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MATTHIAS SCHULTZ | **Hamburg**

## The Orchid Types of the Herbarium Hamburgense (HBG)

**Keywords** herbarium, orchids, types

**Abstract** An inventory of Orchidaceae type specimens kept in the Herbarium Hamburgense (HBG) of the University of Hamburg is presented. 1034 verified type specimens have been located. These represent 172 genera, 805 species and 34 infraspecific entities at subspecies (2), variety (30) or form (2) level. Additionally, 65 sheets marked as types representing 60 putatively unpublished names are listed in an appendix. Collection data as well as type status and synonyms are provided. References are made to electronic resources providing access to full collection metadata as well as high resolution images.

## Introduction

The Orchidaceae is the largest of the monocot plant families. It is cosmopolitan, but the diversity is highest in the tropics. The family comprises almost 800 genera and more than 20.000 species (MABBERTLEY 2008). Many orchids have been – and still are – much esteemed for their showiness and the Orchidaceae is certainly one of the most important horticultural plant families. Hamburg was the “continental centre of orchidomania” during the middle of the 19<sup>th</sup> century second only to the United Kingdom, the global centre of the exaggerated passion for orchids at that time (POPPENDIECK 2006). The collections of orchids cultivated in the glass houses of wealthy Hamburg merchants such as GUSTAV WILHELM SCHILLER (1803–1870), HEINRICH JOHANN MERCK senior (1770–1853) and MARTIN JOHANN JENISCH senior (1760–1827) were unique and internationally renowned. Moreover, Hamburg was also the domain of HEINRICH GUSTAV REICHENBACH (1824–1889) who – after the death of JOHN LINDLEY (1799–1865) – became the undisputed “king of orchids” during the second half of the 19<sup>th</sup> century. REICHENBACH was appointed professor of botany at the Akademische Gymnasium, a precursor of the Hamburg University, and was director of the Hamburg Botanical Garden from 1863 until 1889 (POPPENDIECK 2006). During his time in Hamburg, he edited “*Otia botanica Hamburgensia*”, a kind of program to the lectures held by REICHENBACH at the Akademische Gymnasium summarizing the results of his studies of orchids sent to him by eminent collectors such as FRIEDRICH CARL LEHMANN in South America, CHARLES SAMUEL POLLOCK PARISH in Burma or GEORG AUGUST SCHWEINFURTH in North-east Africa. He also continued editing “*Xenia Orchidacea*” with illustrations and descriptions of rare or important orchidaceous plants. REICHENBACH also treated the orchids in BERTHOLD SEEMANN’s “*Flora Vitiensis*”, inter alia studying orchids collected by EDUARD GRAEFFE (GRÄFFE) in Samoa and Fiji. GRAEFFE collected natural history items during expanded travels in the South Pacific for JOHAN CESAR GODEFFROY VI., a wealthy trader and ship owner who had founded a private natural history museum in Hamburg (1861–1885). REICHENBACH also determined large amounts of plants collected by AMALIE DIETRICH in Queensland, Australia, also commissioned by GODEFFROY VI. REICHENBACH maintained a most significant herbarium which, however, did not stay at Hamburg. The herbarium was willed to the Natural History Museum at Vienna under the strange condition that it must not be consulted by other botanists for 25 years after his death. Today, the Herbarium Hamburgense (HBG) holds only few REICHENBACH specimens, mostly duplicates of various plant families including orchids that have been acquired by exchange and through various sources. The most important part of the orchid collection at HBG is the herbarium of another distinguished German orchideologist and successor to REICHENBACH as editor of the famous “*Xenia Orchidacea*”: FRIEDRICH (FRITZ) LUDWIG WILHELM KRÄNZLIN (1847–1934). A detailed biography of KRÄNZLIN has been published by RÖTH (2006). KRÄNZLIN was working as a

