

Protologues in seed catalogues from
Botanic Garden Copenhagen
1843-1875

By BERTEL HANSEN, KAI LARSEN
& SVEN-ERIK SANDERMANN OLSEN



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Abstract

All protologues from the seed catalogues, the annually published »Index Seminum« from the Botanic Garden, University of Copenhagen, have been compiled and arranged alphabetically. All material used for the original descriptions has been seen as far as it has been available in the herbarium of the Botanical Museum, Copenhagen (C). The protologues are given in their full length with date of publication. Notes on taxonomy and nomenclature have been added.

KEYWORDS

Nomenclature, protologues, index seminum, seed catalogues, botanic gardens Copenhagen.

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I. Introduction

In the previous century it was common policy to publish new names of plants in seed-exchange lists from botanical gardens. This is no longer accepted. According to the International Code of Botanical Nomenclature 1983 Art. 29.5 such names do not constitute effective publications after 1. January 1973. In Denmark such names are found in the older seed-catalogues from the Botanic Garden, Copenhagen between 1843 and 1876. So nearly 100 years before it became illegal this procedure was discontinued in Denmark.

The old seed-catalogues from Botanic Gardens are often very difficult to obtain as they were usually printed in very limited numbers. Often they were used only to order seeds from the respective gardens and not kept in the adjoining library. Another problem is the date of publication often crucial for determining the correct name of a taxon.

We have observed these difficulties in numerous recent monographs where authors write that the protologues have not been available, referring to the Index Seminum Hauniensis. Where this seed catalogue has been quoted, probably most often from literature only, the printing date was usually wrong. In order to prevent misunderstandings in the future we found it worthwhile to publish all protologues from these lists and at the same time – where it has been possible – refer the names to taxa generally recognized today.

In the following enumeration all protologues have been given in alphabetic order according to the name published in the seed-catalogue. ISH refers to Index Seminum Hauniense. The first year corresponds to the year on the title page, i.e. usually the year of the seed harvest, the last year in paranthesis is the year of printing, which has often taken place in Ja-

nuary. In nearly all references the first year is quoted as the year of printing, even in Index Kewensis, which to most authors has been the source of information.

After the reference to the protologue, which is the most important in this connection, one more literature quotation is often mentioned. This second reference is an international periodical which every year reprinted names of new species described in seed catalogues. The protologue is not always repeated, but further comments are sometimes found. This is thus actually beyond the scope of the present publication and the authors may not have found all these “second publishing of names”.

The protologues are reprinted in full and with the original spelling. After the protologue a short note gives information about the identity of the taxon described where it has been possible. For all European plants the standard of *Flora Europaea* has been used. The many species from South and Central America described by Liebmann and Didrichsen have offered greater difficulties. Particularly difficult to trace are the taxa described by Lange on the basis of cultivated plants. Here again the main scope of this publication has been the collection of the protologues rather than typification of the taxa.

The authors have taken great efforts to trace in the Phanerogam herbarium of the Botanical Museum, Copenhagen the sheets (often type material) used by Lange, Didrichsen and Liebmann for their descriptions. Material traced in the herbarium is always cited under the paragraph, Type:, with the original labeltext concerning locality and date following. The reader should always compare with the specimen citation in the protologue. In 12 cases relevant herbarium material has not yet been traced, al-

though in 3 of the cases drawings (by F. Bayer) were found in the herbarium.

All seed-exchange lists (seed-catalogues) printed in Copenhagen were examined. The protologues in the following enumeration are found in the catalogues from 1843 to 1875.

Plates 5-9.

Acknowledgements

We are much indebted to senior lecturer F. Arnklit, Botanical Garden, Copenhagen for tracing seedbags of types missing in herb. (C) and for letting us transfer material from some of these bags to the herbarium. We are most grateful to our colleagues Dr. Bo Johansen, Botanical Laboratory, University of Copenhagen and Dr. Olof Ryding, Botanical Museum, Copenhagen for helping with identification of *Physoziphon* and *Leonurus* respectively.

2. The protologues

Aechmea Weibachii Didr. (*Bromeliaceae*)

ISH 1854: 28 (1855); Ann. Sci. Nat. Bot. Sér. 4. 2: 375 (1854).

Protologue [First published in Ann. Sci. Nat. Bot. Sér. 4. 2: 375 (1854) with same wording as in ISH 1854: 28 (1855)].

Aechmea Weibachii F. Didr. habitu *Aechmeæ discoloris* Bot. Mag. 4293; scapo bracteisque coccineis, ovario rubello, laciniis perigonii exterioribus coeruleis immutatis, interioribus pallide carneis demum nigris. Legi 1847 in monte Corcovado prope Rio Janeiro. Descr. v. in op. cit.

Note: Smith & Downs in Fl. Neotrop. 14. 3: 1786 (1979) recognize the species; they do not quote ISH.

Type: 1 sheet in (C). Hort. bot. haun. 25. Nov. 1854.

Anthriscus neglectus Boiss. & Reut. (*Apiaceae*)

ISH 1854: 22 (1855).

Protologue

Anthriscus neglectus Boiss. & Reut. (diagn. pl. Hisp.). *Carpidia glabra*, nitida, pedicelli apice barbati. Planta per 2 annos culta constanter characteres laudatos servat, ceterum vero *A. vulgari*, in cujus consortio lecta, tam similis ut facile nil nisi ejus var. haberem. Cum libellus, in quo descripta est species, apud nos desideratur, non dijudicare ausus sum, an characteres majoris momenti, a me non observati, eam ulterius ab *A. vulgari* separent; si vero recte suspicamur, eam non nisi hujus modificationem esse, defectu indumenti ortam, tunc *A. vulgari* β , glabrata foret appellanda.

In cultis et ruderalibus ad monasterium St. Laurantii (Escorial) Jun. 1852.

Note: Technically, but apparently inadver-

tently, Lange in ISH (1855) published *A. neglectus* effectively and validly. The 6-word description exactly hits the diagnostic characters separating this taxon from *A. vulgari* = *A. caucalis*. In nomenclatural matters it is, what Lange actually did, and not what he intended to do that counts, and all later remarks in literature to the effect that *A. neglectus* is ined. can therefore be ruled out.

A brief review of the history of the name *Anthriscus neglectus* follows. What does Lange's reference in the protologue above to Boiss. & Reut. "diagn. pl. Hisp." mean? We think it means Boiss. & Reut., Diagn. Pl. Nov. Hisp. in Bibl. Univ. Genève, Ser. 2. 38: 195-220 (1842), of which a separate paginated: 1-28 (1842) exists (See TL II). We have not seen the separate, but vol. 38 of the periodical was available from the Royal Library at Copenhagen. To our surprise the name *Anthriscus neglectus* is not found in Diagn. Pl. Nov. Hisp., nor is it found in Diagn. Pl. Orient.

Loscos & J. Pardo in Ser. Inconf. Pl. Aragon.: 46 (1863) say that *A. neglectus* is not published, but it is close to *A. macrocarpus* Boiss. and *A. molle* Boiss. & Reut. in Diagn. Pl. Orient. 3. n. 2: 99 (1856). Willk. & Lange in Prod. Fl. Hisp. 3: 80. (1874) say that *Anthriscus vulgari* Pers. β . *neglectus* = *A. neglectus* Boiss. & Reut. ined. Index Kewensis 1893 has the entry "*Anthriscus neglecta* Boiss. & Reut. ex Lange, Ind. Sem. Haun. (1854) 22; Losc. & Pard Ser. Inconf. Arag.: 46 (1863) = *vulgari*" meaning that the compilers were aware of Lange's valid publication of *A. neglectus* in ISH (1855).

Cannon in Notulae Systematicae ad Floram Europaeam spectantes (ed. V. H. Heywood), Feddes Repert. 74. 1-2: 36 (1967) transfers *Anthriscus vulgari* var. *gymnocarpa* Moris, Fl. Sardoia 2: 235 (1843) to *A. caucalis* var. *gymno-*

carpa (Moris) Cannon. One year later Cannon in Fl. Eur. 2: 326 (1968) lists *Anthriscus caucalis* Bieb. var. *neglecta* (Boiss. & Reut.) P. Silva & Franco, which should have been var. *neglecta* (Lange) P. Silva & Franco. He has no mention of var. *gymnocarpa* (Moris) Cannon dating back to 1843 and antedating with several decennia the transfer to var. *neglecta* by P. Silva and Franco. We feel that var. *gymnocarpa* would have been the appropriate name for this variety of *A. caucalis* with completely naked fruits. We shall, however, leave the final solution of this intricate matter to the specialists of Apiaceae.

Type: 2 sheets in (C) leg. Lange: 1. in rudertis pr. Escorial 16. Jun. 1852; 2. In rudertis ad Escorial Juni. Plate 1.

Anthurium Kunthianum Liebm. (*Araceae*)

ISH 1854: 25 (1855); Ann. Sci. Nat. Bot. Sér. 4. 2: 372 (1854).

Protologue [First published in Ann. Sci. Nat. Bot. Sér. 4. 2: 372 (1854) with same wording as in ISH 1854: 25 (1855)].

Anthurium Kunthianum Liebm. : acaule, foliis breviter petiolatis obovato-oblongis acutiusculis basin versus longe et anguste attenuatis coriaceis nitidissimis penninerviis, nervis utrinsecus 10-15 intra marginem arcuato-confluentibus, costa antice acutangula, postice rotundata ad basin laminæ geniculato-incrassatis suberosis, petiolis antice subplanis v. leviter canaliculatis, dorso acutangulis v. rotundatis; pedunculo longitudinem folii æquante tereti sulco longitudinali percurso, spadice cylindrico digitum crasso apicem versus attenuato, spatha late lanceolata acuta reflexa cucullata e callocitate hemisphærica exeunte.

Folia ad geniculum petioli 30" longa, 61/2-9" lata, petiolus 4-5", pedunculus 30", spadix 5", spatha 21/2" longa 1" lata.

Species ab *A. mexicano* Liebm. differt nervis folii intra marginem confluentibus, costa et

petiolo postice rotundatis, pedunculo sulco longitudinali percurso. Iisdem notis ab *A. schlechtendalii* Hookeri, crassinervio distincta.

Note: Engler in Pflanzenr. IV. 23B. 21: 80 (1905) draws attention to the similarity with *A. schlechtendalii* Kunth from Mexico, a species also collected by Liebmann.

Type: type not traced in (C).

Begonia parviflora Liebm. (*Begoniaceae*)

ISH 1847: 12 (1848).

Protologue

Begonia parviflora Liebm. herbacea ramosissima glanduloso-pilosula inferne obsolete articulata superne continua; foliis alternis longe petiolatis, petiolo laminam superante, oblique cordatis, lobis basilaribus rotundatis apice brevi-acuminatis margine eroso-crenulatis; flor. axillaribus, pedunculo communi articulato 1 rarius 2 trifloro; floribus albis parvis; masculo majori tetraphyllo, foliolis 2 oppositis rotundis concavis, 2 elongato-obovatis planis; foem. minori 5 phyllo subregulari; capsula trialata basi & apice attenuata, triquetro-ovata, alis æqualibus integris ☉. – E reg. temp. mex. orient.

Note: Liebmann's epithet is a later homonym of *B. parviflora* Poepp. & Endl. The correct name is *B. wallichiana* Lehm.

Type: 2 sheets in (C). Both: Hb. Liebm., *Begonia parviflora* h.h.; *Begonia wallichiana* Lehm.; *Type* of *B. parviflora* Liebm.?; det. Kathleen Burt-Utley 1996.

Berberis serotina Lange (*Berberidaceae*)

ISH 1872: 5 (1873); *Char. emend.* in Bot. Tidskr. 10: 138. Tab. 4 (1878).

Protologue

Berberis serotina Lge. ad int. Ramis gracilibus, elongatis, strictis, sulcatis, fusco-purpureis, vernicoso nitidis; spinis mediocribus, plerumque tripartitis; foliis parvulis, spatulato-lan-

ceolatis, longiuscule mucronatis, integerrimis, supra læte viridibus, sublucidis, subtus pallide viridibus, distincte reticulato venosis; racemis crebris et invicem approximatis, foliorum fasciculos superantibus, florendi tempore leviter, fructiferis valde arcuatis, brevibus, subcorymboso-densifloris; floribus parvulis, c. 10-14 in singulo racemo; petalis pulchre citrinis, obovatis, apice undulato-erosis: stylo brevissimo, stigmatate late depresso, patellæformi; baccis atropurpureis (vix ultra 2-6 in quovis racemo maturescunt).

Serius quam omnes reliquæ nos cultæ species floret (initio Julii); fructus maturos ult. Sept. v. Oct. profert. Ab omnibus, quæ mihi notæ sunt aut descriptas vidi speciebus distincta videtur, hinc *B. sinensi*, illinc *B. creticæ* affinis, ab utraque vero evidenter diversa. Itaque plantam notabilem nomine speciali designare haud inutile duxi; forsitan vero in *B. Thunbergii* DC. quærenda erit, quæ nobis ignota est, sed cujus descripto haud male in nostram quadrat, nisi quod pedicelli foliis breviores dicuntur.

In horto silvicularum (Forsthaven Charlottenlund) colitur sine nomine specifico et absque omni indicatione de patria v. unde semina communicata fuerunt.

Note. A cultivated taxon the origin of which is uncertain.

Type: 1 sheet in (C): fr. ex herb. Liebm., fl. Forsthaven 24. Jun. 1874.

Bidens platycephala Oerst. (*Asteraceae*)

ISH 1859: 27 (1860); *Linnaea* 30: 753 (1860).

Protologue

Bidens platycephala Örd. Affinis *B. tripartitæ*, quacum adhuc confusa esse videtur. Ut differentiæ melius appareant, utraque species conferenda:

Bidens tripartita

- 1) Calathiis fere æque altis ac latis, 40-60 flores continentibus,
- 2) periclinii foliolis exterioribus 6-8 lanceolato-spathulatis undique ciliatis,
- 3) paleis late linearibus, trinerviis, basin aristatum attingentibus,
- 4) calycis tubo corolla plus quam duplo longiore,
- 5) corollæ tubo superne campanulatodilatato,
- 6) acheniis fuscis circa margines papuloso rugulosis, ferme 3^m longis.

Bidens platycephala

- 1) Calathiis duplo latioribus quam altis, 100-150 flores continentibus,
- 2) periclinii foliolis exterioribus 12-14 lanceolatis apicem versus ciliatis,
- 3) paleis anguste linearibus, 1-nerviis apicem aristatum attingentibus,
- 4) calycis tubo corollam æquante
- 5) corollæ tubo superne infundibuliformidilatato,
- 6) acheniis griseis lævibus marginatis, vix 2^m longis.

Præterea species nostra a *B. tripartita* habitu, ramis magis adrectis et colore magis flavescens differt.

Circa Hafniam sponte crescentem *B. tripartitæ* comitum anno 1858 inveni et hybridam prolem *B. tripartitæ* et *B. cernuæ* esse suspicatus sum, sed in hortum botanicum introducta et e semine culta constantem sese præbuit, ut nil obstet, quin pro genuina specie censeatur. (A. S. Örsted).

Note. This taxon falls fully inside the variation range of *B. tripartita* L.

Type: 4 sheets in (C): 1. Nye Vandbassiner 18 sep.; 2. Ved Nye Vandbassiner 1858; 3. Ved Nye Vandbassiner 1858; 4. no information.

Bilbergia pallidiflora Liebm. (*Bromeliaceae*)

ISH 1854: 26 (1855); *Ann. Sci. Nat. Bot. Sér.* 4. 2: 373 (1854).

Protologue [First published in *Ann. Sci. Nat. Bot. Sér.* 4. 2: 373 (1854) with same wording as in ISH 1854: 26 (1855)].

Bilbergia pallidiflora Liebm.: acaulis, foliis

longissimis ligulatis canaliculatis coriaceis spinuloso serrulatis furfuraceo-squamulosis; scapo centrali foliis breviori vaginis convolutis membranaceis lanceolatis acutis obsito; floribus laxe spicatis patulis bractea minutissima scariosa late lanceolata suffultis, perigonii sexpartiti laciniis 3 ext. calyciformibus erectis obtusis ecarinatis convolutis virentibus, laciniis 3 int. petaloideis multo longioribus flavo-virentibus lato-linearibus obtusis canaliculatis patulis demum reflexis; staminibus 6 ima basi perigonii adfixis æquilongis et laciniis int. perigonii subæquantibus, filamentis trigonis apice subulatis virescentibus ceterum excoloribus, antheris basifixis linearibus arcuatis incumbentibus flavidis, stylo trigono trisulcato crassiusculo, stigmate profunde tripartito, laciniis linearibus lividis leviter tortis apice modo papillosis, ovario infero obsolete trigono-ovato rugosa albopulverulento.

Folia bipedalia, 2-21/2" latu; scapus 16"; spica 6"; vaginæ scapi 4-5", perigonii laciniæ ext. 3", lac. int. 16" longæ, 2" latæ, filamenta pollicaria, antheræ 31/2", stylus 9", stigmatis laciniæ 6", ovarium 6"

Specimina viva e Nicaragua reportavit Dr. Ørsted.

Note. The correct spelling is *Billbergia*. Smith & Downs in *Fl. Neotrop.* 14. 3: 2031 (1979) mention that this taxon is widespread from Mexico to Nicaragua.

Type: 1 sheet in (C). *Plantae centroamericana* Ørsted 1845-1848.

Boehmeria elongata Fischer (*Urticaceae*)

ISH 1849: 13 (1850). Jacquin *Eclogæ* tab. 135. delineatio partis superioris plantæ.

Protologue of *Boehmeria* subgenus d. *Gymnogyne*.

Boehmeriæ subgenus d. *Gymnogyne*: flores bracteis scariosis deciduis suffulti, feminei perigonio destituti in receptaculo axillari carnosulo cum masculis perigoniatis conferti. Acheni-

um ellipticum. Americanæ foliis inferioribus oppositis reliquis alternis, succo aqueo – Prope Bahiam. *Didrichsen*.

Note: According to Wilmot-Dear & Friis in *Opera Botanica* 129: 95 (1996) *Boehmeria elongata* is not validated in Fischer's Catalogue 1808. This was first done by Hornemann 1819 in *Supplementum Horti Botanici Hafniensis in usum Tyronum et Botanophilorum conscripsit*, the correct citation thus being *Boehmeria elongata* Fisch. ex Hornem. The correct name for this is *Phenax sonneratii* (Poir.) Wedd.

Type: Type of *Boehmeria elongata* Fisch. ex Hornem. and of *Boehmeria* subgen. *Gymnogyne* *Didrichsen*: 1 sheet in (C). *Herb. Hornem.*, *Boehmeria elongata* Fisch. ex Hornem. h. h. 1819.

Bouchea incrassata Lange (*Verbenaceae*)

ISH 1870: 31 (1871). *Char. emend.* in *Bot. Tidsskr.* 8: 3. Tab. 2. (1874).

Protologue

Bouchea incrassata Lge. (B. *Pseudo-Gervao* h. haun., non Cham., *Stachytarpha azureo-nigra* h. Taurin.), caule bifariam puberulo, ceterum glabro, marginibus petiolorum decurrentibus leviter sulcato, superne dichotome ramoso, ramis patulis: foliis crassis, subcarnosis, junioribus puberulis, adultis glabris, late ovatis, obtusis, brevissime mucronatis, in tertia parte inferiore integerrimis, superne crenato-dentatis, dentibus latis, breviter mucronatis; spicis in dichotomia caulis et ramorum positis, rigidis, densifloris, demum elongatis; floribus dense adpressis, pedicellatis, pedicello 3-4 mm. longo, in planta viva valde semigloboso-incrassato, bractea subulata pedicelli dimidium æquante fulto, bracteolis minutis, setaceis, dimidio bracteæ subæquilongis; calyce tubuloso, extus ad basin usque longitudinaliter fisso, leviter et adpresse puberulo, apice subtruncato, dentibus 5 brevibus subulatis, subæquilongis, basi oblique in pedicellum decurrente; corolla ob-

lique infundibulari, albida v. pallide lilacina maculis linearibus violaceis ad faucem notata, staminibus 4; ovario gynophoro brevi, crassiusculo, sulcato-impreso insidente, stylo exserto, stigmatē oblique bilobo terminato; capsula glabra, calycem superante, conico-acuminata, plano mericarpiorum commissurali leviter excavato.

