria</i>	<i>viridiflora</i> subsp. <i>viridiflora</i>	Clark, J.	10524	MF318768	MF318706	MF318584			
<i>Gesneria</i>	<i>viridiflora</i> subsp. <i>viridiflora</i>	Clark, J.	10509	MF318767	MF318726	sequenced	MF318854		
<i>Gesneria</i>	<i>viridiflora</i> subsp. <i>viridiflora</i>	Clark, J.	10540	MF318769	MF318709	MF318609			
<i>Gesneria</i>	<i>yamuriensis</i>	Clark, J.	10575	MF318771	MF318717	MF318599	MF318830	MF318648	
<i>Kohleria</i>	sp. 'trinidad'	Joly, S.	1102	MF318773			MF318868		
<i>Rhytidophyllum</i>	<i>auriculatum</i>	Lambert, F	2014-025	MF318776	MF318668	MF318573			
<i>Rhytidophyllum</i>	<i>auriculatum</i>	Joly, S.	1100	MF318777	MF318658	MF318564		MF318641	
<i>Rhytidophyllum</i>	<i>auriculatum</i>	Lambert, F	2014-014	MF318775	MF318687	MF318565	MF318824	MF318635	
<i>Rhytidophyllum</i>	<i>auriculatum</i>	Marten-Rodriguez, Silvana	1222	GU323253					
<i>Rhytidophyllum</i>	<i>berteroanum</i>	Marten-Rodriguez, Silvana	1226	GU323254					
<i>Rhytidophyllum</i>	<i>bullatum</i>	Lambert, F	2014-016	MF318780	MF318670	MF318574	MF318847		
<i>Rhytidophyllum</i>	<i>crenulatum</i>	Clark, J.	9531	MF318781	MF318659	MF318576	MF318848	MF318630	
<i>Rhytidophyllum</i>	<i>crenulatum</i>	Clark, John L.	10580	GU323255					
<i>Rhytidophyllum</i>	<i>earlei</i>	Clark, J.	10486	MF318740	MF318689	MF318595	MF318820	MF318625	
<i>Rhytidophyllum</i>	<i>earlei</i>	Clark, J.	10458	MF318739	MF318686	MF318563	MF318818	MF318624	
<i>Rhytidophyllum</i>	<i>exsertum</i>	Clark, J.	10585	sequenced	MF318713		MF318809		
<i>Rhytidophyllum</i>	<i>exsertum</i>	Clark, J.	10038	MF318782	MF318660	MF318566	MF318810	MF318633	
<i>Rhytidophyllum</i>	<i>exsertum</i>	Léveillé-Bourret, Étienne; Alexandre, Hermine	G1	MF318783	MF318661	MF318568	MF318812	MF318637	
<i>Rhytidophyllum</i>	<i>exsertum</i>	Skog, L.	1197-14	GU323256					
<i>Rhytidophyllum</i>	<i>grandiflorum</i>	Marten-Rodriguez, Silvana	1224	GU323257					
<i>Rhytidophyllum</i>	<i>intermedium</i>	Clark, J.	10549	MF318784	MF318721	MF318569	MF318816	MF318629	
<i>Rhytidophyllum</i>	<i>leucomallon</i>	Acevedo, P.	13966	GU323258					
<i>Rhytidophyllum</i>	<i>lomense</i>	Clark, J.	10466	MF318785	MF318691		MF318821	MF318626	
<i>Rhytidophyllum</i>	<i>lomense</i>	Clark, J.	10469	MF318786	MF318692	MF318572	MF318823	MF318628	
<i>Rhytidophyllum</i>	<i>minus</i>	Clark, J.	10500	MF318787	MF318666	MF318577	MF318815		
<i>Rhytidophyllum</i>	<i>onacaensis</i>	E. Carbono	9085	MF318788	MF318678	MF318575	MF318826	MF318618	
<i>Rhytidophyllum</i>	<i>rhodocalyx</i>	Clark, J.	10530	MF318789	MF318662	MF318578	MF318827		