teacher in Berlin. He devoted most of his spare time to the study of orchids and described more than 1,400 species new to science. After his retirement he moved to Wolfenbüttel and it seems that he visited regularly the orchid nursery of the Hamburg Botanical Garden. This is evident from several publications by KRÄNZLIN in the "Mitteilungen des Instituts für Allgemeine Botanik Hamburg" and from a number of new species described from living plants cultivated in the Hamburg Botanical Garden. Furthermore, KRÄNZLIN provided determinations of orchids cultivated in the green houses. This is evident from corresponding marks in orchid catalogues from the 1930ies which are still kept in the HBG archives. For a long time it was believed that KRÄNZLIN's orchids had been destroyed completely in the Berlin Botanical Museum during Allied air raids in World War II. However, KRÄNZLIN's private orchid herbarium had been acquired by HBG in 1935 (POPPENDIECK 2001) – and thus escaped Allied bombing. It was kept separately from the main collections ("Generalherbar") until the evacuation of large portions of the Hamburg Herbarium in 1943. The evacuated material comprised all monocots (including KRÄNZLIN's private orchid herbarium) and the dicots up to the Geraniaceae according to the ENGLERIAN system. It was brought to Schloß Muzschen near Leipzig in 1944, and the material was seized by the Red Armee after the war. It was brought to Leningrad (St. Petersburg), and later on to East Berlin where it remained safe but unavailable. Eventually, the evacuated HBG material was returned to Hamburg in 1990 and it has been made available again to the scientific public since 1992 (POPPENDIECK 2001). After its rediscovery, the significant KRÄNZLIN orchid collection immediately received attention from various, international specialists.

The herbarium of the University of Hamburg holds some 200 boxes of dried orchids containing approximately 10,000 sheets. The plant material originates from all parts of the world. As may well be expected, Germany and Central Europe are particularly well covered. However, the species diversity in orchids is much higher in regions such as Southeast Asia, the Melanesian Archipelago, Oceania and Australia, tropical Africa, Central America and the Caribbean, and in tropical South America. As one of the biggest herbaria in Germany and Europe, HBG holds a significant orchid collection and even today types of newly described taxa are designated to HBG. A first inventory of the orchids preserved in HBG has been published by CHRISTENSON (1994). This paper forms the basis of the present catalogue. CHRISTENSON focused on the rediscovered KRÄNZLIN herbarium. He presented a list of 383 types of orchids described by KRÄNZLIN that were found to be extant at HBG. Examples of labels found on sheets of the KRÄNZLIN herbarium are shown in Fig. 1. In addition, CHRISTENSON summarized also a significant portion of types of species described by other authors and concluded that HBG holds an orchid collection of international importance.

Beside the KRÄNZLIN orchid herbarium, HBG holds relevant type collections especially from the Melanesian and Papuan region as well as from tropical South America and tropical Africa (Figs. 2 & 3). Certainly one of the most important collections at



**Fig. 1** Examples of labels of KRÄNZLIN-types. A–E. determinations and type marks in KRÄNZLIN's hand (▲). C. collection data written by C.L. SPEGAZZINI (●). D. locality and collection number written by E. GRAEFFE on labels of the Museum GODEFFROY (■). E. collection data written by P. DUSÉN (▼).

HBG is that of ERNST HEINRICH GEORG ULE (1854–1915) made in Brazil and Peru between 1883 and 1907. For many years, ULE had a contract with the Herbarium Hamburgense to collect plants, and he repeatedly received payments for incoming material that eventually amounted to several thousand sheets. Some are obvious duplicates with printed labels, whereas other sheets bear handwritten labels and these apparently belong to ULE's private herbarium. In fact, HBG seems to hold the 1<sup>st</sup> set of ULE's plants – at least up to number 7.500. Higher numbers are missing in HBG since ULE entered into a long, and increasingly unfriendly correspondence with HANS KARL ALBERT WINKLER (1877–1945) who was director of the Institut für Allgemeine Botanik Hamburg. WINKLER complained about ULE making too many duplicates from the material which was originally purchased by and destined to Hamburg. In turn, ULE lamented about the poor payments he received and tried to negotiate the conditions of the contract with the result that WINKLER eventually cancelled any payments.