Manifeste ad Boucheæ (neque ad Stachytarphæ) genus hæc planta pertinet (cf. Schauer in Mart. fl. Brasil. Verbenac., p. 195). B. Pseudo-Gervao Cham. vero sub quo nomine planta in horto nostro hucusque culta est, differt a nostra foliis membranaceis, elliptico-oblongis, acuminatis, ambitu scabris, substrigoso pilosis, corolla majore, capsulæ calycem subæquantis rostro brevissimo, vix attenuato. B. læte virens Schauer l. c. tab. 33, quæ proxime nostræ affinis est, differt foliorum margine revolutō, calyce vix ad basin fissō. Ad hac et omnibus quæ descriptas invenio, speciebus, nostra insuper manifeste differt pedicellis crassissimis semiglobuloso-inflatis, calyce hinc decurrente, quare nomen. ex hoc caractere desumptum, ad interim proposui.

Note: Moldenke in Verbenaceae, Avicenniaceae, Stilbaceae, Symphoremaceae and Eriocaulaceae: 238 (1959) gives the correct name Bouchea pseudochascanum (Walp.) Grenz. with B. incrassata as a synonym.

Type: 2 sheets in (C): cult. s. n. B. pseudo-gervao fra Turin under navn af Stachytarpha azureo-nigra i Hort. bot. haun. 13 Sept. 1870.

Calliopsis fimbriata Lange (Asteraceae)

ISH 1866: 5 (1867).

Protologue

Calliopsis fimbriata Lge. mscr., nomine C. Atkinsonianæ Hook. in horto nostro botanico culta, differt ab hac ligulis irregulariter pluridentatis, achæniis grosse tuberculatis, late alatis (ala latitudinem disci æquantibus); a C. cardaminefolia DC. iisdem fere characteribus di-

stinguitur et ab utraque insuper ala achæniorum profunde et eleganter fimbriato-lacera recedit, quare ad interim novo nomine distinxit. C. tinctoria (Nutt.) DC. achæniis exalatis ab affinis esse distinguendam affert DC. (Prodr. V. 568). Ceterum omnes hæc species valde inter se affinis sunt, ita ut ulterius inquirendum erit, an characteres, præcipue in indole varia achæniorum positi, revera constantes sint.

Note: The genus *Calliopsis* Reichenb. (1823) is now usually referred to *Coreopsis* L. (1753). Sherff in his monograph in Field Mus. Nat. Hist. Bot. Ser. 11: 428 (1936) does not mention C. fimbriata, but does recognize *Coreopsis atkinsoniana* Dougl. in Edwards, Bot. Reg. 16: 1376 (1830-31), the species Lange refers to in the protologue.

Type: 1 sheet in (C): Hort. bot. haun. Oct. 1866 cult. s. n. Call. atkinsoniana.

Carduus (hamulosus Ehrh. var. ?) platypus Lange (Asteraceae)

ISH 1857: 26 (1858). *Char. emend.* in ISH 1859: 28 (1860): *Carduus platypus* Lge. (C. [hamulosus? Ehrh. var.] platypus Lge. ind. sem. hafn. 1857; C. granatensis Willk. in Linnaea 1859 p. 115)?

Protologue

Carduus (hamulosus Ehrh. var. ?) platypus Lge. Biennis, caule erecto simplici vel parum ramoso, ramis erectis monocephalis fere usque ad apicem foliatis cauleque interrupte alatis, alis palmato-lobatis lobis spinosis; foliis lanceolatis pinnatilobis lobis trifidis, nervis omnibus in spinam mediocrem stramineo coloratam excurrentibus; calathio erecto, subgloboso, basi appanato, squamis periclinii exterioribus et mediis lanceolatis, nervo medio valido in spinam pungentem coloratum (sæpius purpuream) excurrente, exterioribus planis, demum divaricatis v. reflexis, intermediis e basi concava adpressa paulo supra medium in appendicem lanceolatam recurvatam constrictis (S-formi-

bus), intimis linearibus erectis, apice roseo molli (non pungente) parum curvatis, corollæ pulchre roseæ tubo limbum subæquante, curvato, sum limbo inflato, laciniis linearibus acutis, altero (exteriori) profundius fisso; achæniis stramineo-fuscis, nitidis, striis longitudinalibus obsoletis.

In Hispaniæ centralis collibus campisque aridis, inde a montibus Marianis ad montes Legionenses, passim inveni; semina lecta probe urbem Valladolid (1. Julii 1852). Planta silvestris 1-11/2-pedalis, caulis & folia, præsertim pagina inf., dense arachnoidea, calathia satis magna fere iis *C. nutatis* æqualia; planta vero culta abunde diversa, usque ad 6 pedes alta, læte viridis et parcissime archnoidea, calathiis maximis, *C. macrocephali* Desf. vel *Onopordi Acanthi* subæqualia.

Char. emend. in ISH 1859: 28 (1860): *Carduus platypus* Lge. (*C. [hamulosus? Ehrh. var.] platypus* Lge. ind. sem. hafn. 1857; *C. granatensis* Willk. in *Linnæa* 1859 p. 115)?

Cultura continua hujus plantæ edoctus sum, bonam constituere speciem, nec cum *C. hamuloso* Ehrh., nec cum *C. nigrescente* Vill., quæcum prius associaveram, confundendam. Collata autem descriptione accurata cel. Willkommii l. c. cum nostra, non dubito, quin *C. granatensis* ejus et planta nostra unam eandemque speciem constituent; si vero hæc suppositio nostra recta est, nomen *C. granatensis* minus aptum videtur, quia species per totam fere Hispaniam divulgata est: accedunt enim ad loca austro-hispanica Willkommiana (Sierra Nevada, Sa. Tejada, Sa. de Lujar etc.) nostra e montibus Marianis (Despeñaperros) et Hispaniæ centralis (Valladolid, ubi frequentissima) nec non *Hisp. borealis* (Carucedo in distr. Vierzo), ideoque nomen nostrum (etsi hæsitanter) 1857 datum nomini recentiori præferendum putavi.

Note: *C. platypus* in *Fl. Eur.* 4: 223 (1976). Endemic to Portugal and northwestern and central part of Spain.

Type: 2 sheets in (C): 1. in campis siccis ad

Valladolid 1 Jul. 1852; 2. Valladolid in campis siccis 1 Jul. 1852.

Celosia corymbifera Didr. (*Amaranthaceae*)

ISH 1849: 13 (1850).

Protologue

Celosia corymbifera Didrichsen, herbacea succulenta glabra, floribus corymbosis majusculis, calyce bracteis duplo majori, capsula subglobosa breviori, stigmatibus stylo brevi duplo longioribus. – Petropolis (Serra da Estrella).

Note: Seubert in *Fl. Bras.* 5. 1: 244 (1875) does not mention this name. However, *Celosia cymosa* Seub. loc. cit.: 245 is a synonym of *C. corymbifera* (T. Myndel Pedersen, personal communication).

Type: 1 sheet in (C): Galathea-Expeditionen 4042, Petropolis, F. Didr.

Centaurea Seridis L. β , *maritima* Lange (*Asteraceae*)

ISH 1854: 22 (1855).

Protologue [In *Ann. Sci. Nat. Bot. Sér.* 1. 23: 165 (1831)].

Lange's *description* in ISH 1854: 22 (1855):

Centaurea Seridis β , *maritima* nob. (*C. maritima* L., *Duf. Ann. sc.* XXIII, p. 105).

Species maxime variabilis, e tribu difficillima *Seridiæ*, in omni littorali Valentiniæ & Murciæ videtur frequens. Inter *C. Seridis* L. (*Pluk. alm. mag.* t. 38 f. 1) et *C. sonchifoliam* L. (l. c. t. 39 f. 1) ambigit et forsan, ulterius observata, utrumque speciem jungere apparebit. Folia variant decurrentia et semidecurrentia (caule latius angustiusve alato), integra, sinuato-lonata v. lyrato-pinnatifida (margine semper spinuloso dentata); numerus quoque spinarum periclinii exmie vacillans.

Specimina lecta in agris arte irrigatis circa Murciam urbem Nov. 1851.

Note: The genus *Centaurea* is dealt with by Dostal in *Fl. Eur.* 4: 254 (1976). Here the taxon

is treated as a subspecies under the name *Centaurea seridis* subsp. *maritima* (Dufour) Dostal, J. Linn. Soc., Bot. 71: 203 (1976) and based on *Centaurea maritima* Dufour, Ann. Sci. Nat. Bot. Sér. 1. 23: 165 (1831); according to the current rules of botanical nomenclature Lange's name cannot be maintained.

Type: 3 sheets in (C), not types: 1. in agris ad Murciam urbem Nov. 1851; 2. in agris circa Murciam urbem Nov. 1851; 3. Murcia in agris Nov. 1851.

Cirsium microcephalum Lange ad int.
(*Asteraceae*)

ISH 1854: 22 (1855). Ann. Sci. Nat. Bot. Sér. 4. 2: 370 (1854).

Protologue [First published in Ann. Sci. Nat. Bot. Sér. 4. 2: 370 (1854) with same wording as in ISH 1854: 22 (1855)].

Cirsium microcephalum Lge. ad int.

Adfine *C. lanceolato* foliis decurrentibus, supra hispido-scabris subtus tomentosis, foliorumque forma, sed. diff. fol. margine subrevolutis pagina sup. multo minus aspera, calathiis duplo minoribus in axillis superioribus singulis sessilibus inque apice caulis congestis, junioribus ovato-cylindricis, adultis ovatis, achæniis minoribus, tereti-subcompressis sectione transversali ovali (nec elliptico-lanceolato).

Spinæ foliorum flavicantes. Habitu aliquantulum ad *C. italicum* DC. accedit, sed hujus folia brevius decurrentia, fol. involucralia calathium longe superantia. A *Cirsio lanceolato* nostro satis recedit, an tamen ejus forma australis? Hybrida proles minime censenda, cum copiosissima adesset sine ullo vestigio *C. lanceolati* typici.

In campis asperis ad oppid. Bilbao Oct. 1851.

Note: Lange's name is a later homonym of *C. microcephalum* Moris, Fl. Sardoia 2: 466 (1840-43). Dostal in Fl. Eur. 4: 237 (1976) includes Lange's taxon in the very polymorphous speci-

es *C. vulgare* (Savi) Ten., Fl. Napol. 5: 209 (1835-38).

Type: 3 sheets in (C): 1. in locis asperis ad Bilbao 9 Oct. 1851; 2. Bilbao in campis asperis Oct. 1851; 3. in campis asperis ad Bilbao Oct. 1851.

Cleome indecora Liebm. (*Capparaceae*)

ISH 1845: 3 (1846), ISH 1846: 3 (1847).

Protologue

Cleome indecora Liebm., suffruticosa stricta 4=6 pedalis, floribus terminalibus corymbosis, pedalis albis spathulatis reflexis, siliquis brevistipitatis 21/2=9 pollicaribus cylindricis glabris, foliis 3 foliatis, longi petiolatis, foliolis glabris coriaceis lanceolatis margine denticulatis. In sylvis primævis circa Papantla. Liebm.

Note: In ISH 1846 Liebmann repeated the protologue, but corrected the measures of the fruit from 21/2=9 pedalis to 21/2=3 pedalis. No recent monograph on the genus *Cleome* is available. The name is not mentioned by F. Pax & Käthe Hoffmann in Nat. Pflanzenfam. 17b: 210 (1936).

Type: no specimen extant in (C); 1 drawing by F. Bayer represents *C. indecora* Liebm. Hugh H. Iltis annotates this in 1952 as *Cleome serrata* Jacq. ssp. *serrata*. Plate 2.

Colutea breviaalata Lange (*Fabaceae*)

ISH 1861: 30 (1862).

Protologue

Colutea breviaalata Lge. n. sp.

Frutex humilis; folia 3-4-juga foliolis orbiculari-ovobovatis obtusis (vix retusis), brevissime mucronatis, supra glabra, subtus levissime adpresse puberula, pedunculi biflori, folio breviores, calyx cum pedicello dense adpresse nigro-pilosus; corolla minor quam in speciebus affinis, lamina vexilli orbiculari-reniformis, gibbis basilaribus brevissimis; alæ carina

duplo breviores; maculam vexilli subæquantes cave parum breviores! lobo basilari ungue duplo brevior; legumen ellipticum, inferne in stipitem longum, compressum, falciformi-curvatum sensim angustatum; semina oblique reniformia, nitida.

Specimen hujus plantæ per multos annos in horto bot. hauniensi coluimus indeterminatum et sine indicatione patriæ et horti, unde semina accepimus. Sed collatis speciminibus nonnullis herbarii mei, quæ 1851 ad Murviel fl. Monspel. pro *C. arborescente* legi, eadem prorsus similia inveni, et a *C. arbor.* optime distincta statura duplo v. amplius humiliore, foliis floribusque minoribus, legumine sensim in stipitem longiorem angustatis et imprimis alis brevissimis, qua nota quoque a reliquis *Colutea* speciebus recedit. Igitur speciem nostram botanicis Gallicis, in provinciis Mediterraneis ulterius inquirendam, præcipue commendamus. Ceterum *Coluteæ* generis revisio critica maximopere desideratur, nec dubito quin, speciebus rite definitis et descriptis, numerus sic dictarum specierum, variis vagisque nominibus in hortis cultarum, valde diminueretur.

Note. Browicz in *Monogr. Bot.* 14: 45 (1963) regards this as a mere form of *C. arborescens* L., *Sp. Pl.* 2: 723 (1753).

Type: 4 sheets in (C): 1. Murviel pr. Montpellier 28. Mai; 2. Murviel pr. Montpellier 28. Mai 51; 3. Hort. bot. hafn. 25. Jun. 1860; 4. Ex horto botan. Hauniensi 1860.

Convolvulus pilosella Liebm.
(*Convolvulaceæ*)

ISH 1853: 22 (1854); *Ann. Sci. Nat. Bot. Sér.* 4. 1: 331 (1854).

Protologue

Convolvulus Pilosella Liebm.; herba annua prostrata 5-6 pollicaris; caulibus pluribus teretibus adpresse pilosis, foliis subsessilibus oblongis v. oblongo-spathulatis retusis undulatis marginibus reflexis supra basin parum dilatatis, su-

pra longe pilosis subtus pilosulis, floribus axillaribus solitariis sessilibus, lobis calycinis lanceolatis acutiusculis marginibus hyalinis membranaceis, dorso pubescentibus, corolla lilacina, fauce flava, tubo brevissimo albo, extus sericea, filamentis subulatis albis, antheris ovalibus albis, stylo corolla brevior filiformi, stigmate inconspicuo indiviso, capsula brevissime pedicellata globosa pubescente 2 loculari 4 sperma, seminibus muricatis, pedicello crasso vix lineam longo nitido glabro utrinque bracteola minutissima subulata adpressa suffulto.

Sub nom. *C. fatmensis* Kze ex h. Genuensi accepimus.

Note. Geographic origin of the type is unknown (see protologue).

Type: 2 sheets in (C): 1. *Convolv. Pilosella* Lbm. ind. h. hafn h. h; 2. *Convolvulus Pilosella* Liebm. ! h. h.

Dipogon Liebm. (*Fabaceæ*)

ISH 1854: 27 (1855); *Ann. Sci. Nat. Bot. Sér.* 4. 2: 374 (1854).

Protologue [First published in *Ann. Sci. Nat. Bot. Sér.* 4. 2: 373 (1854) with same wording as in ISH 1854: 27 (1855)].

Dipogon Liebm. nov. gen. *Papilionacearum.*

Calyx bibracteolatus campanulatus bilabiatus ciliatus, labio sup. bidentato, inf. trifido, lobo infimo productiori. Corollæ papilionaceæ vexillum suborbiculatum reflexum basi ad costam canaliculatum bicallosum, alæ ungviculatæ lato-falcatæ obtusæ carinam æquantes, carinæ petala antice connata ungviculata falcata obtusa; stamina 10 diadelpha, filamenta filiformia glabra, antheræ globosæ dorso affixæ biloculares flavæ longitudinaliter dehiscentes, ovarium pluriovulatum glabrum, stylus incurvus antice lineis duabus barbatis notatus, stigma capitatum basi ciliatum. Legumen stipitatum compressum ensiforme apiculatum glabrum 4-5-spermum. Semen strophiolatum subglobosum nitidum fuscum nigro-punctatum.

Note: This monotypic genus was by several authors referred to *Dolichos* L. The reasons for accepting the name *Dipogon* is explained by Verdcourt in *Taxon* 17: 537 (1968); for further information see also Lackey in Polhill & Raven ed.: *Adv. in Legume Science* 1: 324 (1981).

Dipogon glycinoides Liebm. (*Fabaceae*)

ISH 1854: 27 (1855). *Ann. Sci. Nat. Bot. Sér.* 4. 2: 374 (1854).

Protologue [First published in *Ann. Sci. Nat. Bot. Sér.* 4. 2: 374 (1854) with same wording as in ISH 1854: 22 (1855)].

Dipogon glycinoides Liebm.: frutex volubilis, ramis teretibus cortice rugoso fusco tectis, ramulis pilosulis. Folia petiolata trifoliolata, foliolo intermedio remotiori ovato-rhomboidali obtuso mucronulato supra nitido subtus glauco ciliolato, stipellis 2 setaceis ciliatis suffulto, lateralibus oppositis brevipetiolatis oblique ovatis obtusis mucronulatis, utroque stipella lanceolata ciliata suffulto, petiolo communi canaliculato parce pilosulo, stipulis oblique lanceolatis semiamplectentibus ciliatis. Flores axillares racemosi, pedunculus folio suo multoties longior angulatus striatus pilosulus; pedicelli pilosi flore breviores.

Folia 2-2 1/2" longa, petiolus communis 1", foliolium intermedium 1" longum latumque, lateralalia 12-14" longa, 9-10" lata, petioli 1". Pedunculus 4-5", pedicelli 2", calyx 2", vexillum 5-6" longum latumque, alæ 5" longæ, 2" latæ, carina petala 5" longa, 2 1/2" lata. Legumen 12-13" longum, superne 3" latum deorsum attenuatum.

Semina e Brasilia missa nobis communicavit cl. Hofman-Bang. Genus affinis *Glycinæ*.

Note: As shown by Verdcourt the correct name is *Dipogon lignosus* (L.) Verdc., *Taxon* 17: 537 (1968); *Kew Bull.* 24: 406 (1970) based on *Dolichos lignosus* L., *Sp. Pl.* 2: 726 (1753); *Hort. Cliff.*: 360, t. 20 (1737). The species is in-

digenous to S. Africa, but at Liebmann's time cultivated in many botanic gardens in Europe, e. g. in Kew of seeds from Buenos Aires, but also from other sources. The intricate typification is found in Verdcourt l. c. 1970 where also a full synonymy is found.

Type: not traced in (C).

Echium rosulatum Lange (*Boraginaceae*)

ISH 1854: 22 (1855); *Ann. Sci. Nat. Bot. Sér.* 4. 2: 370 (1854).

Protologue [First published in *Ann. Sci. Nat. Bot. Sér.* 4. 2: 370 (1854) with same wording as in ISH 1854: 22 (1855)].

Echium rosulatum Lge. Perennis v. biennis; infra rosulam foliorum radicalium centram oriuntur caules satis numerosi, adscendentes v. dein longissime diffusi, pilis brevioribus adpressis setisque rigidis albidis e glandula atropurpurea surgentibus vestiti; fol. radical. lanceolatis, obtusiusculis, breviter petiolatis nervo medio valido nervis secundariis conspicuis; fol. caulinis sessilibus basi breviter angustatis obtusis; racemis denique valde elongatis, floribus remotis, inferioribus extraaxillaribus; calyce fere ad basin 5-fida laciniis inæqualibus (interiori minori); corollæ tubo limbo brevioris, calycis fere longitudine; corolla externe pubescente jun. rosea, adulta coerulea (lab. inf. pure coerulea, sup. violaceo-striato); filamentis plus minusve pilosis; nuculis ovatis abrupte acuminatis dorso subconvexo, ventre acutangulo in vivo tessellato-punctato, (siccato sublævi).

Inflorescentia denique sparsiflora floribusque inferioribus sæpius extraaxillaribus ad *E. calycinum* Viv. & *E. arenarium* Guss. accedit, a quibus autem rosula foliorum centrali, calyce non accrescente, corolla magna filamentis pilosis cet. abunde differt. *E. plantagineum* L. differt corolla externe vix vel nonnisi apice pilis sparsis pilosa, foliorum nervis lateralibus magis prominentibus, fol. caulinis basi amplectentibus, caule erecto v. adscendente, (non longe dif-

fuso); *E. maritimum* Willd. foliis multo asperioribus, racemis densifloris, filamentis glabris cet. recedit. Reliquas species Echii nobis notas cum hac commutare non licet.

In *Gallecia præsertim littorali ad vias & in campis satis frequ.* Aug.-Sept. 1852

Note: The species is endemic to Portugal and N. W. Spain. Plate (XII) in Lange, Descr. Icon. Pl. Nov. (1864).

Type: 1 sheet in (C): In collibus mari proximis ad Cobas Gallesio 12. Sept. (this specimen drawn).