<i>Rhytidophyllum</i>	<i>rupincola</i>	Léveillé-Bourret, Étienne; Alexandre, Hermine	G5	MF318792	MF318693	MF318596		MF318636
<i>Rhytidophyllum</i>	<i>rupincola</i>	Clark, J.	11957	MF318791	MF318685		MF318819	MF318634
<i>Rhytidophyllum</i>	<i>rupincola</i>	Clark, J.	11261	MF318790	MF318690		MF318822	MF318627
<i>Rhytidophyllum</i>	<i>rupincola</i>	Marten-Rodriguez, Silvana	1253	GU323247				
<i>Rhytidophyllum</i>	<i>sp.</i>	Lambert, F	2014-017	MF318796	MF318669		MF318828	
<i>Rhytidophyllum</i>	<i>sp.</i>	Lambert, F	2014-022	MF318798	MF318671		MF318825	
<i>Rhytidophyllum</i>	<i>tomentosum</i>	Léveillé-Bourret, Étienne; Alexandre, Hermine	G2	MF318799	MF318663	MF318570	MF318817	MF318638
<i>Rhytidophyllum</i>	<i>tomentosum</i>	Marten-Rodriguez, Silvana	1191	GU323260				
<i>Rhytidophyllum</i>	<i>tomentosum</i>	Smithsonian Institution living collection	SI77-235	AY363926				
<i>Rhytidophyllum</i>	<i>vernicosum</i>	Léveillé-Bourret, Étienne; Alexandre, Hermine	G3 (JBM-1267-1966)	MF318800	MF318724	MF318604	MF318844	MF318652
<i>Rhytidophyllum</i>	<i>vernicosum</i>	Marten-Rodriguez, Silvana	1246	GU323261				
<i>Rhytidophyllum</i>	<i>villosulum</i>	Clark, J.	10557	MF318803	MF318657	MF318562	MF318808	MF318632
<i>Rhytidophyllum</i>	<i>villosulum</i>	Clark, J.	10465	MF318801	MF318664	MF318567	MF318811	MF318631
<i>Rhytidophyllum</i>	<i>villosulum</i>	Clark, J.	10569	MF318804	MF318665		MF318814	
<i>Rhytidophyllum</i>	<i>villosulum</i>	Clark, J.	10538	MF318802	MF318667	MF318571	MF318813	MF318639
<i>Sinningia</i>	<i>incarnata</i>	Clark, J.	8849	MF318805	MF318727			

Figure S4: Phylogeny of *Rhytidophyllum*, *Gesneria* and *Bellonia* species (Gesnerieae). Numbers in circles on the branches represent clade posterior probabilities.