**Fig. 2** Examples of labels of orchid types at HBG 1. A. collection data written by E. ULE (▲), species epithet and “sp. nov.” by A. COGNIAUX. B. determination by J.J. SMITH (●), locality data handwritten by HBG staff. C. label completely in the handwriting of K. MORITZ. D & F. species name and locality data by J. MILDBRAED (▼), F with characteristic annotation by E.A. CHRISTENSON. E. label of SCHLIEBEN’s “Pflanzen aus Ost-Afrika” written by HBG staff.

Another important collection at HBG is that of the beforementioned H.K.A. WINKLER. He made a large collection of plants in central Borneo in 1924–1925, at a time when the interest in foreign plant collections in Hamburg shifted from Africa and tropical America to the Melanesian region. Many families of the WINKLER collection have been studied thoroughly (IRMSCHER 1927). The orchids were treated by JOHANNES JACOBUS SMITH (1867–1947) who described no less than 53 taxa as new. There are many other relevant collections at HBG. Examples include:



**Fig.3** Examples of labels of orchid types at HBG 2. A. collection data and name (later added) by O. BUCHTEN. B. label perhaps by REICHENBACH f. (▲), "Lapponiae" added by somebody else, perhaps Th. WAAGE. C. example from R. SCHLECHTER's "Iter Neo-Caledonicum". D. example of R. PANTLING's "Orchids of the Sikkim Himalaya" written by PANTLING. E. label data of Th. KASSNER (▼), "Kassner 2117" by HBG staff plus characteristic annotation by E.A. CHRISTENSON. F. duplicate material collected by P. SALZMANN in Brazil. G. characteristic label from the herbarium of J.F. DRÈGE written by E. MEYER. H. handwritten label of C.L.P. ZEYHER with locality number.

## Africa

HUGO BAUM (Angola, 1899–1900, essentially complete duplicate set), MAX JULIUS DINKLAGE (Cameroon, Liberia, 1888–1920ies, 1<sup>st</sup> set from Cameroon), KURT DINTER (Namibia, 1900ies–1930ies, large set), JOHANN (JEAN) FRIEDRICH (FRANCOIS) DRÈGE (South Africa, 1820–1830ies, large set), CHRISTIAN FREDERIK ECKLON (South Africa, 1820–1830ies, large set), CARL HUGO EHRENFRIED WILHELM HOLST (Tanzania, 1891–1893,

large duplicate set), THEO KASSNER (Zambia, Dem. Rep. Congo, 1907–1908, essentially complete duplicate set), GOTTFRIED WILHELM JOHANNES MILFDBRAED (Dem. Rep. Congo, Cameroon, Equatorial Guinea, 1907–1908, 1910–1911; 1<sup>st</sup> set of “Zweite Reise”, many duplicates of “Erste Reise”), PAUL RUDOLF PREUSS (Cameroon, 1889–1892, many duplicates), GEORG HEINRICH WILHELM SCHIMPER (Ethiopia, Egypt, Algeria, Saudi Arabia, 1830ies, large sets), FRIEDRICH R(E)ICHARDT RUDOLF SCHLECHTER (South Africa, Mozambique, 1892–1898, large duplicate set), HANS JOACHIM SCHLIEBEN (Tanzania, 1931–1935, essentially complete set), ADOLF FRIEDRICH STOLZ (Tanzania, 1900ies), FRANZ LUDWIG STUHLMANN (Tanzania, Mozambique, 1888–1890, 1<sup>st</sup> set of first trip), GEORG LUDWIG AUGUST VOLKENS (Tanzania, 1892–1894, many duplicates), GEORG AUGUST ZENKER (Cameroon, 1896–1913, essentially complete duplicate set), KARL (CARL) LUDWIG PHILIPP ZEYHER (South Africa, 1820–1830ies, large set).