Eleusine geminata (Spreng.) Lange
(*Poaceae*)

ISH 1861: 28 (1862).

Protologue

Eleusine geminata (Spr.) Lge. (*E. indica* γ , *brachystachya* Trin. ic. VI, t. 72; *E. barcinonensis* Costa in Willk. Enum., Linnæa XXX, p. 125; *Triticum geminatum* Spreng.

Specimina nostra, e seminibus ex horto Halensi nomine *E. barcinonensis* acceptis educata, leves quidem differentias, e cultura facile explicandas, a descriptione l. c. facile explicandas, a descriptione l. c. data præbent: culmo pedali v. ultra, foliis non ciliatis, spicis geminis v. ternis (nec 1-2), spiculis 5-6 floris; ceterum vero bene conveniunt, nec dubito, bonam esse speciem, ab *E. indica* omnino distinctam, sed jure prioritatis nomen Sprengelianum nomini recentiori præferendum esse censeo, tanto magis quia, bene monente cl. Willkomm l. c., patria hujus plantæ vix ad Barcinonem quærenda est.

Note: Sprengel described this taxon as *Triticum geminatum* in Spreng., Syst. Veg. 1: 326 (1824). The correct name is *E. tristachya* (Lam.) Lam., Tabl. Encycl. 1. 1. 2: 203 (1792), a south American species naturalized in southern Europe.

Specimens: 2 sheets in (C): cult. Hort. bot. Hafn. 1861 (sem. ex hort. Halensi).

Enhydra affinis Didr. (*Asteraceae*)

ISH 1849: 14 (1850).

Protologue

Enhydra affinis Didrichsen, glabra, caule subfluitante ramis adscendentibus, foliis sessilibus oblongis basi cuncato angustatis obtuse et parce dentatis apice obtusiusculis, capitulis ad axillas solitariis breviter pedunculatis. Species media inter *E. oblongam* et *subcuneatum* DC. Lima, in aquæductu.

Note: The correct spelling is *Enydra* Lour., Fl. Cochinch.: 510 (1790). *E. affinis* is very close to and maybe conspecific with *E. anagallis* Gardn.

Type: 3 sheets in (C): Callao & Lima Nr. 4322 leg. F. Didrichsen.

Epilobium cupreum Lange (*Onagraceae*)

ISH 1873: 2 (1874).

Protologue

Epilobium sp. 29 e Sitcha (h. Petrop.) 66. = *Epilobium cupreum* Lge. mscr. perenne, spithamæum; Caulis, folia inferiora (et superiorum pagina inferior) et capsula intense fusca (cuprea), nitida; caulis e trunco brevi adscendens, petiolorum marginibus decurrentibus leviter quadrangulus, crassiusculus; folia omnia sparsa, breviter petiolata v. super, subsessilia, elliptica v. lanceolata, inferiora obovata, obtusa, superiora acuta, argute serrata, leviter ciliata, ceterum glabra; alabastra erecta, obtuse mammillata, limbus calycis 1/3 petalis brevior, petala pallida v. lilacino-rosea, ad 1/3 laminæ partem usque obcordato-biloba; capsula glanduloso-puberula, 11/2" longa.

Note: The type material was renamed *E. hornemannii* Rchb. subsp. *hornemannii* by Peter C. Hoch 1979.

Type: 2 sheets in (C): Hort. bot. haun, 29 Mai 1868.

Erechtites mülleri Lange (Asteraceae)

ISH 1861: 28 (1862); *Char. emend.* in Bot. Tidsskr. 8: 5. Tab. 3 (1874).

Protologue

Erechtites Mülleri Lge. n. sp. (sect. *Tulodiscus*); *E. hispidula* hort. Melbourn., non DC.

Perennis v. frutescens, fastigiato-ramosa; caulis lævis, tomentosus-arachnoideus; folia linearilanceolata, acuminata, supra glabra, subtus nivo-arachnoidea, margine vix revoluta, remote et obsolete, sed regulariter serrata, basi breviter sagittato-auriculata; corymbus laxus, suprafastigiatus; periclinium cylindricum, gracile, disco brevius, arachnoideum; flores exteriores bifidi, interiores 4-fidi; achænia scabriuscula, erostris, infra pappum callosa.

Hab. Nova Hollandia, unde cel. Dr. F. Müller in collectione ditissima ab horto Melbourn. oblata semina misit.

Ambigit inter *E. prenanthoidem* et *E. hispidulam* DC., quarum prior differt caule glabriusculo, foliis argute dentatis, periclinii glaberrima squamis margine membranaceis flores subexcedentibus, posterior vero caule subsimplici, piloso-aspero, foliis tuberculato-hispidulis, margine revolutis, inæqualiter serratis. Species nostra insuper totius plantæ præter paginam foliorum superiorem indumento arachnoideo insignis est.

Note: An Australian species whose correct name is *Senecio minimus* Lam., *Encycl. Suppl.* 5: 130 (1817).

Type: not traced in (C).

Erodium cicutarium-primulaceum Welw. ex Lange (Geraniaceae)

ISH 1855: 24 (1856); *Linnaea* 28: 359 (1856); *Erodium primulaceum* Welw. ex Lge., ISH 1863: 4 (1864); *Vidensk. Meddel. Dansk Naturhist. Foren. Kjøbenhavn* 1865:133 (1866). *Char. emend.* in Bot. Tidsskr. 8: 1. Tab. 1 (1874).

Protologue

Erodium cicutarium – *primulaceum* J. Lge. (*E. primulaceum* Welwitsch mscr. ex specim. in H. M. Par.) Pedunculus longissimus, 7-9 florus, bracteolis minimis revolutis; sepala obtusa longe aristata, petalis duplo breviora; petala 3 majora obovata, immaculata, 2 minora suborbicularia basi, macula cinerea rubropunctata notata.

Herba robusta, facie *E. romani* W., quæ species differt absentia caulis herbacei, petalis æqualibus. Utrum species distincta, an forma australis robustior *E. cicutarii* maxime polymorphi sit, dubius hæreo.

In campis argillosis circa Hispalim (Sevilla) Mart. 1852 legi.

Char. emend. in ISH 1863: 4 (1864). *Erodium primulaceum* (Welw. mscr.) Lge. *E. cicutarium primulaceum* Lge. ind. sem. haun. 1855: 24; *E. salzmanni* Delil. hort. Monspel. 1838?

Planta, quam in indice sem. hort. haun. descripsi, dubius adhuc, an specificè ab *E. cicutario* separanda esset, postea quotannis in horto bot. nostro culta et ulterius observata constantem sese præbuit et quidem differentias tam graves ab omnibus *E. cicutarii* formis obtulit, ut vere distinctam esse non dubitarem. In peninsula iberica haud rara esse videtur hæc species, equidem ad Burgos, Cordoba, Sevilla et Portum Sæ Mariæ ejusdem specimina legi, e Lusitania quoque specimen a Welwitschio lectum in herb. Mus. Paris adest. Sed forsitan eadem species est, quæ a Delileo nomine *E. Salzmanni* descripta est, saltem specimina hoc nomine designata mihi a Boissiero (ad Yunquera lecta) communicata sunt, sed brevis descriptio Delileo l. c. hanc quæstionem solvere non mihi permisit.

Note: This is one of the numerous forms of *Erodium cicutarium* (L.) L'Hér. in Aiton, Hort. Kew. 2: 414 (1789). In their treatment of the species in *Fl. Eur.* 2: 203 (1968) D. A. Webb & Chater explicit quote *E. primulaceum* and *E. salzmannii* Delile as synonyms to *E. cicutarium* subsp. *cutarium*.

Type: Welw. leg., in herb. (P). There are 5 sheets in herb. (C) with the combination *Erodium primulaceum* (Welw.) Lge.; only one of them from March 1852, loc.: La Albayda pr. Cordoba, not as in protologue: In campis argillosis circa Hispalim (Sevilla) Mart. 1852 legi. (The locality La Albayda pr. Cordoba is cited in Vidensk. Meddel. Dansk Naturhist. Foren. Kjøbenhavn 1865: 133 (1866)).

Eruca vesicaria (L.) Cav. var. *orthosepala*
Lange (*Brassicaceae*)

ISH 1853: 18 (1854).

Protologue

Eruca vesicaria Cav. ! β , *orthosepala* Lge. Specimina in horto educata ceterum typo exacte similia solummodo differunt calycibus adpressis vix inflatis, quæ tamen modificatio forsann mere accidentalis, cultura hortensi enata.

In campis et ruderalibus pr. oppidum Aranjuez Nov. 1851.

Char. emend. in ISH 1857: 28 (1858). *Eruca orthosepala* Lge. (*E. vesicaria* β , *orthosepala* Lge. ind. sem. hort. Haun. 1853) accuratius observata videtur species tam ab *E. sativa* L. quam ab *E. vesicaria* Cav. distincta; ab illa differt siliqua multo minore, valvis fere duplo angustioribus, seminibus multo minoribus, numerosis, biserialibus! (in *E. sativa* sub-1 serialibus, 4-8 in quovis loculo); ab hac diff. caule subglabro, sepalis erectis non inflatis etc. Ab *E. stenocarpa* Boiss. magis differt nervo centrali valvarum evidente (nec obsoleto), seminibus 2-serialibus, rotundato-angulatis subglobosis (nec oblongis, 1-serialibus).

Ad vias et in campis pr. Aranjuez (Nov.) & Lorca Hispaniæ (Dec.) 1851 fructiferam legi. – Genus *Eruca* examini ulteriori valde commendandum; character genericus Candollei “semina uniserialia”, ut hic observavimus, et ut jam Boissier, Gren. & Godr. aliique monuerunt, haud constans.

Note: This variety was considered by the au-

thor, who in ISH 1857: 28 (1858) makes the new combination *E. orthosepala* (Lange) Lange. In Fl. Eur. 1: 340 (1964) Tutin treats it as a synonym of *E. vesicaria* subsp. *sativa* (Miller) Thell. ex Hegi, Ill. Fl. Mitt.-Eur. 4: 20 (1913), a viewpoint maintained by C. Gómez Campo in Flora Iberica 4: 390 (1993).

Type: 2 sheets in (C): 1. Aranjuez 1852 (is this erroneous for 1851?); 2. (not in protologue) e seminibus ad Lorca lectis in hort. bot. hafn. cultæ (“leg. Dec. 1851”) fide Lange: ISH 1857: 28 (1858).

Eustoma lacteum Liebm. (*Gentianaceae*)

ISH 1847: 12 (1848).

Protologue: none. *Text in ISH:*

Eustoma lacteum Liebm. (*Urananthus pallidus* Liebm. Index sem. Hort. Haf. 1845 [erroneous for 1843 (1844)]). A tribus adhuc notis speciebus certe diversa, ulterius describenda. E vicinitate Tehuacan, Mexico.

Note: Nomen nudum. *Eustoma lacteum* is synonymous with *Eustoma exaltatum* (L.) Griseb. in DC., Prodr. 9: 51 (1845), and so is *Urananthus pallidus* Liebm. ex Sond. in E. Otto, Allg. Garten-Zeitung 4: 368 (1848), the citation given in Index Kewensis. However, vol. 4 was published in 1836, long before *Urananthus pallidus* was collected by Liebmann. Vol. 16 was published in 1848, but there is no mention of *U. pallidus* in this volume. We have not been able to find Sonder’s validation of Liebmann’s name in any of the volumes of Allg. Garten-Zeitung and shall leave the matter here. *Eustoma exaltatum* is a widely distributed species from California to Florida through Mexico and Central America to Venezuela. Another synonym is *E. silenifolium* Salisb., Parad. Lond. pl. 34 (1805). The basionym is *Gentiana exaltata* L., Sp. Pl. ed. 2.1: 331 (1762).

Type: 1 sheet in (C). So far no type can be designated. However, 1 sheet is extant: 1. *Urananthus Tehuacan* 12/41.

Filago ramosissima Lange (Asteraceae)

ISH 1855: 24 (1856); Linnaea 28: 360 (1856).

Protologue

Filago ramosissima J. Lge.

Annua, caulis a basi ramosissima, ramis diffusis vel adscendentibus, 2-3-chotomis; folia inferiora ovato-lanceolata, superiora obovato-lanceolata, breviter acuta v. obtusa apiculata; calathia ovato-pyramidata in dichotomiis et ad latera ramorum in glomerulos parvos 3-5-cephalos adgregata, foliis floralibus glomerulos subæquantibus v. superantibus; foliola periclinii 3-serialia; exteriora 5 (calyculi instar ad basin calathii), calathii dimidium vix attingentia, basi lana densa immersa interiora 8-10, a basi corymbiformi v. semilunari, dense arachnoideo-lanata, in acumen glabrum contracta, versus maturitatem erecto-patula, haud stellatim expansa; achenia obovata, punctis pellucidis dense papillosa, pappo sub—12-ratio, radii scabris, corollam subæquantibus.

Species insignis, 2 sectiones hucusque separatas (Gifola & Oglifa) manifeste connectens. A priori (*F. germanica* etc.) diff. glomerulis e calathiis 3-5 (nec 8-∞) compositis, foliolis periclinii 3-serialis (nec 5 serialis), exterioribus vacuis (nec omnibus florigeris), a posteriori (*F. minima* etc.) diff. foliolis periclinii intermediis cuspidatis, ad maturitatem non stellatim patentibus. Habitu etiam inter *F. spathulata* Presl. & *F. minimam* Fr. quasi intermedia.

In glariosis ad pedem montium Illiberitanorum prope Granatam urbem (Sierra Elvira) florentem & fructiferam legi 24 april 1852. (Specimina plurima juxta ipsam urbem Granatam lecta certe eodem pertinent, etsi quibusdam characteribus recedant, sed haud satis evoluta ideoque non rite determinanda). Cel. Durieu de Maisonneuve, cui pauca achænia communicavi, plantam vivam educavit, ejusque amicitiae semina debemus, quæ hoc anno plantas in horto nostro fructificantes produxerunt.

Note: As Holub mentions in Fl. Eur. 4: 122 (1976) this is a North African species whose range just reaches S. E. Spain.

Type: 1 sheet in (C), 4 specimens on sheet, 2 of them apparently types: 1b. In monte Sierra Elvira fl. granat. 24. Apr. 1852; 2. Barranco bermejo fl. granat. in glareosis 19. Apr. 1852.

Fumaria apiculata Lange (Fumariaceae)

ISH 1854: 23 (1855); Ann. Sci. Nat. Bot. Sér. 4. 2: 371 (1854).

Protologue [First published in Ann. Sci. Nat. Bot. Sér. 4. 2: 371 (1854) with same wording as in ISH 1854: 23 (1855)].

Fumaria apiculata Lge.

Foliorum laciniis ellipticis acutiusculis; racemis 10-12 floris, pedicellis semper erectis, bracteis lanceolato-lineares subæquantibus; sepalis lanceolato ovatis, utrinque 1-2 dentatis acutiusculis, latitudine corollam paullo superantibus, longitudine tertiam partem corollæ subæquantibus; fructu compressiusculo, ovato-globo, styli basi insigniter apiculato, superne 2-foveolato, in vivo longitudinaliter striatulo, sicco obsolete rugoso.

Obs. *F. Petteri* Rchb. (ic. t. 4453 b) differt bracteis (in fig. depicta) pedicello multo brevioribus, pedicellis post anthesin curvatis, fructibus obtusis mucronulatis tuberculatis. Fructus forma proxime accedit ad *F. parvifloram* Lam., quacum ceterum nihil commune habet. *F. Reuteri* Boiss. (diagn. pl. Or. no. 8 p. 13) nobis ignota describitur foliorum laciniis minutis anguste linearibus, fructu minuto acutiusculo ovoideo vis compresso. An nihilominus planta nostra ad hanc speciem pertinent, donec adsint specimina authentica non dijudicare ausus sum.

In silvis montanis mont. Carpetan. ad Escorial et Guadarrama, lect. Jun. 1852.

Note: P. D. Sell in Fl. Eur. ed. 2, 1: 307 (1993) treats this as a synonym to *F. reuteri* Boiss., Diagn. Pl. Orient. 1. 2. 8: 13 (1849).

Type: 2 sheets in (C): 1. Pinar de Guadarrama Hisp. centr. 18 Jun. 1852 Joh. Lange; 2. ad caecum montis Sierra de Guadarrama in pineto supra pagum ejusd. nom. 24. Jun. 1852.

Galathea Liebm. (Iridaceae)

ISH 1855: 26 (1856); Linnaea 28: 361 (1856).

Protologue

Galathea Liebm. nov. gen. Iridearum.

Perigonium corollinum superum hexaphyllo-partitum, laciniis ext. 3 majoribus patentibus demum reflexis lato-lanceolatis obtusis cæruleis disco barbato luteo lineis maculisque fuscis notato, laciniis int. 3 minoribus spathulatis convolutis apice revolutis rotundato-bilobis lamina coerulea striata disco flavo fusco maculato, pagina superiori pubescente. Stamina 3 basi perigonii inserta; filamenta libera subulata, antheræ lineares basifixæ, loculis connexivum marginantibus longitudinaliter dehiscentibus stigmatis lobis dorso per totam longitudinem arcte adglutinatis. Pollen ellipticum ochroleucum. Ovarium inferum oblongo-prismaticum triloculare. Ovula plurima in loculorum angulo centrali biseriata. Stylus brevis filiformis. Stigma dilatatum trifidum, lobis erectis trigonis apice bifidis, laciniis subulatis basi dorso transverse appendiculatis, appendicibus parvis cucullatis. Capsula coriacea oblongo-prismatica basin versus attenuata glabra loculicide trivalvis, valvis 3 striatis fuscis. Semina obovato-angulata apice truncata longitudinaliter dense sulcata nigricantia. Rhaphe umbilicum basilarem chalazae apicali incrassatæ jungens. Embryo axillis albumine corneo brevior.

Herba perennis brasiliensis, radix fibrosa, rhizoma subnullum, folia biserialia ensiformia equitantia ancipitia tenuiter nervata glauca. Scapus compressus anceps biflorus. Flores unilaterales spatha diphylla cincti, spatha inferiore flores longe superante, superiore longitudine florum. Flos singulis spathella diphylla

compressa ancipite cinctus, magnus speciosus.

Note: Sprague in Bull. Misc. Inform. 1928: 279 (1928) discussed this generic name which is antedated by Galatea Cass. (1818), and Galatea Herb. (1820). The two spellings are regarded as mere orthographic variants, therefore Liebmann's name cannot stand. The correct name is Neomarica Sprague loc. cit.

Galathea speciosa Liebm. (Iridaceae)

ISH 1855: 26 (1856); Linnaea 28: 363 (1856).

Protologue

Galathea speciosa Liebm.

Hab. in sylvis pr. Rio de Janeiro.

Folia 3 pedalia 2" lata. Scapus 2' longus 1-1 1/2" latus. Spathæ universalis folium inf. 12" longum 1 1/2" latum, folium sup. 4 1/2" longum 9" latum. Spathellæ 3" longæ 5" latæ. Perigonii laciniæ ext. 1 3/4" longæ 1" latæ; lacin. int. 1 1/2" longæ 8" latæ. Stylus et stigma 9". Antheræ 4", filamenta 1 1/2-2". Ovarium 3-4". Capsula 12-14" longa, valvæ 3-4" latæ.

Obs. A Cypella Herb., cui proximum est genus nostrum, differt: stigmatis lobis bifidis nec trifidis, filamentis liberis, antheris dorso stigmatis adglutinatis, scapo compresso ancipiti, rhizomate subnullo. A Tigridia Juss. differt: perigonio usque ad basin fisso, filamentis liberis, stigmatis laciniis dilatatis trigonis bifidis appendiculatis, scapo ancipiti.

Nomen genericum olim in plantis Irideis applicatum iterum restituo. Galathea Salisb. = Viuesseuxia Roche. Galathea Herb. = Amaryllis L. (Nerine Herb.)

Note: See under the genus Galathea. The correct name is Neomarica caerulea (Ker-Gawl.) Sprague, Bull. Misc. Inform. 1928: 280 (1928) based on Marica caerulea Ker-Gawl. in Bot. Reg. 9. t. 713 (1823-24). Originating from Brazil, often cultivated in the tropics and run-wild.

Type: Consisting of 12 seeds and 2 open, empty fruits transferred from seedbag in the Botanical Garden, Copenhagen to herb (C). On seedbag: "den levende plante fra Rio Janeiro ved Grosserer R. Puggaard, 1855".

Galium aparinella Lange ad int.

(*Rubiaceae*)

ISH 1854: 24 (1855).

Protologue

Galium Aparinella Lge ad int. (Boiss.) diff. a *G. Vaillantii* DC., cui proximum, herba multo graciliore, corolla ochroleuca minima lanciniis breviter apiculatis apice sæpius inflexo, fructibus minoribus, pilis apice hamatis, basi tuberculatis obsitis.