Variance

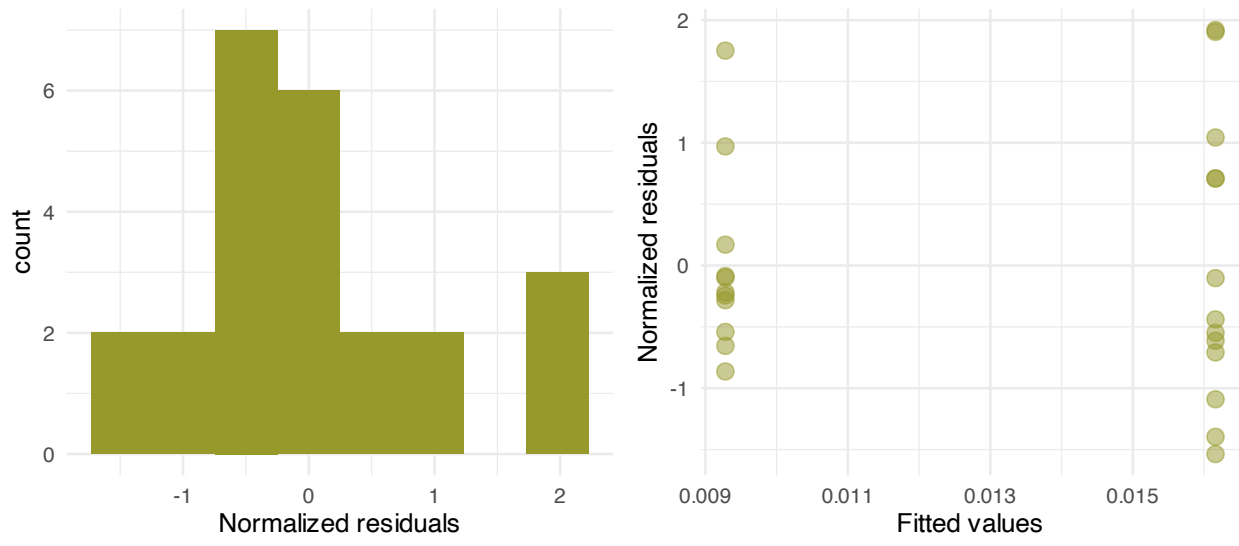


Figure S5: Residuals vs fitted plot for the phylogenetic generalised least square (PGLS) regression.

Table S5: Bayes Factors (BF) comparing the fit of the univariate (OU) and multivariate model (OUM) of evolution of the complete dataset of 100 simulations of ancestral pollination strategies (SIMMAP 1 to 100), for the first three principal components of the floral morphospace (PC1 to PC3).

SIMMAP	PC1	PC2	PC3	SIMMAP	PC1	PC2	PC3
1	5.32	0.97	-1.79	51	1.54	-0.97	0.29
2	0.49	-2.22	3.23	52	11.46	3.29	-6.67
3	11.02	-21.81	-3.49	53	4.27	-0.36	0.51
4	-1.92	0.66	2.77	54	4.45	-8.09	-1.69
5	-2.49	-5.50	-0.20	55	0.90	-3.38	-6.70
6	5.79	1.93	2.50	56	-4.21	-1.66	0.96
7	0.88	4.57	7.65	57	4.87	-1.74	4.21
8	4.09	9.23	-3.39	58	-2.51	2.44	0.52
9	4.97	-5.27	-1.45	59	-1.22	-2.17	4.31
10	-2.83	-13.39	3.58	60	-0.84	-5.15	9.99
11	1.48	-1.40	-1.18	61	2.05	-10.17	-3.11
12	-1.50	-4.38	-1.79	62	-3.71	-6.09	2.30
13	-5.81	-5.82	0.81	63	2.70	-5.83	-5.39
14	-2.13	7.32	0.66	64	-2.80	-9.75	-3.59
15	2.83	-2.28	2.87	65	-2.64	-11.58	-3.55
16	10.98	-20.69	2.08	66	6.17	-7.89	1.32
17	-5.90	-2.31	-3.66	67	5.64	-12.43	-4.86
18	-3.78	-6.40	-5.56	68	13.47	-12.10	9.41
19	1.87	-1.89	-3.81	69	-7.19	-1.78	9.33
20	4.06	-4.38	-7.72	70	4.69	-1.08	-2.06
21	-0.15	-14.94	-10.54	71	2.44	-4.61	0.05
22	4.25	-9.97	-1.32	72	-0.55	-7.92	-1.42
23	-2.64	5.73	3.04	73	12.20	-3.42	1.53
24	-0.16	1.28	-6.23	74	-2.38	-3.88	4.27
25	8.33	-5.45	-2.23	75	2.88	-12.67	4.68
26	-1.78	-19.35	-1.06	76	1.63	-7.48	15.25
27	-0.14	1.73	-3.72	77	4.19	-0.79	-4.05
28	6.55	-6.79	-12.99	78	8.20	3.20	2.95
29	0.01	-9.99	-0.92	79	1.50	4.73	-9.93
30	-3.69	4.48	-3.81	80	2.99	-1.53	0.43
31	3.27	-2.65	-4.93	81	0.37	-16.28	-1.62
32	-17.36	-2.23	-6.53	82	8.28	-2.42	-1.52
33	3.02	-6.74	0.96	83	-3.82	7.21	0.27
34	-4.13	3.56	-5.01	84	14.76	0.23	0.79
35	-0.84	-1.15	1.34	85	1.27	-5.68	7.48
36	0.92	3.13	8.11	86	4.89	-2.10	-1.81
37	-3.78	-4.77	2.39	87	-2.05	-9.65	-13.06
38	0.46	-9.87	-3.66	88	5.15	-4.66	7.94
39	-2.09	-8.14	-2.49	89	2.34	-8.03	3.32
40	-2.75	-16.75	-3.96	90	-0.23	-4.79	-1.07
41	0.62	1.56	-2.99	91	7.63	-7.81	1.47
42	6.88	-7.88	0.54	92	-2.06	-14.02	-3.53
43	1.25	12.04	2.71	93	-5.54	-11.35	-2.84
44	1.21	-2.42	-2.14	94	-1.14	-0.33	-5.41
45	0.31	-3.30	-4.88	95	-1.01	-3.36	7.83
46	-3.99	-13.26	-8.68	96	6.57	-3.96	18.30
47	-2.02	2.20	-6.68	97	-0.71	-11.81	-1.04
48	-0.57	-2.96	5.17	98	2.93	-10.21	-1.13
49	-1.29	2.98	5.89	99	1.29	-1.71	-1.46
50	-3.10	3.17	3.72	100	3.59	-10.20	-6.92