## America

OTTO BUCHTIEN (Bolivia, 1900–1920ies, large set), HEINRICH FRANZ ALEXANDER VON EGgers (Caribbean, 1870–1899), GERT HATSCHBACH (Brazil, 1940–1990ies), JOHANN WILHELM KARL MORITZ (Venezuela, mid 19<sup>th</sup> cent., mixed set, large portion ex herb. J.J. Meyer of Altona, whose vast collection was willed to the Altonaer Museum and taken over by HBG after World War II), RUDOLF AMANDUS PHILIPPI (Chile, 2<sup>nd</sup> half 19<sup>th</sup> cent., large set), CYRUS GUERNSEY PRINGLE (Mexico, 1882–1907), WILHELM (GUILLERMO) SCHAFFNER (Mexico, 1870ies), FRIEDRICH SELLO(W) (Brazil, 1820ies, many indets ex coll. OLFERS), PAUL ERNST EMIL SINTENIS (Puerto Rico, 1884–1887), HANS von TÜRKHEIM (Santo Domingo, 1910–1911).

## Asia

DIETRICH BRANDIS (large private herbarium acquired in 1918, mostly India and Burma, incl. ROBERT PANTLING and many other collectors, many duplicates from Kew Herbarium distributed in 1860ies), JOSEPH & MARY STRONG CLEMENS (Borneo, 1931–1933, large set), ADOLPH DANIEL EDWARD ELMER (Philippines, Borneo, 1903–1923, large set), GEORGE FORREST (China, Burma, Tibet, early 20<sup>th</sup> century), CARL CURT HOSSEUS (Thailand, 1904–1905), ERNEST HENRY WILSON (China, 1899–1911, large sets of trips for VEITCH & Sons and ARNOLD Arboretum).

## Australia & Oceania

AMALIE DIETRICH (Australia, 1863–1873; ex herb. GODEFFROY, very large set), EDUARD GRAEFFE (Fiji, Samoa, 1862–1872; ex herb. GODEFFROY, large set), FERDINAND JACOB HEINRICH VON MUELLER (Australia, 2<sup>nd</sup> half 19<sup>th</sup> century, incl. many other collectors in

herb. MUELLER), JOHANN AUGUST LUDWIG PREISS (Australia, 1838–1842, large duplicate set), FRIEDRICH R(E)ICHARDT RUDOLPH SCHLECHTER (New Caledonia, 1902–1903, large duplicate set).

## Europe

There are only occasional types in the European collections. Plants collected at type localities (so-called topotypes) may be of interest in matters of species conservation and related questions. There is a number orchid duplicates from the herbarium of CARL LUDWIG WILLDENOW which have been received by HBG with the herbarium of PAUL WILHELM MAGNUS. Though containing only very few actual types, these are old collections and certainly of historic importance.

## Material and methods

The HBG orchid collection (c. 200 boxes) has been thoroughly searched for types during a recent inventory supported by the German Global Biodiversity Information Facility (GBIF) program (POPPENDIECK 2003). All traced orchid type specimens have been fully databased and scanned to obtain high-resolution images. Metadata are stored in the HBG database, an online-searchable MySQL database developed in conjunction with two other GBIF projects (HBG Aizoaceae and Bryophyte collections; <http://www.herbariumhamburgense.de/>). The scans have been produced using a “HerbScan” manufactured at Kew and consisting of a vertically mobile tray to hold the plant sheets and an upside-down mounted 600 dpi A3 image scanner (Epson expression 10000XL, Model 3181A). A colour chart is included in the scans to ensure true colour reproduction. All specimens listed below are searchable via the Herbarium Hamburgense internet portal (<http://www.herbariumhamburgense.de/>) or via GBIF (<http://www.gbif.org/>). Metadata and high-resolution scans of all types are (or eventually will be) available through the JSTOR Plant Science port (<http://plants.jstor.org/>).