Inter suffrutices (*Frankenia thymifolia*, *Centaurea hyssopifolia* cet.) solo gypsaceo ad Aranjuez lect. 21 Mai 1852.

Note: Ehrend. & Krendl in *Fl. Eur.* 4: 35 (1976) treat this as synonymous to *G. parisiense* L., *Sp. Pl.* 1: 108 (1753).

Type: 3 sheets in (C): inter suffrutices solo calcarea ad Aranjuez 20 Mai 1852; Inter frutices ad Aranjuez 20. 5. 1852; inter frutices solo calcarea ad Aranjuez 20 Mai 1852.

Geranium omphalodeum Lange

(*Geraniaceae*)

ISH 1865: 27 (1866).

Protologue

Geranium omphalodeum Lge. ad int., annuum, spithamæum v. parum ultra; caulis erectus, parum ramosus, viscido-pilosus; folia longe petiolata, ambitu reniformia, palmatisecta, segmentis 5 serrato-incisis v. pinnatifidis, laciniis acutis; stipulæ breves, ovato-lanceolatae, acuminatae, membranaceae; pedunculus brevissimus erecto-patulus, non reflexus, 1-2-florus, pedicelli deflorati cernui, apice incrassati; sepala ovata, breviter mucronulata, vesiculosoinflata, trinervia, nervis sepalorum exteriorum valde

carinato-prominulis; petala; rostrum (columella stylaris) carpellis vix duplo longius, carpella matura fusca, ovata, facie externe excavata, margine circumcirca eleganter rugosocrenata (fere ad instar *Omphalodis linifoliae*), carina secus medium in fundo cavitatis prominula leviter crenulata percursa, facie interna radiatim striolata semen; lævissimum, ovale, utrinque truncatum v. basi obtusum, fuscum.

Ex horto Berolinensi nomine *Geranii columbini* acceptum. Florendi tempore *G. dissecto* valde videtur simile, a quo tamen characteribus indicatis et præcipue calycis et carpellorum structura toto coelo diversum est. *G. mascatense* Boiss. (*diagn. pl. orient.* 1,59), magis nostro affine, differt caulibus subdiffusis, foliis ambitu orbicularibus, ultra medium (in nostro fere ad basin usque) 5-fidis, pedunculis defloratis declinatis, rugis valvularum sub lente punctatis, rostro valvulis subtriplo longiore.

Habitus plantæ Boissierianæ insuper *G. molli* similis dicitur, sed nostra species minime *G. molli*, sed *G. dissecto* similis est. *G. favosum* Hochstett. mscr. in *Rich. Tent. fl. Abyss.* (cf. *Walp. Ann.* II, 236) quoque affine videtur, sed distinctum caule glabriusculo, sepali ovalisoblongis, et præterea *carpidia* modo dicuntur "glabra, rugoso-favosa". Ex descriptione brevi et ob defectum speciminum authenticorum haud dijudicare possum, an forsitan nostra planta ad hanc ultimam speciem referenda sit.

Note: The name is synonymous with *G. trilophum* Boiss., *Diagn. Pl. Orient. Ser.* 1. 6: 30 (1846) according to *Ind. Kew.* The name is not referred to by Schönbr.-Tem. in *Fl. Iranica* No. 69 (1970). Lange later in ISH [*Nomina emendata plantarum*] 1867: 2 (1868) refers this to *Geranium favosum* Hochst.

Type: 1 sheet in (C): Hort. bot. haun. 16. Aug. 1865, (sem. ex hort. Berolin. s. n. *G. columbini*).

Gesneria Sartorii Liebm. (*Gesneriaceae*)

ISH 1853: 20 (1854); Ann. Sci. Nat. Bot. Sér. 4. 1: 330 (1854).

Protologue

Gesneria Sartorii Liebm.: caule subherbaceo erecto stricto simplici tereti tomentoso, foliis oppositis petiolatis ovato-lanceolatis acutiusculis basi sensim attenuatis rotundato-crenatis supra hispidis subtus pubescentibus, floribus 2-3 in quavis axilla aggregatis, pedunculis folio suo brevioribus, calyce campanulato 5 gono 5 dentato pubescente, dentibus brevibus latis acuti marginibus parum reflexis, corolla 3-4 plo brevior, fructifero connivente, corolla sesquipollicari tubuloso-bilabiata parum incurva, tubo lateraliter compresso supra medium parum ventricosum extus pubescente basin versus constricto et ima basi urceolato dilatato 5 gibboso nitido glabro, labio superiore porrecto bilobo, lobis rotundatis glabris, labio inf. brevior reflexo 3 lobo, lobis rotundatis glabris; staminibus exsertis filamentis tenuissime puberulis, antheris conglutinatis glabris, rudimento stam. quinti brevissimo subulato, glandulis perigyniis 2, altera antica latissima emarginata ovarium semiamplectente, altera postica parva subulata, ovario pubescente, stylo exserto puberulo, stigmate transverso truncato obsolete bilobo fusco.

Folia inferiora 8" longa 4" lata, petioli 1 1/2", pedunculi 1 1/2-1 3/4", corolla lateritia-miniata.

In terra ex Mexico reportata enata.

Type: no specimen traced in (C) under *Gesneria* or *Gesneriaceae* indet.

Gilia stricta Liebm. (*Polemoniaceae*)

ISH 1853: 21 (1854); Ann. Sci. Nat. Bot. Sér. 4. 1: 331 (1854).

Protologue

Gilia stricta Liebm.: annua pusilla, toto glanduloso-pubescentibus; caule erecto stricto superne parce ramoso, foliis inferioribus petiolatis op-

positis, superioribus sessilibus alternis, bipinnatisectis, laciniis linearibus crassiusculis acutus supra glabris subtus puberulis, floribus axillaribus terminalibusque 1-3 brevipedunculatis, pedunculis flore brevioribus sub maturitatem capsulae saepe elongatis, calyce erecto tubuloso 5dentato glanduloso-pubescente, dentibus acutis mucronulatis, corollae tubo calyce parum brevior, laciniis ovatis acutis lilacinis, fauce nudo, staminibus infra faucem tubi insertis non exserta, filamentis nudis incurvis, antheris parvis lilacinis, capsula calycem aequante elongata trigona obtusa apiculata glabra, seminibus biserialibus (3-4 in utraque serie), ovoideis verruculosus.

Sub nom. *G. congesta* Hook. ex h. Berolinensi accepta.

Note: In herb. (C) *G. stricta* is annotated anonymously as *G. multicaulis* Benth.

Type: 1 sheet in (C): Liebm. sp. n. sub. nom. *G. congesta* Hook. ex h. Berol. accepimus h. h.

Heracleum eminens Lange (*Apiaceae*)

ISH 1861: 29 (1862); *Char. emend.* in Bot. Tidsskr. 5: 185. Tab. 3 (1872).

Protologue

Heracleum eminens Lge. (*Heracleum* sp. Nr. 89 "Argatsch Kisse" e Tauro 1853, hort. Vindob.). Perenne, robustum, 5-6 pedale; folia maxima pinnatisecta, segmento terminali trifido, laciniis pinnatilobis, lobis obtusis v. in foliis superioribus acutis, minute crenatis, subtus glauca, dense velutino-tomentosa, supra pubescentia; foliola involucri brevissima subulata, involucelli 8-10 setacea, pedicellis florigeris subduplo breviora; petala alba, vix radiantia; achænia orbiculari-obcordata, profunde emarginata, sat magna, glanduloso-pubescentia; vittæ dorsales inferne clavato-incrassatae latissimæque, ita ut invicem sese tangant, 3/4 tam partem totius dorsi occupantes, commissurales multo angustiores, vix nisi tertiam partem commissuræ attingentes.

Semina ex horto Vindobonensi accepta, in Tauro lecta sunt.

Inter *Heraclei* species, quas descriptas vidi, præcipue *H. villosum* Fisch. et *H. palmatum* Baumg. cum nostra planta comparanda esse videntur. Prior horum differt foliis sinuato-pinnatifidis, argute serratis, acuminatis, achæniis minoribus, ellipticis v. ovalibus, obsolete emarginatis, aspero-ciliatis, vittis dorsalibus multo angustioribus, invicem distantibus; posterior vero foliis inferioribus palmato-5-partitis, superioribus trilobis, lobis omnibus acute dentatis v. serratis, achæniis sulcato-striatis, verrucoso-hispidis distinguitur. An *H. amplissimum* Wend. (*Linnaea* vol. XV) cum nostro identicum sit, ob brevem ejusdem descriptionem vix judicari potest.

ISH 1861: 29, *H. giganteum* (Hort. Gorenk.). Hornem. Hort. Haun. suppl.: 32 (teste specim. in herb. Schum.)?

Note: In *Ind. Kew.* listed as a synonym to *H. platytaenium* Boiss., *Ann. Sci. Nat. Bot. Sér. 3. 1: 331* (1844). Davis in *Fl. Turkey 4: 488* (1972) accepts *H. platytaenium*, but does not mention *H. eminens*.

Type: 2 sheets in (C): 1. hort. bot. hafn. 29/6 61; 2. hort. bot. hafn. 29/6 61, sem. ex Tauro (hort.Vindob.).

Iberis procumbens Lange (*Brassicaceae*)

ISH 1861: 29 (1862).

Protologue [See *Iberis Tenoreana* DC. var. *hispanica* Lange].

Description

Iberis procumbens Lge. (*I. Tenoreana* β , *hispanica* Lge. ind. sem. haun. 1854 p. 24).

Ulterius observata hæc planta, ad littora Galliciæ borealis lecta, specificè distinguenda mihi videtur ab *I. Tenoreana* DC., quacum olim junxeram. Radix longa, lignescens; caules e collo numerosi, frutescentes, procumbentes, elongati, dense foliati et ramosi; rami rigide patentes v. flexuosi, angulati et in angulis pilis re-

flexis dense hispidi; folia lineari- v. lanceolato-spathulata, apice utrinque 1-2-dentata, carnosa, pagina superiore margineque ciliato-hispida; pedicelli brevis adscendentes, fructiferi subumbellatim contracti (minus arcte quam in *I. contracta*); siliculæ ovaes, basi apiceque subæquilatæ, breviter et anguste emarginatæ (nec, ut in *I. Tenoreana*, basi latiores, apice profunde emarginatæ auriculis protractis); styli longitudo valde variabilis; flores fructusque minores quam in *I. Tenoreana* secundum specimina hujus quæ vidi italica.

Note: Endemic to western coastal areas of the Iberian Peninsula. Based on *Iberis tenoreana* DC. var. *hispanica* Lange (See this).

Iberis Tenoreana DC. var. *hispanica* Lange (*Brassicaceae*)

ISH 1854: 24 (1855).

Protologue

Iberis Tenoreana (DC.) β , *hispanica* Lge.

A speciminibus italicis (Schouw, Gussone) differt ramis lone prostratis, superne magis foliosis, floribus frutuque minoribus. Attamen non ita diversa nobis visa est ut speciem novam in genere jam speciebus onusta crearemus. Styli longitudo summopere variabilis. In speciminibus nostris folia semper eximie ciliata (An huc pertinet *I. contracta* β ?, ciliolata DC.?). Ad *I. contractam* Pers. nullo jure referri posse nostram plantam, inspectis speciminibus hujus speciei a cl. Boissier et Bourgeau missis certior factus sum. Differt enim hæc ramis erectis strictis, fol. glabris, corymbo fructifero arcte contracto cet.

Ad littora Oceani prope pagum Cobas Galliciæ bor. Sept. 1852.

Note: In their treatment of the genus *Iberis* in *Fl. Eur. 1: 322* (1964) P. Silva & Franco refer De Candolle's species to the very polymorphous *I. pruitii* Tineo, *Pl. Rar. Sicil.: 11* (1817), a widespread mediterranean species of which numerous variants have been described. Lange in ISH

1861: 29 (1862) transferred this variety to *Iberis procumbens* Lange.

Type: 4 sheets in (C): 1. In arenosis maritimis ad Cobas pr. Ferrol Galleciae 16. Sept., designated *lectotype* by S. Ortiz 1989; 2. In arenosis maritimis ad Cobas Galleciae 16. Sept. 1852; 3. In arenosis maritimus ad Cobas Galleciae Sept. 1852; 4. In arenosis maritimis ad Cobas Galleciae 15. Sept. 1852.

Kalanchoë integerrima Lange
(*Crassulaceae*)

ISH 1872: 5 (1873); *Char. emend.* in Bot. Tidskr. 10: 139. Tab. 5 (1878).

Protologue

Kalanchoë integerrima Lge. ad int. Erecta, basi frutescens, glauca; foliis remotis (internodiis 1/2-1" longis), oppositis, breviter petiolatis (petiolo sæpe torto), obovato-spathulatis, obtusiusculis, integerrimis; cyma laxa, pedicellis calyce subtriplo longioribus, corollæ subæquolongis, bracteis minutis, subulatis; sepalis 4 lanceolato-subulatis, viridibus; corolla hypocrateriformi, tubo basin versus ampliato, limbi quadrifido, laciniis planis, coccineis; staminibus 8, quorum 4 longioribus, tubo corollæ insertis: capellis 4, extus squamis 4 linearibus minutis fultis, stylus brevibus, stigmatibus capitellato terminatis.

Nomine *Cotyledonis coccineæ* designata ex horto Berolinensi semina accepimus, sed *Cotyledon coccinea* Cav. (*Echeveria* DC.) toto coelo differt a nostra. Ob corollam hypocrateriformem quadrifidam ad *Kalanchoës* genus certa referri debet, sed ab hujus generis speciebus differt foliis integerrimis (neque crenato-laciniatis). Proxime accedit ad *K. spathulatam* DC., quæ tamen foliis crenatis corollaque lutea recedit a nostra.

Type: type not traced in (C).

Kalmia intermedia Lange (*Ericaceae*)

ISH 1873: 3 (1874).

Protologue

Kalmia glauca β , *intermedia* h. Paris. 64 = *Kalmia intermedia* Lge. ad int. Differt a *K. cuneata* foliis glabris, ellipticis, floribus roseis (nec albis fundo purpureo), a *K. glauca* ramulis teretibus, dense glanduloso-puberulis (nec ancipitibus v. trigonis, glabris), foliis læte viridibus, pedunculis calycibusque minute puberulis (nec glabris). Videtur distincta species, saltem vix cum *K. glauca* jungenda.

Note: The identity of *K. intermedia* Lange is confirmed by John Ebinger who 1973 annotated the type.

Type: 1 sheet in (C): Hort. bot. haun. 16 Jun. 1873, sem. ex hort. Paris s. n. *K. glauca* var. *intermedia*.

Koeleria maritima Lange (*Poaceae*)

ISH 1859: 27 (1860).

Protologue

Koeleria maritima Lge. n. sp. Ad littora Oceani pluribus locis Galleciæ (el Burgo, Coruña, Vigo) legi 1852.

Planta nostra *K. valesiacæ* Gaud. haud dissimilis est, differt vero pluribus characteribus maximi momenti, v. c. vaginis foliorum emarcidorum non reticulato-fissis, foliis planis, glumis inæqualibus, spiculá brevioribus. A *K. cristata* Pers. cui characteribus propius accedit, distinguitur culmis brevioribus, usque ad supra medium foliatis; foliis vix ciliatis; panicula brevior et densiore, basi apicequæ obtusa; spiculis villosis; ab utraque differt culmis brevibus et robustis; foliis, etiam caulinis, longioribus; glumis ovato lanceolatis, dorso longe & patulo-ciliatis (nec anguste lanceolatis, breviter & adpresso-ciliatis). – Cum speciebus halophilis (*K. glauca* & *K. albescens* DC.) ob colorem læte viridem, foliis planis, panicula obtusa etc., non confundi potest.

Note: *K. glauca* (Schrader) DC., *Cat. Pl. Horti Monsp.*: 116 (1813) and some related species are in *Fl. Eur.* 5: 218 (1980) by Humphries treated as “*Koeleria macrantha* group”. This is a widely distributed polyploid complex. Kai Larsen in *Hereditas* (1960) has studied a part of the variation from a cytological point of view and grown Spanish plants that match Lange’s description; these plants are high polyploids while *K. glauca* sens. str. are either diploid or tetraploid. Future studies may justify maintaining *K. maritima* as a var. under *K. glauca*.

Type: 2 sheets in (C): 1. La Coruna, ad littora Oceani 10 aug. 1852; 2. Ad littora Oceani pr. El Burgo Galleciae 6 Sept. 1852.

Leonurus intermedius Didr. (*Lamiaceae*)

ISH 1849: 14 (1850).

Protologue

Leonurus intermedius Didrichsen. A sectionis Cardiacæ speciebus tubo recto sensim dilato et lobo medio labii inf. bilobo; ab iis sectionum Chaituri et Panzeriæ labio subplano et tubo intus annulato. Nuces glabræ. Tahiti.

Note: No reference to this species has been found in recent literature. According to Dr. Olaf Ryding (pers. comm.) the correct name is *Leonurus sibiricus* L.

Type: Inflorescence and seeds transferred from seedbag in Botanical Garden, Copenhagen to herb (C). On seedbag: “fra Tahiti Didrichsen samlet på Galathea expeditionen, 1849”.

Lepigonum glandulosum Liebm. non *Fisch. & Mey* 1837. (*Caryophyllaceae*)

ISH 1853: 21 (1854); *Ann. Sci. Nat. Bot. Sér.* 4. 1: 330 (1854).

Protologue

Lepigonum glandulosum Liebm.: tota planta glanduloso-puberula gracilis erecta subsimplex 4-5", radice palari crassiusculo, caule tereti debili, foliis oppositis patulis cylindricis fili-

formibus mucronatis internodio longioribus, stipulis interfoliaribus scariosis hyalinis lanceolatis acutissimis glabris, floribus axillaribus solitariis longe pedunculatis in racemum rariflorum dispositis, pedunculis demum reflexis, calyce corollam duplo superante, sepalis ovatis obtusis marginibus scariosis dorso glanduloso-puberulis, petalis minutis albis ovatis obtusis, staminibus perpaucis (in speciminibus observatis inter 1 et 3 variantibus) petala fere subæquantibus, antheris globosis didymis flavis, ovario glabro ovato, stylis 3 erectis virescentibus filiformibus, capsula calycem parum superante 3valvi, seminibus numerosis nigris disciformibus ala hyalina cinctis.

Semina pr. Valparaiso legit cl. Didrichsen.

Note: The present taxon was changed to *Spergularia liebmanniana* (Lange) Rohrb., *Linnæa* 37: 241 (1871) based on *Lepigonum liebmannianum* Lange ISH 1858: 2 (1859); Lange in 1859 realized that *L. glandulosum* Liebm. was a later homonym.

Type: 1 sheet in (C): sem. e Valparaiso mis. Didrichsen h. h.

Lepigonum Liebmannianum Lange (*Caryophyllaceae*)

ISH [Nomina emendata plantarum] 1858: 2 (1859).

Protologue: *Lepigonum glandulosum* Lbm. ind. sem. haun. 1853 jure prioritatis nomen servare nequit, cum jam altera species hoc nomine designata sit (*Lepig. gland. Fisch. & Mey. ind. sem. Petrop.* 1837), ideoque speciei Liebmannianæ nomen novum imposui. Descriptio auctoris defuncti l. c. data suppleatur notis sequentibus: pedunculi capillares, sepalorum 3-4plo longitudine; staminum numerus vacillans (in speciminibus h. a. florentibus 5-10, nec 1-3); semina lævia, obovato-pyriformis, alata et aptera in eadem capsula mixta. – Cum nulla specierum in monographia cl. Kindbergii descriptorum convenire videtur species nostra, an vero

inter speciosa cell. Fisch. & Mey. l. c. enumeratas (quarum descriptiones frustra quæsi) lateat, ulterius inquirendum.

Note: See *Lepigonum glandulosum* Liebm.

Linaria lilacina Lange (*Scrophulariaceae*)

ISH 1854: 24 (1855); Ann. Sci. Nat. Bot. Sér. 4. 2: 371 (1854).

Protologue [First published in Ann. Sci. Nat. Bot. Sér. 4. 2: 371 (1854) with same wording as in ISH 1854: 24 (1855)].

Linaria lilacina Lge. Planta pulcherrima, perennis, proxime adfinis *L. verticillatæ* Boiss. a qua distinguitur corolla pallide lilacina striis atroviolaceis (nec flavovirente), calcare sordide luteo corolla brevior (nec cum corolla concolore aequae paullo longiore), labio super, ultra medium bifido (nec ad tertiam partem bilobo), palato lilacino reticulatim striato (nec vitellino v. aurantiaco), fauce solum intus aurantiaco velutina; seminibus undique marginatis (nec submarginatis). Semina ceterum variant disco lævi & obsolete granulato-punctato (quod idem in *L. glaciali* observavit cl. Cosson (not p. 173), ita ut non "lævissima" appellari possint.