Table S6: Summary statistics of the estimated parameter values per principal component (PC) for the two models, averaged over all stochastic simulations (SIMMAPs).

	PC1						PC2						PC3					
	Summary			Quantiles			Summary			Quantiles			Summary			Quantiles		
	Mean	SD	Naive SE	2.5%	25%	50%	Mean	SD	Naive SE	2.5%	25%	50%	Mean	SD	Naive SE	2.5%	25%	50%
Model : mean OUM variance OU																		
posterior	326.70	11.57	0.12	308.63	318.25	325.26	360.57	13.45	0.13	339.13	350.82	358.90	361.52	13.43	0.13	336.06	352.55	360.22
log likelihood	320.62	6.00	0.06	308.43	316.34	320.80	336.63	4.26	0.04	328.81	334.28	336.65	334.19	4.40	0.04	326.12	331.25	334.31
prior mean	37.91	9.78	0.10	19.47	30.60	38.44	31.05	2.60	0.03	25.64	29.48	31.33	32.36	2.51	0.03	27.43	30.82	32.51
prior log variance	-15.86	10.50	0.11	-30.03	-22.58	-17.64	3.51	14.61	0.15	-21.34	-7.97	-0.45	5.86	13.59	0.14	-13.78	-4.34	3.51
mean α	24.64	10.33	0.10	9.05	16.95	22.06	0.96	0.72	0.01	0.07	0.46	0.77	5.93	4.86	0.05	0.33	2.52	4.83
mean σ^2	0.18	0.15	0.00	0.02	0.06	0.12	0.02	0.01	0.00	0.01	0.02	0.02	0.06	0.05	0.00	0.01	0.03	0.04
mean θ hummingbird	0.24	0.02	0.00	0.18	0.22	0.23	-0.07	0.12	0.00	-0.30	-0.16	-0.06	-0.01	0.05	0.00	-0.12	-0.04	-0.01
mean θ mixed-pollination	-0.21	0.02	0.00	-0.25	-0.22	-0.21	0.04	0.12	0.00	-0.21	-0.03	0.04	0.04	0.06	0.00	-0.07	0.02	0.04
log variance α	6.74	3.99	0.04	1.49	3.81	5.85	8.08	4.52	0.05	1.34	4.92	7.14	8.48	6.07	0.06	1.26	4.54	7.05
log variance σ^2	4.25	3.44	0.03	0.23	1.65	3.09	1.42	1.50	0.02	0.06	0.30	0.96	1.17	1.52	0.02	0.04	0.23	0.57
log variance θ	-5.81	0.59	0.01	-7.27	-5.90	-5.68	-5.85	0.54	0.01	-7.71	-5.83	-5.74	-5.92	0.63	0.01	-8.16	-5.89	-5.76
Model : mean OUM variance OUM																		
posterior	327.50	11.97	0.12	308.20	318.20	325.59	356.01	14.33	0.14	331.30	346.16	354.68	362.09	13.66	0.14	338.47	351.61	361.82
log likelihood	321.34	6.00	0.06	307.06	318.75	321.47	336.38	4.44	0.04	326.60	333.52	336.81	334.30	3.90	0.04	326.03	331.50	334.32
prior mean	37.44	10.11	0.10	18.89	30.77	36.77	31.48	2.36	0.02	25.80	29.84	31.85	32.40	2.31	0.02	28.25	30.76	32.61
prior log variance	-13.33	11.61	0.12	-33.16	-21.37	-15.39	1.33	15.49	0.15	-24.90	-10.26	-1.26	8.39	13.93	0.14	-14.76	-2.03	7.34
mean α	23.31	11.07	0.11	6.22	14.90	22.04	0.88	0.87	0.01	0.04	0.32	0.61	6.49	4.83	0.05	1.10	2.94	4.85
mean σ^2	0.16	0.14	0.00	0.03	0.07	0.12	0.02	0.01	0.00	0.01	0.01	0.02	0.07	0.05	0.00	0.02	0.03	0.05
mean θ hummingbird	0.24	0.02	0.00	0.18	0.22	0.23	-0.06	0.12	0.00	-0.32	-0.12	-0.04	-0.02	0.03	0.00	-0.11	-0.03	-0.01
mean θ mixed-pollination	-0.20	0.02	0.00	-0.25	-0.22	-0.21	0.07	0.13	0.00	-0.24	-0.00	0.06	0.03	0.04	0.00	-0.03	0.01	0.03
log variance α	7.62	4.98	0.05	1.48	3.82	6.91	9.46	5.73	0.06	1.37	4.96	8.33	7.76	5.19	0.05	1.12	4.22	6.69
log variance σ^2	3.50	2.58	0.03	0.25	1.50	3.11	2.03	2.39	0.02	0.03	0.38	1.33	0.87	0.92	0.01	0.03	0.17	0.54
log variance θ hummingbird	-6.24	0.55	0.01	-7.84	-6.43	-6.10	-5.78	0.53	0.01	-7.69	-5.81	-5.68	-6.15	0.73	0.01	-8.87	-6.10	-6.00
log variance θ mixed-pollination	-5.53	0.56	0.01	-6.81	-5.60	-5.40	-5.92	0.51	0.01	-7.72	-5.94	-5.81	-5.75	0.63	0.01	-8.02	-5.73	-5.60