## Results and discussion

Alltogether 1034 type sheets have traced and databased for this inventory representing 805 species, two subspecies, 30 varieties and two forms. The following enumeration is based on the first HBG type registry published by CHRISTENSON (1994), but has been completed and additional information is provided.

## Data

At first taxon name, describing author(s) and place of basionym publication are given. This is followed by label information such as geographic origin, date, collector and collection number if present. Finally, the Herbarium Hamburgense ID is given as well as the type status. If relevant, additional notes are provided. Label data are largely reproduced verbatim. The sequence of label information has been homogenized, initials of collectors have been added, any brackets omitted and outdated geographic names have the modern country put in front. Square brackets are used to indicate information not present on the label itself but taken from the corresponding printed descriptions. Country and collector are given in parentheses in those cases that descriptions are based on cultivated material and not on the wild plant.

## Type status and tyification

The species descriptions of names listed below have been checked thoroughly using the original sources (or photocopies as well as scanned resources displayed through electronic media) in order to validate the status of the HBG material as "type" in the broadest sense. In some cases it proved to be difficult to decide whether a particular sheet represents a type or not. In these cases the corresponding material has been marked "TYPUS?". It is hoped that specialists will use the present catalogue and help solving pending problems. Though not representing actual types, topotypes are listed here since such material may prove potentially useful in the course of neo- or epitypifications, or may become relevant in matters of species conservation or DNA barcoding efforts.

Some names listed here appear to be *nomina nuda* lacking a description. They are listed as "TYPUS?", not because the corresponding material represents an actual type, but rather to alert specialists. For the purpose of the present paper it proved to be too tedious to verify if such naked names have been validated in the meantime, have been placed into synonymy, or have remained unstudied so far (see also appendix). A few names appear to be illegitimate later homonyms of other previously and validly published names. It proved to be too time consuming to clarify if such names have been placed into synonymy in the meantime, have been transferred into other genera wherein the specific epithet is not blocked, or if the species are still in need of a new name. No attempts have been made here towards typification of names. However, in some cases notes are provided which may be useful for taxonomists.

CHRISTENSON (1994: 344) discussed the difficulties connected to the determination of the type status of orchids described by KRÄNZLIN. He listed those specimens as holotypes that have been marked by KRÄNZLIN as types and when it was known that there is no other original material deposited elsewhere. In the contrary case (holotypes

known to be deposited in another herbarium), the types from the KRÄNZLIN herbarium have to be considered isotypes irrespective of KRÄNZLIN's original "casual and inconsistent" (CHRISTENSON 1994: 344) type marks. Examples for isotypes are numerous specimens collected by P. Dusén in Paraná, Brazil. The holotypes are kept in the herbarium of the Natural History Museum at Stockholm (S). Any annotations in the hand of KRÄNZLIN such as "Typus!" or "Unicum!" have been reproduced since they may prove potentially useful in typification efforts.

If present, recent annotations such as "lectotype", "isolectotype" or "neotype" given by specialists have been reproduced as well. Although necessarily incomplete, references are given to specific papers, monographs or widely used floras that contain type information of HBG orchids.

## Synonymy

In case that recent specialists provided annotations stating the current or accepted name, such annotations are repeated here. In a certain number of (mostly African) species the synonymy has been checked rather extensively following major floras such as "Flora of Tropical East Africa", "Flore d'Afrique Centrale", "Flora Zambesiaca", "Flora of southern Africa", "Flora of West Tropical Africa" or "Flore du Cameroun". The synonymy of Bornean orchids has been checked using WOOD & CRIBB (1994). Australian orchid names have been compared with the "Australian Orchid Name Index" by CLEMENTS & JONES (electronic version 13 June 2008). Selected regional floras and monographic treatments or research articles have been consulted as well, though the clarification of synonymy of all names compiled in the present list had to remain incomplete. Useful resources for tracing synonymy are "The Plant List" (<http://www.theplantlist.org/>) and "World Checklist of Selected Plant Families" (<http://apps.kew.org/wcsp/home.do>).