Obs. *L. anticaria* Boiss. & Reut. (pug. p. 86) adfinis quidem, sed hæc tota glaberrima (Partibus floralibus exceptis), fauce intense coerulea seminibus tuberculatis etc. differt, et sec. specimina authentica in Mus. Par. comparata, habitu prorsus aliena. Cum reliquis speciebus nobis notis non confundi potest.

In fissuris rupium circa urbem Jaen satis frequens Majo 1852.

Note: Endemic to the Jaen province in the south of Spain.

Type: 5 sheets in (C): 1. in monte Castelli supra Jaen 5. Mai; 2. Monte del Castello supra urbem Jaen 5 Mai 1852; 3. Jaen monte del Castello 5 Mai 1852; 4. Jaen in fissuris rupium 6/5 1852; 5. 5. Mai 1852 Hispania, Jaen.

Linaria Tournefortii Lange
(*Scrophulariaceae*)

ISH 1859: 28 (1860).

Protologue

Linaria Tournefortii Lge. (*Antirrhinum Tournefortii* Poir., *Linaria saxatilis* Benth. in DC. prod., excl. synonym. nonn.).

Multicaulis; ramis erectis v. adscendentibus; fol. linearibus v. lanceolatis, infer. verticillatis, superioribus sparsis; ramis superne in ramulos ascendentes racemo terminatos paniculatim congestos divisis; racemis florentibus capitatis, fructiferis spicæformi-elongatis, pedicellis dimidium calycis vix æquantibus; bracteis linearibus calycem capsulamque superantibus; calycis laciniis subæqualibus, lanceolato-linearibus acutis, capsulam maturam æquantibus eave paullo longioribus; calcare corollam parum superante, arcuato v. rectiusculo; capsula subglobosa; seminibus nigrescentibus, reniformi-orbiculatis, anguste marginatis disco tuberculato.

Corolla citrina, impunctata, palato vitellino. Seminum discum semper tuberculatum inveni, nec lævum, ut vult cel. Benth. l. c. Planta per magnam partem Hispaniæ dispersa, valde polymorpha ideoque dubiis vexata, quare denuo eam describere utile duxi. Etsi formas excentricas facile distinctas species haberes, varias tamen formas, inter se arcte conjunctas, in unam speciem jungere, nomine Poiretiano certissimo appellandam prætuli. (Nomen Linneanum *A. saxatile* variis rationibus dubium nobis videtur). Tres sequentes formas præcipue insignis seorsim distinguo:

α) inquinans nob. (*Ant. Tournefortii* Poir. in herb. Desfont., *L. saxatilis* Reut. in herb. Webb.; *L. Perezii* Careño in Herb. Mus. Par.) perennis, ramis diffusis v. ascendentibus, foliis densissime congestis, anguste lineari-lanceolatis, tota planta valde glutinosa, indeque chartæ adhærens et arena, pappis etc. semper inquinata; corolla majore, calcare sæpius curvato, seminibus angustissime marginatis. Variis locis

Hispaniæ, præcipue centralis, observavi, v. c. Escorial (et alibi in mont. Carpetan., Reut., Carreño), Valcabado de Paramo, Villafranca del Vierzo. Jun.-Jul. 1852.

β) *glabrescens* nob. (L. Perezii J. Gay herb. ! et in D. R. pl. Astur.; L. vulgaris Planellas Ens. p. 315; L. saxatilis Lk. & Hffg. ??) annua v. perennans, ramis diffusis fere a basi ramosissimis; foliis latioribus (lanceolatis), subglabris, magis distincte verticillatis magisque remotis; herba viridis, parce et vix nisi summa apice glutinosa; cor. mediocri, calcare rectiusculo, seminibus majoribus, latius marginatis.

In Hispania occidentali, præsentim Gallecia, variis locis frequens (Lugo, Santiago etc.) æst. 1852.

γ) *minor* nob. (L. glutinosa Benth. l. c. sub L. saxatili, non Lk. & Hffg.) annua; ramis erectiusculis, foliis linearibus, distincte verticillatis verticillis remotis; minus glutinoso-pubescentem quam forma α , magis quam β . Tota planta gracilior, corolla minor, pallidior, calcare curvato, semina angustissime marginata, duplo minora quam in β .

In Hispania centrali aliquot locis, v. c. Olmedo (Cast. vet.), Villafranca del Vierzo (Leon) Jul. 1852 legi.

Hæc ultima forma habitu quidem similis est L. filifoliæ (Lag.) var. glutinosæ (L. glutinosa Lk. & Hffg.) quæ tamen ob flores magis distantes, semina omnino immarginata, obtuse triquetra, punctato-scabra ad aliam tribum pertinet, ideoque cel. Benth. male hoc synonymon ad nostram plantam duxit. Etiam L. saxatilis Lk. & Hffg. a cell. autoribus in tribu seminibus obtusangulis immarginatis posita est, quapropter vix huc pertinet.

Note: Lange based his name on *Anthirrhinum tournefortii* Poir. in Lam., *Encycl. Suppl.* 4: 24 (1816). Transferred to *Linaria* by Steud., *Nomencl. Bot. Ed. 1. 1:* 483 (1821); this is synonymous with L. saxatilis (L.) Chaz., *Suppl. Dict. Jard.* 2: 39 (1789), a very variable species from the Iberian peninsula. No infraspecific taxa are

recognized in most recent publications; also the varieties established by Lange in the above protologue fall within the continuous variation range of the species.

Type: 9 sheets in (C): 1. *l.* var. *inquinans* Lge., Villafranca del Vierzo, ad ripas glareosas, fl. Sil., 18 Jul. 1852; 2. var. *inquinans* Lge., Valcabado de Paramo (Leon) 8. Jul. 1852; 3*a.* var. *inquinans*, Valcabado de Paramo (Leon) 9. Jul. 1852; 3*b.* Cerro Mazotta supra Escorial 15. Jun. 1852; 4. var. *inquinans*, Cerro Mazotta supra Escorial 15. Jun. 1852. – 2. *l.* var. *glabrescens* Lge., Santiago de Compostela in muris 16. Aug. 1852; 2. var. “*glabrata*”, Lugo Galleciæ frequ. Jul. 1852; 3. var. *glabrescens*, ad sepes pr. oppid. Lugo Galleciæ Jul. – 3. *l.* var. *minor*, Olmedo (Cast. vet.) in arenosis, 28. Jun. 1852; 2. var. *minor*, in collibus schistoris ad Villafranca del Vierzo 14. Jul.

Lycopersicon racemigerum Lange
(*Solanaceæ*)

ISH 1865: 26 (1866); *Char. emend* in Bot. Tidskr. 5: 189. Tab. 4 (1872).

Protologue

Lycopersicon racemigerum Lge. ad int., annuum, herbaceum, leviter pubescens; caulis debilis, flexuosus, subscandens, pilis brevissimis glanduligeris vestitus; folia utrinque viridia, interrupte pinnatisecta, segmentis oppositis v. alternis, majuribus longe petiolatis, hastato- v. ovato-cordatis, obtusis, subintegris v. basin versus sinuato-dentatis, minoribus interjectis brevibus petiolulatis, oblique ovatis cordatisve; cymæ extrafoliaceæ, vix bracteatae, flexuosæ, elongatæ, racemiformes, vix dichotomæ, 15-20 floræ; pedunculus communis breviter villosus, pedicelli 4-6 lin. longi, supra v. infra medium articulati; segmenta calycis linearia, acutiuscula, demum reflexa; corola lutea, calyce vix duplo longior; bacca globosa, pisi v. baccæ Ribis nigri magnitudine, matura miniata.

Ex hortis Americæ borealis (Noveboraci) se-

mina accepimus, a pictore Hammer nomine "Tomato grape" communicata.

Differt a reliquis Lycopersici speciebus a beat. Dunal (DC. prodr. XIII. 1. p. 23) descriptis, maxime tamen *L. Humboldtii* (Willd.) Dun. affine. Hoc autem recedit foliis subtus glaucescentibus; caule pilis longioribus articulatis brevioribusque intermixtis vestito, segmentis acutis, cymis 5-8-floris, baccis majoribus (*Cerasi minoris* magnitudine). *L. peruvianum* (Jacq.) Mill. differt caule ramisque incanis, segmentis ovato ellipticis, minoribus subsessilibus, pedicellis bracteolatis. *L. pimpinellæfolium* (L.) Dum. demum difert caule foliisque glaberrimis, segmentis integerrimis, pedunculo stricto, c. 12-floro, pedicellis 9 lin. longis etc. Reliquæ generis species in opere citato descriptæ, ut videtur, cum hac nostra commutari nequent.

Note: The identity of this name is uncertain.

Type: 2 sheets in (C): 1. sem. ex Noveboraco nomine "Tomato-grape" a pictore Hammer communicata; 2. sem. ex Amer. bor. (New York) attulit pictor Hammer.

Madvigia Liebm. (Genus) (Bromeliaceae)

ISH 1854: 26 (1855); Ann. Sci. Nat. Bot. Sér. 4. 2: 373 (1854).

Protologue [First published in Ann. Sci. Nat. Bot. Sér. 4. 2: 373 (1854) with same wording as in ISH 1854: 26 (1855)].

Madvigia Liebm. nov. gen. Bromeliacearum.

Perigonii superi sexpartiti laciniæ exteriores 3 calycinæ erectæ carinatæ ovatæ acuminatæ acutæ tubo trigono duplo breviores extus parce furfuraceæ hyalinæ, interiores petaloideæ usque ad basin liberæ et annulo epigyno insertæ nudæ albi exterioribus duplo longiores elongata-lanceolatæ deoroum longe attenuatæ æstivatione convolutiva patulæ. Stamina 6, 3 cum petalis connata et longe decurrentia, 3 libera annulo epigyno inserta, filamentis petalis parum breviora teretia superne incrassata gla-

bra alba; antheræ dorso affixæ introrsæ lineares basi bifidæ erecta demum subhorizontaliter arcuntæ biloculares longitudinaliter dehiscentes, pollen albidum. Ovarium inferum 3loculare; ovula plurima in placenta e loculorum angulo centrali prominula horizontalia anatropa. Stylus longitudinem staminum æquans exsertus teres superne incrassatus. Stigmata 3 subpetaloidea recurvata canaliculata margine papilloso-fimbriata alba.

Genus a *Bromelia* differt; staminibus 3 liberis, 3 cum petalis connatis, filamentis superne incrassatis stylo longo tereti clavato, stigmatibus subpetaloideis caniculatis recurvis.

Genus in honorem viri celeberrimi J. N. Madvig, Professoris philologiæ dedicatum.

Note: The correct name of this taxon is *Cryptanthus Otto & Dietrich*, Allg. Gartenzeitung 4: 297 (1836). Nom. cons.

Type: *Madvigia densiflora Liebm.*

Madvigia densiflora Liebm. (Bromeliaceae)

ISH 1854: 27 (1855); Ann. Sci. Nat. Bot. Sér. 4. 2: 374 (1854).

Protologue [First published in Ann. Sci. Nat. Bot. Sér. 4. 2: 374 (1854) with same wording as in ISH 1854: 27 (1855)].

Madvigia densiflora Liebm.

Subacaulis stolonifera, folia dense rosulata vaginantia coriacea patulo-reflexa lato-linearata longe acuminata acutissima enervia subcaniculata margine undulata aculeato-denticulata, dentibus parvis falcatis subhyalinis, supra glabra nitida subtus albo-furfuracea. Flores dense fasciculati in axillis foliorum superiorum sessilis; inflorescentia prolifera. Flos spatha hyalina arcte adpressa vaginante lanceolata acutata suffultus albus.

Sub nomine *Bromeliæ humilis* olim ab horto Utrechtiano accepimus.

Note: The correct name of this taxon is *Cryptanthus acaulis* (Lindl.) Beer var. *acaulis*, Fam. Bromel.: 75 (1856), a very variable Brazilian

species of which 3 var. are recognized; Liebmann's taxon is referred to var. *acaulis*.

Type: not traced in (C). Apparently a specimen is present at (U), according to Smith & Downs, *Fl. Neotrop.* 14. 3: 1593 (1974). This statement may be due to misunderstanding the last line in the protologue. Dr. Paul Maas 23.8.1996 informs us that such a specimen is not extant at herb. (U).

Matthiola phlox Didr. (*Brassicaceae*)

ISH 1865: 27 (1866).

Protologue

Matthiola Phlox Didr. Hoc nomine jam in indice sem. haun. 1862 p. 18 cl. Didrichsen plantam designavit, cujus semina in Algeria legit cl. Pingel. Descriptionem vero plantæ forsitan novæ hucusque non publicavit nomini's autor, qui igitur munus eandem poste describendi suscipiat.

Note: This taxon is no longer recognized. In Maire & Quezel, *Fl. Afr. Nord.* 14: 31 (1977) it is regarded a mere form of *M. lunata* DC., *Syst. Nat.* 2: 176 (1821) as f. *phlox* (Didr.) Quezel.

Type: 2 sheets in (C). Apparently the epithet "phlox" was never validly published in any combination with *Matthiola*, hence no type exist. However, in (C) 2 sheets are extant with the name *Matthiola phlox* Didr.

Nertera scapanioides Lange (*Rubiaceae*)

ISH 1868: 22 (1869).

Protologue

Nertera scapanioides Lge. mscr. perennis; caules brevissimi, inferne radicantes, valde ramosi, ramis intricatis, solo arcte adpressi, longe pilosi, apice erectiusculi, glabrati; folia pusilla, approximata, petiolata, patula v. reflexa, cordata, transverse ovalia v. subreniformia, obtusissima, integerrima, petiolo basi piloso excepto glabra, dense albopunctata; stipulæ interpetiolares lineares subglandulæformes; flo-

res in ramulis terminales, solitarii sessiles; calycis tubes glaber, limbo bidentato coronatus; corolla breviter infundibularis, tubo vix limbi longitudine, limbo plano lobis ovatis, margine papilloso, viridibus, fuscomaculatis; stamina 4 longe exserta, filamentis patulis; stigmata linearia subsessilia, longe exserta, divaricata; bacca miniata, exacte globosa, grani *Piperis nigri* c. magnitudine, dipyrena, pyrenis ellipticis, pallide stramineis, lineam longis, lineam dimidiam vix latis, ventre planis, dorso convexis.

Habitus fere *Scapaniæ nemorosæ* v. sp. aff., unde nomen propositum se mihi obtulit. Plantulam ex horto bot. Hullensi, in schedula "ignota e Nova Zealandia" designatum accepimus. Ab omnibus, quas descriptas vidi, speciebus differre mihi videtur. *N. depressa* Banks differt a nostra glabritie caulis et petiolorum, foliis acutis, coriaceis v. carnosis (neque membranacis). Iisdem characteribus et calycis limbo obscure 4-lobo differt *N. Cunninghamii* Hook. – *N. dichondræfolia* Hook. *Nov. Zeal. t.* 28 A et *N. setulosa* Hook. l. c. tab. 28 B (quæ ultima quoad habitum similis est nostræ) ovario hispido, prior insuper foliis longe petiolatis, acutis v. acuminatis, posterior foliis corollaque apice hispidis differt. Conferenda cum nostra quoque *N. gracilis* Raoul *Ann. Sci. Nat.* 3. ser. II, p. 121, quæ ex descriptione foliis acuminatis, utrinque pilosis recedit.

Note: Allan in *Fl. New Zealand* 1: 591 (1961) writes: "I know nothing of *N. scapanioides* Lange". Of the 6 species treated in the flora, *N. ciliata* Kirk, *Stud. Fl. New Zealand*: 247 (1899) matches Langes description; if the two are identical, Langes name has priority.

Type: 1 sheet in (C); Hort. Bot. haun. 16 Mai 1866 s. n. "ignota a Nova Zeelandia" hort. Hull. diff. a *Nertera depressa*. *Nertera scapanioides* mh. ad int. ulterius inquirenda [*scrips. Lange*]. On a determinavit slip by R. Mason 5. 12. 1962: "Holotype of *Nertera scapanioides* Lange. Specifically distinct from *N. depressa* B. & S. ex Gaertn."

Nonnea micrantha Boiss. & Reut. var.
coerulea Lange (Boraginaceae)

ISH 1854: 25 (1855); Ann. Sci. Nat. Bot. Sér. 4. 2: 372 (1854).

Protologue [First published in Ann. Sci. Nat. Bot. Sér. 4. 2: 373 (1854) with same wording as in ISH 1854: 25 (1855)].

Nonnea micrantha Boiss. & Reut. α , *coerulea*. N. Bourgæi Coss. (not p. 122) fide ipsius autoris ad eandam speciem pertinet, sed differt corolla ochroleuca, ideoque β , *ochroleuca* dicenta. In speciminibus nostris, ut in Cossonianis, fornices ciliato-barbatæ, nec, ut in descriptione Boissieri indicatur, glabræ. An igitur hic character variabilis?

In collibus glareosis ad Granatam urbem ect. Apr. 1852.

Note: The variety was established mainly on basis of the flower colour, but this is varying from yellow to blue in *N. micrantha* like in several other Boraginaceae, therefore a formal taxonomic recognition seems superfluous.

Type: 3 sheets in (C): 1. ad vias circa monasterium Sacromonte pr. Granatam urbem 13. Apr. 1852; 2. Granada 25. Apr.; 3. Granada, ad monast. Sacromonte 13. 4. 52.

Oxalis zonata Liebm. (Oxalidaceae)

ISH 1853: 20 (1854); Ann. Sci. Nat. Bot. Sér. 4. 1: 329 (1854).

Protologue

Oxalis zonata Liebm. : tota planta glaucopruinosa glabra; rhizomate sublignoso fusiforme sursum versus attenuato foliis delapsis squamoso, deorsum glabro; foliis terminalibus fasciculatis longissime petiolatis ternatis, foliolis lineari-oblongis obtusis v. apice leviter retusis margine revolutis carnosulis subtus pallidioribus hyalino-papillosis subsessilibus, petiolis teretibus basi articulatis dilatatis, stipulis adnatis; pedunculis axillaribus folia parum superantibus decumbentibus basi articulatis; umbella bi-

fida 6-10 flora; bracteis squamæformibus minutis, pedicellis glabris basi articulatis floribus suis longioribus; sepalis subrhombæo-ovati medio dilatis apice truncatis obsolete denticulatis ciliatis rubro-marginatis, corolla calycem duplo superante flava rubro-marginata; staminibus 5 fertilibus glabris edentulis, 5 sterilibus parum longioribus medio dentiferis v. callosis sursum sub lente subtilissime puberulis, antheris transversis reniformibus flavis, stylis 5 stamina æquantibus puberulis inferne purpurascens, capsula glabra, oculis polyovulatis.

Rhizoma 44", petioli 5", foliola 6" longa 2" lata, pedicelli 6".

Species e confinio *O. polyanthæ* Walp. ex h. Pisano sub nomine *O. bifidæ* accepta. Patria ignota, verosimiliter Chile.

Note: This taxon is treated by Reiche in Bot. Jahrb. Syst. 18: 283 (1894) and by Knuth in Pflanzenr. 4. 130: 215 (1930). Note that even if the author is in doubt about the origin, there can be little doubt that it comes from Chile; it belongs to the section *Angustifolia* with 4 other species all endemic to Chile.

Type: not traced in (C).

Philadelphus acuminatus Lange
(Hydrangeaceae)

ISH 1875: 33 (1876); *Char. emend.* in Bot. Tidsskr. 10: 131. Tab. 2 (1877).

Protologue

Philadelphus acuminatus Lge. (Fortegnelse over Landbohøjskolens Frilandstræer (1871) pag. 65). Gracilis, vix 4-pedalis; cortice fuscocinereo, ramorum jun. ochraceo; foliis ovatis, longe acuminatis, distincte et grosse dentatis, pallide lutescenti-viridibus, subtus pallidioribus, subglabris, nervis 2 inferioribus utriusque lateris prominulis, prope basin folii egredientibus; floribus parvis, 5-7 invicem remotis, racemum elongatum laxiflorum formantibus; calycis tubo leviter puberulo, laciniis flavidis rubrotinctis; petalis lutescentibus, campanulato-in-

curvis, stylo persistente, staminibus brevioribus, vix ad medium usque 4-fido; stigmatis cruribus filiformibus, apicem versus vix incrassatis.

Species hæc, a reliquis, quas descriptas vidi, speciebus satis distincta, sub nomine Ph. Satsumi accepta est, sed tam ab hujus descriptione (C. Koch dendr. I., p. 338) quam ab icone (Paxt. Flow. gard. II., p. 162) ita discrepat, ut vix huc referri debeat. Floratione reliquarum specierum (Ph. hirsuto excepto) præcociore quoque distinguitur, florere enim incipit medio v. ineunte Junio et ante medium Julii jam deflorata est.