Table S7: Effective sample size (ESS) for the parameters of the model of the combined Markov-Chain Monte-Carlo (MCMC) chains from all ancestral pollination syndrome map along the phylogenetic tree (SIMMAP) (n=100)

	PC1 mOUM vOU	PC2 mOUM vOU	ESS PC3 mOUM vOU	PC1 mOUM vOUM	PC2 mOUM vOUM	PC3 mOUM vOUM
log.lik	61309.79	70491.73	67008.86	62659.55	70615.70	64466.00
logvar.alpha	61034.46	23905.63	23336.38	34835.13	22715.32	22811.39
logvar.sigma_sq	52979.99	26449.04	25310.77	46052.83	28557.39	21187.55
logvar.theta	306458.69	331071.92	394075.85	-	-	-
logvar.theta_hummingbird	-	-	-	190817.02	325108.00	287370.86
logvar.theta_mixed_pollination	-	-	-	377657.65	252859.28	370206.76
mean.alpha	5587.35	14806.36	181602.15	5417.43	14455.74	168800.14
mean.sigma_sq	3320.00	2805.54	2779.53	3363.13	2796.27	2746.18
mean.theta_hummingbird	62966.89	620455.42	686961.60	64111.59	621262.12	674100.33
mean.theta_mixed_pollination	70332.12	516778.86	1043092.64	72174.97	506294.47	1019109.07
posterior	18805.83	4538.83	4051.82	14056.49	5387.01	3361.80
prior.logvar	39419.29	52470.94	44733.67	38828.83	47402.60	40702.81
prior.mean	578.84	505.09	464.11	596.25	503.27	466.07