## Name changes, spelling and authorship

A few changes have been made in the spelling of species epithets following suggestions in art. 60–62 of International Code of Botanical Nomenclature ICBN (Vienna Code, MCNEILL et al. 2006). Likewise, a few notes and corrections have been made in case of problems concerning the authorship of names, again following the ICBN regulations and guidelines.

## Enumeration of types

*Aa chiogena* SCHLTR., Repert. Spec. Nov. Regni Veg., Beih. 10: 35. 1922

Bolivia, am Chacaltaya, 30 km von La Paz, Feb 1908, O. BUCHTIEN 1289, HBG500204: ISO

≡ *Altensteinia chiogena* (SCHLTR.) C. SCHWEINF.

*Acianthus cymbalariifolius* F. MUELL. & KRAENZL. ex KRAENZL., Oesterr. Bot. Z. 44: 209. 1894 (as "cymabariaefolius")

New Caledonia, J. ROBERTS, HBG500859: HOLO?

*Acriopsis papuana* KRAENZL. in SCHUMANN & LAUTERBACH, Fl. Deutsch. Schutzg.: 250. 1900, *nom. nud.*

Papua New Guinea, Finschhafen, K. LAUTERBACH, HBG500868: TYPUS?

ann. KRÄNZLIN: Typus!

ann. CHRISTENSON: Basis for *Acriopsis papuana* KRAENZL., Fl. Deutsch. Schutz. 250, nomen

*Aerangis lutambae* MANSF., Notizbl. Bot. Gart. Berlin-Dahlem 12: 704. 1935

Tanzania, Tanganyika-Terr., Distr. Lindi, Lutamba-See, 20 Sept 1934, H.J. SCHLIEBEN 5365, HBG500210: ISO

*Aerangis schliebenii* MANSF. ex SCHLIEBEN, Gartenflora 86: 44, 60. 1937

Tanzania, Tanganyika Terr., Distr. Lindi, Masasi-Muiti, 25 Apr 1935, H.J. SCHLIEBEN 6419, HBG500867: ISO

*Agrostophyllum indifferens* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 44. 1927

Indonesia, West-Borneo, auf dem Bukit Mehipit, 10 Dec 1924, H. WINKLER 725, HBG500205: SYN; HBG500015, HBG500016, HBG500206: ISOSYN

*Agrostophyllum megalurum* RCHB. f. in SEEMANN, Fl. Vit. 1: 296. 1868

Samoa, Upolu, Mt. Tofua, T.U. M.P., E. GRAEFFE 1259, HBG515772: TYPUS

*Agrostophyllum reinekeanum* KRAENZL., Bot. Jahrb. Syst. 25: 602. 1898

Samoa, F. REINECKE, HBG501726: HOLO

ann. KRÄNZLIN: Typus

ann. CRIBB: = *Glomera montana* RCHB. f.

*Agrostophyllum drakeanum* KRAENZL., J. Bot. Morot 17: 422. 1903

New Caledonia, BOUDOIN 347, HBG500869: HOLO  
ann. KRÄNZLIN: Typus

*Altensteinia nervosa* KRAENZL., Bot. Jahrb. Syst. 36, Beibl. 80: 8. 1905

Chile, Tarapacá, [coll.?], HBG506650, HBG506651: ISO  
ann. KRÄNZLIN: ex Herb. S. Jago  
ann. ALVAREZ: = *Myrosmodes*

*Amblostoma dusenii* KRAENZL., Kongl. Svenska Vet. Akad. Handl. 46(10): 54. 1911

Brazil, Paraná, Jacarey, 17 Jul 1909, P. DUSÉN 8397, HBG500870: ISO  
ann. KRÄNZLIN: Typus

*Apostasia curvata* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 11. 1927