Note: Synonymous with *P. coronarius* L., Sp. Pl. 1: 470 (1753).

Type: 5 sheets in (C); 1. Philadelphus acuminatus Lge., Landbohøjskolens Arboret 4. Jul. 1870, fra Travemünde under navn af "Ph. satsumi"; 2. Landbohøjskolens Arboret 10. Jul. -29. Sept. 1869, modtaget under navn af "Ph. satsumi" men forskellig fra "Ph. satsumi"; 3. Bot. Haves Planteskole 9. 7. 1871, fra Hæsedø u. N. af Ph. Satsumanus; 4. Bot. Haves Planteskole 9. 7. 1871, fra Japan (Haven i Petersborg); 5. Bot. Haves Planteskole 9. 7. 1871, fra Utrecht u. N. af Ph. inodorus.

Phrynium Riedelii F. Didr. (*Marantaceae*)

ISH 1854: 28 (1855); Ann. Sci. Nat. Bot. Sér. 4. 2: 375 (1854).

Protologue [First published in Ann. Sci. Nat. Bot. Sér. 4. 2: 375 (1854) with same wording as in ISH 1854: 28 (1855)].

Phrynium Riedelii F. Didr. glabra, costa vix puberula, capitulo ovali. Phrynio velutino Poepp. valde aff. – Ex horto imperiali San Christovao prope Rio Janeiro. Fusiorem descriptionem vide in: den Naturhistoriske Forenings videnskabelige Afhandlinger.

Note: Didrichsen must have changed his mind as the plant is described in Vidensk. Meddel. Dansk Naturhist. Foren. Kjøbenhavn 1854: 185 (1855) as *P. riedelianum*. The correct

name now is *Calathea riedeliana* (Didr.) K. Schum. in Pflanzenr. 4. 47: 105 (1912). Another synonym is *C. koernickeana* Regel in Gartenflora 23: 33. t. 784 (1874); Petersen in Vidensk. Meddel. Dansk Naturhist. Foren. Kjøbenhavn 1889: 333 (1890); in Fl. Brasil. 3. 3: 127 (1890).

Type: not traced in (C) under *Calathea* and *Phrynium* and *Marantaceae* indet.

Physosiphon nicaraguensis Liebm.

(*Orchidaceae*)

ISH 1853: 20 (1854); Ann. Sci. Nat. Bot. Sér. 4. 1: 329 (1854).

Protologue

Physosiphon nicaraguensis Liebm.: differt a *P. Loddigesii* Lindl. foliis apice leviter emarginatis, spica longitudine folii, scapo minus bracteato, perigonii ext. foliolis magis acutis pallide virescentibus perig. int. foliolis 2 acutis columnam duplo superantibus, labelli lobis lateralibus minus evolutis, lobo medio acuto, columna brevissima, capsula perigonio 3-4plo longiore clavata 6 costata 6 sulcata, costis rotundatis.

E Nicaragua reportavit Mag. Ørsted.

Note: The name seems not to be mentioned in any recent treatment on the genus in central America. However, Bo Johansen (pers. comm.) has confirmed the identity and thinks the name will stand.

Type: 1 sheet in (C). 1 fragmentary infructescence with flowers transferred from seedbag in Botanical Garden, Copenhagen.

Pilea robusta Liebm. (*Urticaceae*)

ISH 1852: 20 (1853); Ann. Sci. Nat. Bot. Sér. 3. 19: 366 (1853).

Protologue

Pilea robusta Liebm.: annua robusta pumila dioica, caule 6" tetragono glabro pellucido nodoso opposite ramoso, foliis oppositis longe

petiolatis ellipticis acutis basi leviter emarginatis parum cucullatis, grosse serratis, serraturis patulis hic illica denticulo instructis, rugosis pallide viridibus supra pilis longis raris adspersis, subtus glabris, 3 nerviis, 1-2" longis 3/4-1" latis, petiolis lamina brevioribus subtetragonis pellucidis sparse pilosis, pilis sub laminam magis confertis, stipulis deciduis, paniculis axillaribus geminis patulis interrupte glomeratis brevissime pedunculatis folio suo multoties brevioribus, floribus minutissimis brevissime pedicellatis, perigonio foem, glabro 3fido, caryopsi perigonio duplo longiore lenticulari ovata obliqua fusca granulata.

In terra mexicana (e vicinitate Hac. de Mirador) enata.

Obs. Olim ex horto nostro sub nomine *Urticæ pumilæ* L. distributa. Differt ab *Urtica pumila* L. (quæ tamen *Pilea* est): Foliis supra pilosis dupliciter serratis, petiolis lamina brevioribus, floribus dioicis, paniculis irregulariter ramosis.

Note: No reference to this species have been found in recent literature. Liebmann embarked in Copenhagen 1840 bound for Mexico. He brought gardener Rathsack from the Botanical garden in Copenhagen to collect and take care of living plants for the garden. They disembarked at Vera Cruz 7 February 1841. In 8 months Rathsack had collected about 2600 specimens of living plants and embarked late 1841 bound for Copenhagen with his precious load. He was back in Copenhagen 1842. Many of his plants are still under cultivation in the greenhouses. One of them is the annual, *Pilea robusta*, which germinated from soil with some plants from Mirador (see protologue). Since then seeds have been collected every season and sown the following, but a specimen was apparently never dried for herb. (C). This will take place in the season 1997, and this specimen of the 155th generation may eventually serve as a neotype.

Type: not traced in (C).

Pitcairnia elata Liebm. (*Bromeliaceae*)

ISH 1849: 14 (1850).

Protologue

Pitcairnia elata Liebm., foliis gramineis lato-linearibus leviter canaliculatis glabris; scapo 2-2 1/2 pedali, racemo laxo, floribus longepedunculatis patentissimis albis, perigonii phyllis 3 exterioribus lineari lanceolatis, interioribus 3 exteriora 3 plo superantibus lineari-spatulatis obliquis, staminibus perigonio parum brevioribus; pedunculo perigonioque exteriori glanduloso-pubescentibus. – in rupibus reg. calido-temperatæ Mex. orientalis.

Note: Smith & Downs in Fl. Neotrop. 14. 1: 355 (1974) refer this taxon to *P. albiflos* Herb. in Curtis, Bot. Mag. 53: 2642 (1826), a species endemic to Brazil, the Rio de Janeiro area. This is not in correspondence with the protologue, in which Mexico orientalis is given as type locality.

Type: not traced in (C).

Pitcairnia exscapa Liebm. (*Bromeliaceae*)

ISH 1848: 12 (1849).

Protologue

Pitcairnia exscapa Liebm. planta dense cæspitosa, foliis bififormibus, inferioribus cartilagineis brunneis vaginantibus lanceolatis costatis in acumen longissimum subulatum abrupte attenuatis margine spinoso dentatis, superioribus gramineis inferioribus multo longioribus lineari-lanceolatis integerrimis; scapo brevissimo inter folia immerso, floribus subcorymbosis, perig. ext. foliolis 3 lanceolatis subulatis carinatis excoloribus extus lepidoto-lanatis, perig. int. fol. 3 roseis spathulato-falcatis basi nudis.

Note: Smith & Downs in Fl. Neotrop. 14. 1: 406 (1974) list this name among the synonyms of *P. heterophylla* (Lindl.) Beer, Fam. Bromel.: 68 (1857). It is a very variable species distributed from Mexico to Venezuela and Peru.

hujus formis abunde recedit ramis brevissimis, (quo planta fere cæspitosa evadit), rosulis sub anthesi concavis, infundibiliformibus, foliis brevius petiolatis, latioribus, obsolete crenatis, pedunculis brevioribus, sepalis multo latioribus pluribusque aliis notis, quare persuasus sum, eandem bonam constituere speciem, et cum nullibi eam descriptam invenio, novo nomine designare non inutile duxi.

Note: Engl. & Irmsch. in Pflanzenr. IV. 117. I: 181 (1916) refer this to *S. cuneifolia* L., Sp. Pl. ed. 2. 1: 574 (1762) as a forma subintegra Ser. in Naturwiss. Anz. Allg. Schweiz. Ges. Gesammten Naturwiss. 1: 73 (1818); in recent literature it has not received any taxonomic recognition.

Type: 1 sheet in (C); Hort. bot. hafn. 11. Mai 1863, culta in h. h. s. n. *S. cuneifolia*.

Saxifraga multicaulis Lange
(*Saxifragaceae*)

ISH 1863: 4 (1864); *Char. emend.* in Bot. Tidskr. 5: 181. Tab. 1 (1872).

Protologue

Saxifraga multicaulis Lge. (Sect. Hydatice) perennis, rhizoma ramos plurimus emittens tenues decumbentes atropurpureos, hinc inde foliis minutis sparsis munitos; rami apice rosulis foliatis terminati, unde iterum ramuli plures egrediuntur, ramis primariis similis; folia rosularum spathulata, in petiolum lamina æquilongum sensim angustata, crassiuscula, subcanaliculata, apice recurvo utrinque denticulis 1-2 crenata, margine angustissimo cartilaginea, sub apice poro obsolete non calcareo – incurvato notata, opaca, præter petioli basin longe sed parce ciliatum glaberrima; scapus floribus e centro rosularum egrediens 2-4 pollicaris, gracillimus, aphyllus, apice racemo brevi corymbiformi terminatus; pedunculi glandulosi-pilosi; sepala libera, lanceolata, obtusa, glanduloso-pilosa, post anthesin deflexa; petala calyce vix duplo longiora, obovata, alba, 3 maculis atropurpureis infra medium notata.

Sub nomine *Saxifragæ cochlearis* hanc plantam ex horto Genuensi olim accepimus, sed et *S. cochlearis* Rchb. (quæ ad *S. lingulatam* Bell. accedit) et *S. cochleariæfolia* Schrad. (Walp. Repert. II:368) ab eadem valde diversæ sunt, quare hoc nomen rejicendum est. Affinitatem quandam cum *S. cuneifolia* L. habet, quæ autem foliis lucidis, multo latioribus, rotundato-obovatis, brevius petiolatis, magis crebre et profunde crenatis, sepalis latioribus, petalis probe basin macula crocea solitaria notatis etc. differt.

Note: Engl. & Irmsch. in Pflanzenr. IV. 117. I: 182 (1916) refer this to *S. cuneifolia* L., Sp. Pl. ed. 2. 1: 574 (1762) as a garden variety.

Type: 1 sheet in (C); *Saxifraga multicaulis* Lge., *Saxifraga cochlearis* Rchb. h. h.

Sedum anglicum (*Crassulaceae*)

ISH 1857: 27 (1858).

Protologue

Sedum anglicum. Suspicio, plantam hoc nomine vulgo designatam collectivam speciem, varias formas vel forsitan species distinctas complectentem, sistere. Tales tres formas tam in statu silvestri quam pluribus annis in horto botanico nostro cultas observavi, quarum historiam posthæc accuratus proponere in animo est; hoc loco non nisi brevem descriptionem præmittam.

1. *S. (angl.*) Raji* Lge. (*S. minimum* non acre fl. albo Raj. Syn. tab. 12 f. 2; *S. anglicum* Bab. man. ed. 3 p. 123). Annuæ, caulibus diffusis radicanibus, surculis sterilibus nullis, foliis sparsis, distantibus, ovatis acutiusculis semicylindricis, basi breviter acute calcarato-gibbis, inferioribus subflexis, superioribus horizontaliter patentibus; petalis lanceolatis concavis, carpellis fere petalorum longitudine, sensim in stylum evidentem acuminatis.

In Gallecia frequens locis aridis, in muris, rupibus etc. Semina lecta ad oppid. Ponte-

sed hæc species differt fol. radic. undulatis, fol. perig. interioribus latioribus quam longis, exterioribus parum brevioribus etc. Ab omnibus affinis, quas novi aut descriptas vidi, indole diversa epidermidis plantæ ♂ & ♀ optime distinguitur.

Note: Valdés Berm. & Castrov. in *Anales Inst. Bot. Cavanilles* 34: 326-327 (1977) refer this to *Rumex acetosa* subsp. *biformis* (Lange) Berm. & Castrov., which again by Jalas & Suominen in *Atlas Fl. Eur.* 4: 44 (1979) is referred to *Rumex acetosa* L., *Sp. Pl.* 1: 338 (1753) subsp. *acetosa*.

Type: 1 sheet in (C): in rupibus maritimis ad la Coruna 10 Aug. 1852. Joh. Lange

Rumex crystallinus Lange (*Polygonaceae*)

ISH 1861: 28 (1862); *Char. emend.* in *Bot. Tidsskr.* 8: 7. Tab. 4 (1874).

Protologue

Rumex crystallinus Lge. n. sp.

Annuus, pedalis v. parum ultra, erectus, ramosus; caules fere a basi inde florigeri; folia petiolata (petiolo lamina parum brevior), denticulata margine undulatissima, subtus ad nervos crystallino-papillosa, ceterum glabra, inferiora e basi oblique cordato-ovato elongato-lanceolata; verticilli omnes foliati, distantes, multiflori denseque glomerati; pedicelli nutantes, perigonio parum longiores, basi articulati et cum perigonio maturo mox decidui; valvæ calycinæ lineares, obtusæ, patulæ, valvæ corollinæ omnes calliferæ, basi utrinque 1-2-dentatæ, dentibus subulatis, vix hamatis, valva ipsa parum brevioribus, callo valde prominente, niveo s. leviter roseo, cum perigonio pedicelloque dense crystallino-papilloso; caryopsis minima, pallide stramineo-fusca, nitida.

Patria verosimiliter Nova Hollandia, unde semina ex hort. Melbourn. h. a. accepimus nomine *R. Brownii*. Genuinus *R. Brownii* Campd., quem olim rite determinatum ex horto eodem Melb. misit cel. F. Müller, valde differt a nostra foliis vix v. obsolete undulatis, racemis aphyllis,

verticillis 5-8- floris, valvis ecallosis, dentibus hamatis etc. Potius videtur affinis *R. ucranico* Fisch. e Rossin, *R. chinensi* Campd. e China et *R. Klotzschiano* Meisn. ex Ind. orient., sed ab omnibus his variis notis, et præcipue omnium patium floralium, immo petiolorum, indumento singulari crystallino videtur diversus.

Note: Endemic to South and East Australia. A synonym is *R. halophilus* F. Muell. (1863).

Type: 2 sheets in (C): sem. ex hort. Melbourne s. n. *Rum. Brownii*; sem. ex hort. Melbourne s. n. *R. Brownei*

Saxifraga infundibulum Lange

(*Saxifragaceae*)

ISH 1863: 5 (1864); *Char. emend.* in *Bot. Tidsskr.* 5: 183. Tab. 2 (1872).

Protologue

Saxifraga Infundibulum Lge. (sect. *Hydati-ca*), perennis; rhizoma breviter ramosum; ramis rosulis ambitu exacte orbicularis dense imbricatis terminati; folia rosularum obovato-orbicularia, glaberrima, læte viridia, crassiuscula, angustissime cartilagineo-marginata, obsolete repando-crenulata, ante quemque denticulum poro pellucido non incrustato notata, in petiolum latum, lamina multo brevior, basi ciliatum angustata, florendi tempore concava (ita ut rosulæ tum quasi infundibulari-excavatæ evadant), hyemem versus explanata (et rosulæ tum planæ); scapus e centro rosularum 2-3-pollicaris, aphyllus, glanduloso pilosus, panicula brevi terminatus; pedunculi breves glandulosi; sepala libera, late-ovata, obtusissima, glandulosi-ciliata, demum reflexa; petala calyce plus duplo longiora, late obovata, alba, basin versus macula crocea notata.

Planta hæc, habitum præ se ferens omnino singularem et inter pulcherrimas *Saxifragæ* species numeranda, jam multis annis in horto nostro botanico culta est sub nomine *Saxifragæ cuneifoliæ*. Sed collata cum *S. cuneifolia* L. vera, cui quidem affinis est, tamen ab omnibus

ceae Ott. & Dtr. 2) Bot. Haves Planteskole Aug. 1870.

Rosa Andreae Lange (Rosaceae)

ISH 1874: 23 (1875).

Protologue

Rosa Andreae Lge. ad int., frutex, ut videtur, humilis sed robusta, caule pubescente et dense aculeato, aculeis inæqualibus, rectis, puberulis; foliis impari-2-3 jugis, foliorum inferiorum stipulis angustis, superiorum sensim latioribus, glanduloso-serratis, foliolis parvis ovalibus, (1/2-1 pollicaribus), crenato serrulatis (crenarum marginibus reflexis), supra obscure viridibus, glabris, fere lucidis, depresso reticulato rugulosis, subtus dense cano puberulis; flore magno, subsolitario, inter stipulas bracteales submembranaceo dilatatas suboculto, pedicello brevissimo; calycis laciniis corolla longe brevioribus, acuminatis, apicem versus lanceolato-dilatatis integerrimis; petalis latis, retusis, pulchre et saturate kermesinis; hypanthio valde et subdisciformi-depresso, fusco, glaberrimo.

In insula Sachalin plantam legit 1870 narchus Andrea, in cujus, pro Museis nostris indefatigati collectoris honorem hanc speciem nominavi.

A proxime affini *R. rugosa* Thbg., (quacum cel. Crépin *R. ferocem* Lindl. et *R. kamschaticam* Vent. quoque conjungendas esse censet), differt planta nostra statura humilore, foliis supra atroviridibus, lucidis, serraturis reflexis, petalis multo majoribus magisque saturate coloratis, sed imprimis fructu valde depresso (neque globoso). Itaque etsi opus quidem arduum videtur, novam in Rosæ vasto genere speciem proponere, tamen hanc plantam speciosam sine nomine emittere nolui, quare ad interim nomen proposui et rhodographis peritis ulteriorem ejus investigationem commendabo.

Hauniæ die 30. Januarii 1875.

Note: Synonymous with *R. rugosa* Thunb., Fl. Jap.: 213 (1784).

Type: Not traced in (C); in the typecover is an anonymous collection without locality but with the inscription in Danish: "Original exemplar" (i. e. typespecimen) from herb. A. C. Schulz. Under *Rosa rugosa* Thunb. is a specimen from herb. Joh. Lange: In insula Sachalin versus fl. Amur, leg. H. V. Fenger 1868.

Rumex bififormis Lange (Polygonaceae)

ISH 1857: 26 (1858).

Protologue

Rumex bififormis Lge.

Planta herbacea perennis (ex tribu Acetosæ), dioeca; caule erecto angulato-sulcato, basi purpurascens, in planta ♂ cum petiolis brevissime pubescente, in planta ♀ glaberrimo; foliis radicalibus et caulinis inferioribus petiolatis, integerrimis, ovalibus obtusis, basi sagittata auriculis breviter acuminatis conniventibus v. angulum acutum angustum formantibus, caulinis sup. lanceolato-ovatis sessilibus auriculis semiamplexicaulibus, omnibus (in pl. ♀) glaberrimis, crassiusculis, pagina sup. vernicoso-nitidis, pag. inf. pallidioribus impresso-punctatis; in pl. ♂ minus nitidis & sparsim brevissime puberulis; ochreis 4-6 lin. longis, in laciniis lineares irregulariter fissis; racemis thyrsoido-densifloris in paniculam brevem aphyllam dispositis; fol. perigon. fl. ♂ obovatis (3 exterioribus multo brevioribus), fl. ♀ 3 exterioribus brevissimis, reflexis pedicelloque adpressis, interioribus 3-4plo longioribus ovali-reniformibus, leviter emarginatis, basi in 2 auriculas obtusas productis, squama callosa deflexa truncata auricularum longitudine in sinu interjecta; caryopsi de acute trigono, nitido.

In rupibus maritimis prope oppidum la Coruña Galleciæ die 10. Aug. 1852 plantam fructiferam legi. In horto nostro botanico e seminibus inde sumtis educata, per plures annos habitum conservavit singularem, ab omnibus formis *R. Acetosæ* distinctissimam. Potius ad *R. thyrsoidem* Desf. (DC. prodr. XIV.) accedit,

Type: no specimen extant in (C); one drawing by F. Bayer represents *P. heterophylla* (Lindl.) Beer syn. *P. exscapa* Liebm. fide L. B. Smith 1959. Plate 3.

Pulicaria arabica Cass. var. *glabrescens*
Lange (*Asteraceae*)

ISH 1853: 49 (1854).

Protologue

Pulicaria arabica Cass. var. *glabrescens* Lge. Differt a typo foliis viridioribus subglabris, squamis periclinii breviter pubescentibus, glandulis paucis intermixtis, planta fere inodora (nec periclinio arachnoideo-tomentoso glandulis crebris aromaticè odora).

In ruderalis ad urbem Santiago de Compostela Aug. 1852

Note: Langes plant must be identified as *P. paludosa* Link in Neues J. Bot. 1: 142 (1806). In Willk. & Lange: Prodr. Fl. Hispan. 2: 41 (1870) Willkomm does not recognize the variety. Another question is whether *P. paludosa* and *P. arabica* are conspecific, in any case *P. paludosa* is the older name. *P. arabica* is distributed in N. Africa and does not occur in Europe except for one collection from Crete.

Type: not traced in (C).

Ribes Schlechtendalii Lange
(*Grossulariaceae*)

ISH 1870: 31 (1871).

Protologue

Ribes Schlechtendalii Lge. mscr. (*R. rubrum* var. *pubescens* Hartm., Skand. Fl., *R. rubrum* β , *silvestre* Mert. & Koch (teste herb. norm. IV. 57), *R. spicatum* Robs. (?), Eng. Bot. tab. 1290.

Differt a *R. rubro* L. foliis pagina inferiore dense cano-pubescentibus v. subtomentosis, racemis brevioribus magisque densifloris, erectis v. subnutantibus (vix pendulis), calyce late infundibulari (neque plano, subrotato), pallide fuscopurpureo (forma α) v. viridulo (β), pedi-

cellis dense glanduligeris, baccis parvulis, minus acidulis.

Colitur in horto academiæ agronomico-veterinariæ, ubi specimina, nunc *R. holosericeum*, nunc *R. acerifolii* nomine designata, a variis hortis accepimus. Sed *R. holosericeum* Dietr., teste C. Kochio, ut synonymon ad *R. Biebersteinii* Berl. (*R. caucasicum* M. B.) referendum est, et *R. acerifolium* hort. ad formam *R. rubri* L. foliorum lobis acutioribus et longioribus, teste Kochio, spectare videtur. *R. spicatum* Robs. ex Schldl. (Linnæa vol. 31, p. 738) species valde dubia videtur, et figura ejusdem (Engl. Bot. l. c.) si omnino huc pertinet, haud bene cum nostra convenit. Medium inter *R. rubrum* et *R. petræum* fere locum tenet nostra planta, sed bene ab utroque distinctam speciem sistere mihi videtur, et neque mera varietas *R. rubri* habenda est, neque forma hybridæ originis, cum in Scandinavia, ubi *R. rubrum* β , *pubescens* Hartm., cum nostra optime conveniens, pluribus locis viget, *R. petræum* Wulf. non occurrit. Si vero, ut suspicor, a *R. rubro* specificè distinguende sit nostra et si nomina commemorata huic applicari nequeant, novo nomine designari debet, quare in memoriam beati Schlechtendalii, qui *Ribes* species ad tribum *R. rubri* pertinentes optime tractavit (Linnæa 31. p. 729) ad interim appellavi.

Tam in Scandinavia (ad Gevaliam, in Bahusia etc.) quam in Britannia occurrit, ejusque 2 formæ sequentes distinguendæ sunt: α purpurascens (*R. petræum* Engl. Bot., non Wulf.), sepalis rubentibus, et β , virescens, sepalis virentibus.

Note: According to Webb in Fl. Eur. ed. 2, 1: 461 (1993) this species should be referred to *R. spicatum* Robson in With.: Arr. Br. Pl. ed. 3. 2: 265 (1796); it is an extremely variable species.

Type: 3 sheets in (C): 1. Landbohøjskolens arboret, 1) Aug. 1870, 2) 14. Mai 1861; 2. Hort. bot. 1864 (sem. ex hort. Regiomont s. n. *Ribes rigens*, haud recta; 3. 1) Hort. bot. haun. 27. Mai 64, sem. ex hort. Berolin. s. n. *R. holoseri-*

vedra 25. Aug. 1852. Culta sequenti fere mense serius floret (12 Jul. flores nondum explicati).

2. *S.* (angl.***) *pyrenaicum* Lge. (*S. anglicum* Gren. & Godr. fl. Fr. 1: 624 part. ex loc. nat.). Perennis, caulibus florigeris et surculis sterilibus diffusis, foliis lineari-ovalibus obtusis, basi calcarato-gibbis patentibus, cæterum ut forma prior, sed multo præcocior (12 Jul. jam deflorata et ex parte fructifera).

In Pyrenæis centralibus usque ad regionem subalpinam frequentem inveni (v. c. ad Bagnères de Luchon Jul. 1851).

3. *S.* (angl.****) *Hudsonianum* Lge. (*S. anglicum* Huds. fl. Angl. 196 (excl. syn. Raj.). E. Bot. tab. 171; F. D. tab. 82; Gren. & Godr. l. c. e. descr.). Perennis, caulibus florigeris et surculis sterilibus, adscendentibus, foliis sparsis approximatis et in surculis sterilibus imbricatis, subglobo-ovalibus obtusissimis, utrinque convexis, basi vix gibbis (non acute calcaratis) erecto-patulis, supremis erectis; petalis ovatis subplanis, brevissime acuminatis, carpella multo superantibus, stylo obsoleto.

Specimina culta ex seminibus ad Næs Norvegiæ lectis (C. Rosenberg) educata præcedenti c. 14 diebus serius floruerunt (12. Jul. optime florens).

Note:

1. ?var. *raji* Lange. The annual habit noted by Lange refer this to *S. arenarium* Brot., Fl. Lúsit. 2: 212 (1805).
 2. ?var. *pyrenaicum* Lange. In Fl. Eur. ed. 2, 1: 434 (1993) recognized by Webb, Akeroyd & Hart as subsp. *pyrenaicum* Lange; strictly speaking Lange do not indicate the status and according to the nomenclatural rules the combination is not correct with Lange as author.
 3. ?var. *hudsonianum* Lange. Perennial and clearly belonging to the polymorphous *S. anglicum* complex. It is not menti-

oned in Fl. Eur. or other recent literature but Blytt in Norges Fl. 3: 896 (1876) quote it in synonymy; it must be referred to subsp. *anglicum*.

Type: 5 sheets in (C); 1. var. *raji*. 1. Cultum in hort. bot. haun. e seminibus ad Pontevedra lectis 12 Jul. 1857 (570/7b); 2. var. *pyrenaicum*. 1. Bagnères de Luchon 5 Jul., 2. Bagnères de Luchon 1851, 3. Bagnères de Luchon 5. Jul.; 3. var. *hudsonianum*. 1. E seminibus ex Norvegia (C. Rosenberg) in hort. bot. haun. culta.

Sedum pseudofabaria Lange (*Crassulaceae*)

ISH 1868: 23 (1869).

Protologue

Sedum Pseudo-Fabaria Lange. mscr. In hortus nomine *S. Fabariæ* (neque *S. Fabarium*, ut sæpe, sed minus recte scribitur) planta vulgo colitur, cum vero *S. Fabaria* Koch (Sturm D. Fl. h. 83, tab. 9) minime commutanda. Nostra enim ab illo differt foliis majoribus, pallide lutescenti-viridibus, pruina cæsia obductis, oppositis (neque sparsis), ovalibus v. late obovatis, obtusiusculis (neque lanceolatis acutis), obsolete denticulatis (nec grosse inæqualiter dentato serratis), basi angustata semiamplexicaulibus (neque in petiolum subattenuatis); cyma laxiore, foliato, foliis floralibus pallide viridibus, ellipticis; petalis anguste lanceolatis, acuminatis, erecto-patulis (neque ovato-lanceolatis, acutis, horizontaliter divergentibus), pulchre lilacinis (nes saturate roseis), staminibus ima basi petalorum adnatis (neque, ut in textu ad figuram citatam *S. Fabariæ* indicatur, ad „ supra basin petalorum insertis). Antheræ virgineæ purpureæ, effoetæ atrofusæ, polline pallide luteo repletæ. Pistilla fere petalorum longitudine, erectiuscula v. minus divergentia quam in *S. Tephio*, pulchre rosea punctis pellucidis subchrySTALLINIS saturate purpureis adspersa.

Patria hujus plantæ mihi ignota est, sed frigorem hiemes nostræ ægre suffert, quare climatis mitioris filia esse videtur quam verum *S.*

Fabaria Koch., montium Fermaniæ, Galliæ et Pyrenæorum civis, qui apud nos tute sub divo colitur. Multo serius floret quam *S. Fabaria*, quod mense Junio (*S. Telephio præcocius*) florere indicat Koch l. c., dum nostra species vix ante Sept. florere incipit et adhuc Octobri optime floret. Ob differentias graves a *S. Fabaria* Koch, quod nomen errore ad hanc speciem pulchram, hortorum in sero autumnus decus, relatam est, nomen novum eidem addere fas est. Figuram in Ill. hortic. tab. 271, de qua agit cel. K. Koch (Wochenschr. p. 270), comparare non potui, sed verosimiliter ad nostram speciem, neque ad verum *S. Fabaria* pertinet.

Note: There is no reference to this species in Praeger, Acc. Sedum in J. Roy. Hort. Soc. 46. 1921, but it evidently belongs to the *Sedum telephium* complex.

Type: 1 sheet in (C): hort. bot. haun. 25 Sept. 1868, sem. ex h. Genev. (s. n. *S. Fabarium* Lem.), (non *S. Fabaria* Koch).

Seseli cantabricum Lange (*Apiaceae*)

ISH 1855: 27 (1856); *Linnaea* 28: 363 (1856).

Protologue

Seseli cantabricum J. Lge. Perennis, multicaulis, erecta, parce ramosa, ramis leviter striatis, foliatis; folia radicalia & caulina inferiora ambitu triangularia, biternata segmentis anguste lanceolato-linearibus acuminatis integerrimis, petiolo vaginæ longitudine; fol. caulina media simpliciter ternata segmentis linearibus, superiora in segmentum unicum lineare integerrimum basi vaginatum reducta; umbellæ radii 6-10, inæquales, sulcati, involucri 0. v. 1-phylo, involucellis 6-10-phyllis foliolis involucelli setaceis umbellulas densifloras vix dimidio æquantibus; pedicelli umbellularum primo patentibus dein arcuato conniventibus, (unde umbellulæ florentes con vexæ, fructiferæ contractæ); calycis segmenta triangularia, acuta erectopatentia, stylopodio breviora; styli breves, erecto-

patentes, demum subreflexi, petala ovalia obtusa cum lacinula inflexa, sordide luteolo-albida; fructus pedicello subæquilongus, ovalis sectione transversali suborbiculari, jugis leviter & æqualiter elevatis; mericarpii commissura plana 3-vittata, interstitiis 1-vittatis.

Tota planta glaberrima, læte viridis. Habitus *Peucedani parisiensis*, sed ob fructus structuram certe *Seseli* (trib. *Euseseli*). Inter hujus generis species *S. triternato* Pursh (Hook. fl. bor. Amer.) affinis sed hujus calyx obsoletus & fructus forma aliena.

In ericetis montanis Cantabriæ, præsertim circa oppid. Bilbao frequens. Sept.-Oct. 1851 florentem & fructiferam legi.

Note: Endemic to N. Spain.

Type: 4 sheets in (C): 1. Bilbao Oct. 1851; 2. in collibus Bilbao frequ. 9. Oct. 1851; 3. Bilbao in supibus et ericetis 25. Oct. 1851; 4. in ericetis montanis ad Bilbao Oct. 1851.

Solanum suffruticosum Schousb. ex Lange (*Solanaceae*)

ISH 1855: 25 (1856); *Linnaea* 28: 361 (1856).

Protologue

Solanum suffruticosum Schousb.? Species videtur a *S. nigro* distincta, caule suffruticoso (21/2-4 ped.), foliis minoribus angustioribus ovato-ellipticis, floribus duplo minoribus, corollæ pagina inferiore lilacina, baccis minoribus.

Ad sepes prope oppid. Pontevedra Galleciæ Aug. 1852.

Note: Hawkes & Edwards quote this taxon with the authors Schousb. ex Willd. which is correct as the name was published in *Enum. Pl.* 1: 236 (1809); it is synonymous with *S. nigrum* L., *Sp. Pl.* 1: 186 (1753) subsp. *nigrum*. "Habitat in Barbaria" according to Willd., *Enum. Pl.* 1: 236 (1809) and microfiche of 4363 in herb. Willd., but label written by Willdenow: "inermis, foliis ovatis angulata dealatis glabris um-

bellis pedunculatis infra axillaribus, caulo-suffruticosi. Habitat in Barbaria". The type is very close to *S. nigrum* L., whereas 3 specimens cited by Lange from Pontevedra 1852 deviates considerably.

Type: 1 sheet in (C): "Schousboe ex hispania" [*scrips. Vahl*].

Sonchus tenerrimus DC. var. *glandulosus*
Lange (*Asteraceae*)

ISH 1853: 19 (1854).

Protologue

Sonchus tenerrimus DC. β , glandulosus Lge. In agris et ad vias pr. urbem Jaen Majo 1852. – Achænia basi valde adtenuata; caulis pedunculi pericliniaque glanduloso-hispida, foliorum laciniæ ovals obtusæ, parce ciliatæ.

Note: *Sonchus tenerrimus* is a very variable species, distributed all over S. Europe. In most recent literature no infraspecific taxa are recognized.

Type: 3 sheets in (C). 1. Ad vias et in rupibus pr. oppidum Jaen 6. Mai; 2. in agris et ad vias circa Jaen Mai 1852; 3. Jaen in agris & ad vias 7. maj 52.

Specularia castellana Lange
(*Campanulaceae*)

ISH 1854: 25 (1855); Ann. Sci. Nat. Bot. Sér. 4. 2: 372 (1854).

Protologue [First published in Ann. Sci. Nat. Bot. Sér. 4. 2: 372 (1854) with same wording as in ISH 1854: 25 (1855)].

Specularia castellana Lge.; *S. falcata* β , scabra DC. prod. VII. 2: 490 (1839).

Caula erecto, a basi inde sæpius ramoso, ramis diffusis, foliis crenulato-undulatis, inferioribus obovatis, basi adtenuatis, superioribus ovato-lanceolatis, semiamplexicaulibus; floribus remotis in spicam elongatam dispositis; calycis laciniis linearibus, sub anthesi patentibus, rectis v. apice reflexis, tubi tertiam vel ejus dimidi-

um æquantibus; corollæ tubo brevissimo, limbo calycis laciniis subæquante (paullo brevioribus v. longioribus); seminibus rotundato-lenticularibus. Tota herba, præsertim foliorum pagina inferior, scabra.

S. falcata Alph. DC. diff. caule apice, nec basi ramoso, calycis laciniis longissimis lanceolatis, tubum æquantibus, corolla duplo longioribus ("lobi calycis 6-8-lin. longi, falcati, latiores quam in Speculo" DC), denique tota herba glabra vel caule scabriusculo.

S. falcata β , scabra DC. e Madera (Lowe), quæ describitur "caule calycibus nervisque foliorum scaberrimis hirtellis, lobis calycinis corolla vix duplo longioribus" forsitan ad nostram speciem pertinet.

In campis siccis utriusque Castiliæ satis frequens. Semina lecta ad Encinillas (prov. Burgos) Oct. 1852

Note: The generic name *Specularia* is synonymous with *Legousia*. The correct name of this S. W. European taxon is therefore *L. castellana* (Lange) Samp., *Herbário Portugues*: 127 (1913).

Type: 1 sheet in (C): Encinillas Hispan. bor. Oct. 1852.

Sutherlandia foliolata Lange (*Fabaceae*)

ISJ 1859: 29 (1860); *Linnaea* 30: 757 (1860).

Protologue

Sutherlandia foliolata Lge. n. sp. (*Swainsonia miniata* Hort. Melbourn.).

Caulis frutescens, c. 3-pedalis, teres, erectus ramosus, ramis erectopatulis; folia imparipinnata, 5-7 juga, foliolis suboppositis ovatis ovalibusve, apice emarginatis, basi plerumque 1-2 foliolis accessoriis instructis (unde folia decomposita, foliola 2-3-foliolata evadunt; stipulæ parva, ovata, ciliatæ; pedunculi biflori, folio breviores, pedicellis cernuis supra medium bibracteolatis; calyx pilis sparsis nigris æqualiter et basi insuper secusque nervos glandulis ferrugineis vestigis; vexillum ovatum, margine re-

volutum, carina cymbæformi auctiuscula 1 brevius alæ minimæ, ungui carinæ æquilongæ et in flore penitus inclusæ, obtusæ, altero latere auriculatæ; stamina 10 diadelpha (alternis brevioribus); ovarium stipitatum, multiovulatum, utrinque attenuatum; stylus ascendens, florendi tempore ovario subæquilongus, apice infra stigma terminale latere superiore barbatum; legumen ellipticum, inflatum (fere ut in *Colutea*): semina lævia, nitida, uniformia, stipitata.

Folia læte viridia, pagina inf. parce breviterque pilosa; flores (alis albidis exceptis) miniatum et albostrati. Ob pedunculos biflores, colorem et indumentum foliorum, præsertim vero ob foliola accessoria ad basim foliolorum videtur bene distincta species.

Semina ex horto Melbournensis accepimus, sed an planta in Nova Hollandia spontanea, an in horto e seminibus peregrinis (v. c. s. C. b. sp., ubi reliquæ omnes generis species videntur) inducta sit, indicatum non invenimus.

Note. This taxon belongs to the monotypic south African genus *Sutherlandia*. The correct name is *Sutherlandia frutescens* (L.) R. Br. The identity is clearly established by the original calyces, fruits and seeds from the seedbag in the Botanical Garden, Copenhagen, material now transferred to herb (C). The species was introduced to Australia. The statement in the protologue "semina lævia" is not correct, the testa has a corrugated surface.

Type: One sheet in (C).

Tabernaemontana nicobarica Liebm.

(*Apocynaceae*)

ISH 1855: 27 (1856); *Linnaea* 28: 363 (1856).

Protologue

Tabernaemontana nicobarica Liebm.

Foliis oppositis inæqualibus lanceolatis basi cuneatis sensim in petiolum brevem decurrentibus apice obtuse acuminatis undulatis utrinque glabris; cymis in dichotomiis ramorum

geminis di-trichotomis corymbosis multifloris foliis brevioribus, bracteis parvis mox deciduis linearibus glabris, pedicellis calyce 3-4plo longioribus, calycis lobis inæqualibus spathulatis obtusis basi glandulis 1-3 linearibus instructis, corollæ albæ tubo limbum superante basi et apice parum tumido, limbi laciniis dextrorsum convolutis inæqualibus lato-falcatis obtusis undulatis fauce nuda, staminibus supra medium tubi insertis, antheris oblongis acutis filamentis longioribus, stylo bisulco torto, stigmatibus apice bilobo, lobis emarginatis, basi annulato, ovariis 2 ovatis glabris.

In ins. Nicobaricis Kar Nicobar et Chowey legit beat. Kamphoevener.

Folia 3-4 1/2" longa, 2" lata, petiolus 3-4". Cymæ 2-2 1/2". Pedicelli 1/2-3/4", calycis lobi 2-3" longi 1" lati, corollæ tubus 6-7", laciniæ limbi 4-5" longæ 3" latæ.

Note: on sheet: *Tabernaemontana crispa* Roxb. ex Wall. (holotype of *T. nicobarica* Liebm.). Det. A. J. M. Leeuwenberg 1988 (WAG).

Type: 1 sheet in (C): sem. e Kar Nicobar et Chowry mis. Kamphoevener h. h.

Tolpis umbellata DC. var. *minor* Lange
(*Asteraceae*)

ISH 1853: 19 (1854).

Protologue

Tolpis umbellata DC. Planta culta habitum in statu silvestri a *T. barbata* Gärtn. valde recedentem bene conservat. Diff. ab illa calathiis duplo vel ultra minoribus, corollis omnibus sulfureis, achæniis 4 nec 2-3 aristatis, ita ut censeam, has 2 stirpes haud recta a cel. Gren. & Godr. esse junctas. Longitudo quidem relativa squamarum periclinii nota videtur summopere variabilis.

T. umbell. β, minor Lge. in promontorio Cabo de Gata Dec. 1851 lecta diff. statura plus duplo minore, gracili, calathiis minimis.

Note: The correct name is *T. barbata* (L.) Gaertn., *Fruct. Sem. Pl.* 2: 372 (1791). *Tutin in Fl.*

Eur. 4: 306 (1976) does not subdivide this polymorphous species but mentions *T. umbellata* Bertol., Rar. Lig. [Ital.] Pl. 1: 13 (1803) as a variant, which, however, is not given formal taxonomic rank.

Type: 3 sheets in (C): 1. e seminibus ad promontorium Chavidemum (Cabo de Gata) lectis (Dec. 1851) in H. bot. Hafn. culta 1853; 2. sem. ex Hisp. mis. Lange h. h.; 3. e seminibus ad Cabo de Gata lectis in H. Hafn. culta 5. Sept. 1853.

Trifolium striatum var. *spinescens* Lange
(*Fabaceae*)

ISH 1855: 25 (1856); *Linnaea* 28: 361 (1856).

Protologue

Trifolium striatum β , *spinescens* J. Lge. diff. a forma typica calycis laciniis multo longioribus & validioribus, angustissime subulatis spinescentibus, tubum æquantibus (dente inferiori tubum superante) omnibusque corollam superantibus.

Forma insignis, forsan species distincta; cum vero præter structuram calycis nullam notam specificam invenire potuerim, ad interim non nisi varietatis nomine eam proposui.

In campis prope Matritum legi jam desiccatum Nov. 1851.

Note: *T. striatum* is a very variable species; Willk. in Willk. & Lange, Prodr. Fl. Hispan. 3: 362 (1877) recognizes 3 varieties. In Fl. Eur. 2: 166 (1968) Coombe does not subdivide the species but comments on its polymorphy; two closely related species are mentioned, *T. gracile* Thuill. and *T. longisetum* Boiss. & Balansa, but none of these are identical with var. *spinescens*.

Type: 2 sheets in (C). According to the protologue a specimen "In campis prope Matritum legi jam desiccatum Nov. 1851" was the basis of the description. This specimen is not extant in (C). However two other specimens (of one col-

lection) are found: Herb. Joh. Lange, *Trifolium striatum* β , *spinescens* Lge., La Carolina (Sierra Morena) in collibus graminosis 10. Mai [scrips. Lange].

Turnera alba Liebm. (*Turneraceae*)

ISH 1847: 12 (1848); Ann. Sci. Nat. Bot. Sér. 3. 9: 318 (1848).

Protologue

Turnera alba Liebm. floribus sessilibus terminalibus subsolitariis bibracteolatis, corolla (magnitudine *Rosæ caninæ*) alba ad unguis flavida, petalis lato-obovatis crenulatis, stylo staminibus parum superante profunde tripartito, stigmatibus 3 tripartitis plumosis; foliis ellipticis grosse et irregulariter serratis utrinque pubescentibus subtus cano-virentibus, basi cuneatis biglandulosis petiolatis. – Ad ripas flum. Rio de las vueltas Dep. \odot Oajacæ Mex. \ddagger

Note: Urban in his monograph on *Turneraceae* in Jahrb. Königl. Bot. Gart. Berlin 2: 137 (1883) has this under *T. lucida* Urb. as a var. *velutina* (Presl) Urb. The correct name is *T. velutina* Presl, Reliq. Haenk. 2: 44. 1831-1835.

Type: 1 sheet in (C): Rio de las vueltas 5. 1842 leg. Liebm., No. 4266.

Urananthus pallidus Liebm.
(*Gentianaceae*)

ISH 1843: 7 (1844).

Protologue:

Note: Nomen nudum. See *Eustoma lacteum* Liebm.

Viola tricolor L. var. *villosa* Lange
(*Violaceae*)

ISH 1853: 19 (1854).

Protologue

Viola tricolor L. var. *villosa* Lge. In mont. Carpetanis ad pagum Guadarrama reg subalp. Jun. 1852. Caulis inferne pubescens; fol. villo-

sa, stipulis adnatis; capsulæ minimæ, globosæ.

Note: Lange in Willk. & Lange, Prodr. Fl. Hispan. 3: 702 (1878) refers var. (α) villosa to *V. tricolor* L. ζ parvula (Tineo) Lange, which in Fl. Eur. 2: 281 (1968) by Valentine, Merxm. & A. Schmidt is treated as *V. parvula* Tineo, Pl. Rar. Sicil.: 5 (1817).

Type: 2 sheets in (C): 1. Pinar de Guadarama 24. Jun. 1852, leg. Lange; 2. in reg. subalp. monte Carpetan ad Puerto al Guadarama 18. Jun. 1852, leg. J. Lange.

Xanthium Cavanillesii Schouw

(Asteraceae)

ISH 1849: 14 (1850).

Protologue

Xanthium Cavanillesii Schouw

Xanthium orientale Cac. icon. 3. t. 221

Xanthium echinatum Murr. ?

involucro fructigero ovali inter aculeos et ad basin rostrorum hispidisso, aculeis tenuiter subulatis strictis inferioribus retrorsum porrectis, rostris tenuibus strictis apice uncinatis. Buenos Ayres. Didrichsen.

Note: This is a synonym of *X. strumarium* L., Sp. Pl. 2: 987 (1753). Schouw is given as author also in Index Kewensis but Didrichsen has "signed" the diagnosis.

Type: 1 sheet in (C): F. Didrichsen 4206 Buenos Ayres.

Zephyranthes lilacina Liebm.

(Amaryllidaceae)

ISH 1844: 7 (1845).

Protologue

Zephyranthes lilacina Liebm. Differt a *Zeph. grandiflora* Lindl. staminibus inæqualibus, alternis longioribus, stylo admodum brevioribus, fauci non insertis, antheris semilunatis; stylo filiformi; stigmatibus trilobis, lobis filiformibus recurvis; pedunculo longitudine perigonii 3 pollicari; spatha pollicari ad medium fissu.

Note: This plant is probably identical with *Z. carinata* Herb. in Curtis, Bot. Mag. 2594 (1825), a species which is closely related to *Z. grandiflora* Lindl. Baker in Handb. Amaryll.: 31 (1888) regards them as synonymous. *Z. carinata* is the commonest species in cultivation, it originates from Mexico, Cuba and Jamaica. On seedbag in Botanical Garden, Copenhagen in translation: "1844 from garden in Kiel as *Z. grandiflora*."

Type: 1 sheet in (C) with seeds and fruits transferred from seedbag. Plate 4.

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Names in ISH in **bold**, correct name in *italics*.

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Aechmea weillbachii Didr.
- Anthriscus neglectus** Boiss. & Reut. (Apiaceae)
Anthriscus caucalis Bieb. var. *neglecta* (Lange) P. Silva & Franco
- Anthurium Kunthianum** Liebm. (Araceae)
Anthurium kunthianum Liebm.
- Begonia parviflora** Liebm. (Begoniaceae)
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Berberis serotina Lange
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Bilbergia pallidiflora Liebm.
- Boehmeria elongata** Fischer
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Bouchea pseudochascanum (Walp.) Grenz.
- Calliopsis fimbriata** Lange (Asteraceae)
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- Carduus (hamulosus Ehrh. var. ?) platypus** Lange (Asteraceae)
Carduus platypus Lange
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Celosia corymbifera Didr.
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Enhydra affinis Didr.
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Lycopersicum racemigerum Lange
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Nertera scapanioides Lange
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Philadelphus coronarius L.
- Phrynium Riedelii** Didr. (Marantaceae)
Calathea riedeliana (Didr.) K. Schum.
- Physosiphon nicaraguensis** Liebm. (Orchidaceae)
Physosiphon nicaraguensis Liebm.
- Pilea robusta** Liebm. (Urticaceae)
Pilea robusta Liebm.
- Pitcairnia elata** Liebm. (Bromeliaceae)
Pitcairnia albiflos Herb.
- Pitcairnia exscapa** Liebm. (Bromeliaceae)
Pitcairnia heterophylla (Lindl.) Beer
- Pulicaria arabica** Cass. var. *glabrescens* Lange (Asteraceae)
Pulicaria paludosa Link
- Ribes Schlechtendalii** Lange (Grossulariaceae)
Ribes spicatum Robson
- Rosa Andreae** Lange (Rosaceae)
Rosa rugosa Thunb.
- Rumex biformis** Lange (Polygonaceae)
Rumex acetosa L. subsp. *acetosa*
- Rumex crystallinus** Lange (Polygonaceae)
Rumex crystallinus Lange
- Saxifraga infundibulum** Lange (Saxifragaceae)
Saxifraga cuneifolia L.
- Saxifraga multicaulis** Lange (Saxifragaceae)
Saxifraga cuneifolia L.
- Sedum anglicum** (Crassulaceae)
Sedum anglicum Huds.
- Sedum pseudofabaria** Lange (Crassulaceae)
Sedum telephium L.
- Seseli cantabricum** Lange (Apiaceae)
Seseli cantabricum Lange
- Solanum suffruticosum** Schousb. ex Lange (Solanaceae)
Solanum nigrum L.
- Sonchus tenerrimus** DC. var. *glandulosus* Lange (Asteraceae)
Sonchus tenerrimus DC.
- Specularia castellana** Lange (Campanulaceae)
Legousia castellana (Lange) Samp.
- Sutherlandia foliolata** Lange (Fabaceae)
Sutherlandia frutescens (L.) R. Br.
- Tabernaemontana nicobarica** Liebm. (Apocynaceae)
Tabernaemontana crispa Roxb. ex Wall.
- Tolpis umbellata** DC. var. *minor* Lange (Asteraceae)
Tolpis barbata (L.) Gaertn.
- Trifolium striatum** var. *spinescens* Lange (Fabaceae)
Trifolium striatum L.
- Turnera alba** Liebm. (Turneraceae)
Turnera velutina Presl
- Urananthus pallidus** Liebm. (Gentianaceae)
Eustoma exaltatum (L.) Griseb.
- Viola tricolor** L. var. *villosa* Lange (Violaceae)
Viola parvula Tineo
- Xanthium Cavanillesii** Schouw (Asteraceae)
Xanthium strumarium L.
- Zephyranthes lilacina** Liebm. (Amaryllidaceae)
Zephyranthes grandiflora Lindl.



2. Drawing by F. Bayer of *Cleome indecora* Liebm.



1. Type of *Anthriscus neglectus* Lange.

4. Plates



3. Drawing by F. Bayer of *Pitcairnia excapa* Liebmann.



4. Drawing by F. Bayer of *Zephyranthes rosea* (Liebm.), a name never published by Liebmann. The drawing probably represents *Zephyranthes lilacina* Liebm.

Index seminum

in

Horto academico Hauniensi a. 1842 collectorum.

<i>Acæna adscendens</i> <i>Vahl.</i>	<i>Argemone mexicana</i> <i>L.</i>
<i>Achyropappus schkuhrioides</i> <i>Lk. & Otto.</i>	<i>Armeria elongata</i> <i>Koch.</i>
<i>Ageratum conyzoides</i> <i>L. β. album.</i>	— <i>purpurea</i> <i>Koch.</i>
<i>Agrostis spica venti</i> <i>L.</i>	<i>Arthrolobium scorpioides</i> <i>DC.</i>
<i>Allium Victorialis</i> <i>L.</i>	<i>Asperugo procumbens</i> <i>L.</i>
<i>Alopecurus agrestis</i> <i>L.</i>	<i>Asphodelus luteus</i> <i>L.</i>
<i>Althæa cannabina</i> <i>L.</i>	<i>Astragalus Ciccr</i> <i>L.</i>
<i>Alysicarpus vaginalis</i> <i>DC.</i>	<i>Axyris hybrida</i> <i>L.</i>
<i>Amaranthus Blitum</i> <i>L. β. adscendens.</i>	<i>Barbarea præcox.</i> <i>RBr.</i>
— <i>flavus</i> <i>L.</i>	— <i>vulgaris</i> <i>RBr. β. arcuata.</i>
— <i>lividus</i> <i>L.</i>	<i>Barkhausia alpina</i> <i>DC.</i>
— <i>sanguineus</i> <i>L.</i>	<i>Begonia diversifolia</i> <i>Grah.</i>
— <i>sylvestris</i> <i>Desf.</i>	— <i>hirtella</i> <i>Lk.</i>
— <i>tristis</i> <i>L.</i>	<i>Berteroa incana</i> <i>DC.</i>
<i>Amethystea coerulea</i> <i>L.</i>	<i>Billbergia zebrina</i> <i>Lindl.</i>
<i>Ammannia diffusa</i> <i>Willd.</i>	<i>Blitum glaucum</i> <i>Koch.</i>
— <i>indica</i> <i>Lam.</i>	<i>Boerhaavia hirsuta</i> <i>L.</i>
— <i>sanguinolenta</i> <i>Sv.</i>	<i>Borago officinalis</i> <i>L.</i>
<i>Anagallis arvensis</i> <i>L. β. fl. albido.</i>	— — <i>β. fl. albo.</i>
<i>Achusa hybrida</i> <i>Ten.</i>	<i>Bunias aspera</i> <i>Retz.</i>
<i>Ancistrocarpus maypurensis</i> <i>Humb. Bonpl.</i>	<i>Bupthalmum salicifolium</i> <i>L.</i>
<i>Andrographis paniculata</i> <i>Wall.</i>	<i>Burrielia gracilis</i> <i>DC.</i>
<i>Androsace septentrionalis</i> <i>L.</i>	<i>Campanula persicifolia</i> <i>L.</i>
— — <i>β. exscapa.</i>	— — <i>β. fl. albo.</i>
<i>Anoda triangularis</i> <i>DC.</i>	— <i>thyrsoidca</i> <i>L.</i>
<i>Anomatheca cruenta</i> <i>Lindl.</i>	<i>Capsicum angulosum</i> <i>Mill.</i>
<i>Antirrhinum Orontium</i> <i>L.</i>	— <i>cerasiforme</i> <i>Willd.</i>
<i>Arabis alpina</i> <i>L.</i>	<i>Carex Hornschuchiana</i> <i>Hoppe.</i>
— <i>collina</i> <i>Ten. β. purpurascens.</i>	— <i>pilulifera</i> <i>L.</i>
— <i>muralis</i> <i>Bertol.</i>	— <i>pulicaris</i> <i>L.</i>
— <i>sagittata</i> <i>DC.</i>	— <i>punctata</i> <i>Gaud.</i>

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<p>Xanthium Strumarium <i>Lin.</i> Xeranthemum inapertum <i>Gay.</i> — <i>radiatum</i> <i>Lam.</i> Ninnesia encelioides <i>Cav.</i></p>	<p>Youngia japonica <i>DC.</i> Zacintha verrucosa <i>Gärtn.</i></p>
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Hafniæ die XVI Januarii 1848.

A. Weibach,
hortulanus.

J. F. Schouw,
Horti præfectus.

1) *Begonia parviflora* *Liebm.* herbacea ramosissima glanduloso-pilosula inferne obsolete articulata superne continua; foliis alternis longe petiolatis, petiolo laminam superante, oblique cordatis, lobis basilaribus rotundatis apice brevi-acuminatis margine eroso-crenulatis; flor. axillaribus, pedunculo communi articulato 1 rarius 2 trifloro; floribus albis parvis; masculo majori tetraphyllo, foliolis 2 oppositis rotundis concavis, 2 elongato-obovatis planis; foem. minori 5 phyllo subregulari; capsula tri-lata basi & apice attenuata, triquetro-ovata, alis æqualibus integris. ☉. — E reg. temp. mex. orient.

2) *Eustoma lacteum* *Liebm.* (*Urananthus pallidus* *Liebm.* Index sem. Hort. Haf. 1845.) A tribus adhuc notis speciebus certe diversa, ulterius describenda. E vicinitate Tehuacan, Mexico.

3) *Turnera alba* *Liebm.* floribus sessilibus terminalibus subsolitariis hibracteolatis, corolla (magnitudine *Rosæ caninæ*) alba ad unguis flavida, petalis lato-obovatis crenulatis, stylo staminibus parum superante profunde tripartito, stigmatibus 3 tripartitis plumosis; foliis ellipticis grosse et irregulariter serratis utrinque pubescentibus subtus cano-virentibus, basi cuneatis biglandulosis petiolatis. — Ad ripas flum. Rio de las vueltas Dep. ☉ Oajacæ Mex. 24.



Adnotationes :

1. *Rosa Andreae* Lge. ad int., frutex, ut videtur, humilis sed robusta, caule pubescente et dense aculeato, aculeis inæqualibus, rectis, puberulis; foliis impari — 2—3 jugis, foliorum inferiorum stipulis angustis, superiorum sensim latioribus, glanduloso-serratis, foliolis parvis ovalibus, ($\frac{1}{2}$ —1 pollicaribus), crenato-serrulatis (crenarum marginibus reflexis), supra obscure viridibus, glabris, fere lucidis, depresso-reticulato-rugulosis, subtus dense cano puberulis; flore magno, subsolitario, inter stipulas bracteales submembranaceo-dilatatas suboculto, pedicello brevissimo; calycis laciniis corollâ longe brevioribus, acuminatis, apicem versus lanceolato-dilatatis, integerrimis; petalis latis, retusis, pulchre et saturate kermesinis; hypanthio valde et subdisciformi-depresso, fusco, glaberrimo.

In insula Sachalin plantam legit 1870 navarchus Andrea, in ejus, pro Museis nostris indefatigati collectoris honorem hanc speciem nominavi.

A proxime affini *R. rugosa* Thbg., (quacum cel. Crépin *R. ferocem* Lindl. et *R. kamschaticam* Vent. quoque conjungendas esse censet) differt planta nostra statura humiliore, foliis supra atroviridibus, lucidis, serraturis reflexis, petalis multo majoribus magisque saturate coloratis, sed imprimis fructu valde depresso (neque globoso). Itaque etsi opus quidem arduum videtur, novam in Rosæ vasto genere speciem proponere, tamen hanc plantam speciosam sine nomine emittere nolui, quare ad interim nomen proposui et rhodographis peritis ulteriorem ejus investigationem commendabo.

Hanniæ die 30. Januarii 1875.

Joh. Lange.

INDEX SEMINUM

IN

HORTO ACADEMICO HAUNIENSI a. 1875 COLLECTORUM.

Asterisco notatae sunt species, quarum semina e plantis silvestribus in loco natali lecta sunt

** Species, quarum semina in horto acad agronom. (Landbohøjskolen) lecta sunt.

Polypodiaceae.	
Acrostichum crinitum <i>L.</i>	Polypodium leiorhizon <i>Wall.</i>
— quercifolium <i>Retz.</i>	— Phyllitidis <i>L.</i>
Hemionitis palmata <i>L.</i>	— serpens <i>Forst.</i>
Gymnogramme chrysophylla (<i>Klfs.</i>)	— spectabile <i>Klfs.</i>
— <i>Sic.</i>	Cheilanthes argentea (<i>Gml.</i>) <i>Hook.</i>
— ferruginea <i>Kze. β</i>	— hirta <i>Sic.</i>
— lanata (<i>Klotsch.</i>) <i>Hook.</i>	— tomentosa <i>Lk.</i>
— heterocarpa <i>Blume.</i>	Hypolepis dicksonioides (<i>Endl.</i>) <i>Hook.</i>
Cryptogramme crispa (<i>L.</i>) <i>R. Br.</i>	Adiantum caudatum <i>L.</i>
Llavea cordifolia <i>Lagasc.</i>	— chilense <i>Klfs.</i>
Notochlæna nivea (<i>Lam.</i>) <i>Desv.</i>	— diaphanum <i>Blume.</i>
— sinuata <i>Klfs.</i>	— patens <i>Willd.</i>
Polypodium brasiliense <i>Poir. α</i> ne-	— pulverulentum <i>L.</i>
riifolium (<i>Schkr.</i>) <i>Bak.</i>	— reniforme <i>L.</i>
— crenatum <i>Sic.</i>	— trapeziforme <i>L. β</i> penta-
— diversifolium <i>Sic.</i>	dactylon (<i>L. et F.</i>) <i>H. et B.</i>
— irioides <i>Lam.</i>	Pteris arguta <i>Ait.</i>
	— cretica <i>L.</i> (albo-lineata.)

Adnotationes :

1. *Philadelphus acuminatus* Lgc. (Fortegnelse over Landbohøjskolens Frilandstræer (1871) pag. 65.) Gracilis, vix 4-pedalis; cortice fusco-cinereo, ramorum jun. ochraceo; foliis ovatis, longe acuminatis, distincte et grosse dentatis, pallide lutescenti-viridibus, subtus pallidioribus, subglabris, nervis 2 inferioribus utriusque lateris prominulis, prope basin folii egredientibus; floribus parvis, 5-7 invicem remotis, racemum elongatum laxiflorum formantibus; calycis tubo leviter puberulo, laciniis flavidis rubrotinctis; petalis lutescentibus, campanulato-incurvis, stylo persistente, staminibus brevioribus, vix ad medium usque 4-fido; stigmatibus cruribus filiformibus, apicem versus vix incrassatis.

Species hæc, a reliquis, quas descriptas vidi, speciebus satis distincta, sub nomine *Ph. Satsumi* accepta est, sed tam ab hujus descriptione (*C. Koch* dendr. I., p. 338) quam ab icone (*Paxt.* Flow. gard. II., p. 162) ita discrepat, ut vix huc referri debeat. Floratione reliquarum specierum (*Ph. hirsuto* excepto) præcociore quoque distinguitur, florere enim incipit medio v. ineunte Junio et ante medium Julii jam deflorata est.

Joh. Lange.

Title. – Titles should be kept as short as possible and with an emphasis on words useful for indexing and information retrieval.

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