Indonesia, West-Borneo, bei Lebang Hara, 4 Dec 1924, H. WINKLER 595, HBG500909:  
HOLO  
= *Apostasia wallichii* R. Br. (see Wood & CRIBB 1994)

*Apostasia wallichii* R. Br. var. *seraweiensis* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7:  
10. 1927

Indonesia, West-Borneo, am unteren Serawai, 20 Nov 1924, H. WINKLER 268,  
HBG500005: LECTO; HBG500006, HBG500199, HBG500200: ISOLECTO  
= *Apostasia wallichii* R. Br. (see Wood & CRIBB 1994)

*Appendicula latibracteata* J.J. SM. var. *rajana* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg  
7: 48. 1927

Indonesia, West-Borneo, auf dem Bukit Raja, 17 Dec 1924, H. WINKLER 925,  
HBG500226: HOLO; HBG500009, HBG500227: ISO  
= *Appendicula pendula* BLUME (see Wood & CRIBB 1994)

*Asarca appendiculata* PHIL. ex KRAENZL., Orchid. gen. sp. 2: 33. 1903

Chile, Prov. O'Higgins, Talcaregne, [R. A. PHILIPPI?], HBG500910: SYN  
ann. KRÄNZLIN: spec. typ.

*Bicornella parviflora* RIDL., J. Linn. Soc., Bot. 21: 500. 1885

Madagascar, Imerina, Ränder der Reissümpfe, Jan 1881, J.M. HILDEBRANDT 3820,  
HBG500856: ISOSYN  
= *Cynorkis graminea* (THOUARS) SCHLTR. (see Du Puy et al. 1999: 117)

*Bipinnula philipporum* KRAENZL., Orchid. gen. sp. 2: 21. 1903(1904)

[Chile, Cordillere von Curicó, coll.?], HBG500917: HOLO

*Bletia godseffiana* KRAENZL., Gard. Chron. 1, ser. 3, 13: 442. 1893

(South America) Hort. F. SANDER, St. Albans, HBG501344: HOLO  
ann. KRÄNZLIN: Typus

*Bonatea pratensis* LINDL., Gen. Sp. Orchid. Pl.: 328. 1835

Brazil, Bahia, in pratis subhumidis, P. SALZMANN, HBG500134: ISO  
≡ *Habenaria pratensis* (LINDL.) RCHB. F.

*Brachycorythis engleriana* KRAENZL., Bot. Jahrb. Syst. 22: 20. 1895

Cameroon, Jaunde-Station, G. ZENKER [563], HBG501348: HOLO?

ann. CHRISTENSON: "Zenker 563"

= *Brachycorythis tenuior* RCHB. F. (see SZLACHETKO & OLSZEWSKI 1998)

*Brachycorythis kassneriana* KRAENZL., Bot. Jahrb. Syst. 51: 378. 1915

Zambia, N.W. Rhodesien, Kamibinga spr., Dec 1907, TH. KASSNER 2117, HBG501349:  
ISO

*Brachycorythis oligophylla* KRAENZL. in WARBURG, Kunene-Sambesi Exped.: 208. 1903

Angola, am Longa b. Napalanka, H. BAUM 614, HBG501350: HOLO

= *Brachycorythis angolensis* (SCHLTR.) SCHLTR. (see LA CROIX & CRIBB 1995)

*Brassavola chacoensis* KRAENZL., Bot. Jahrb. Syst. 36, Beibl. 80: 7. 1905

Argentina, Chaco, Colonia Besisteneia, Jan 1886, C.L. SPEGAZZINI 69472, HBG501354:  
HOLO

ann. KRÄNZLIN: Typus!

*Brownleea pentheriana* KRAENZL. ex J. ZAHLBR., Ann. Naturhist. Hofmus. Wien 20: 6.

1905

South Africa, Transvaal, Montagu-Pass, A. PENTHER 189, HBG501355: HOLO-fragment  
(=ISO)

*Buchtienia boliviensis* SCHLTR., Repert. Spec. Nov. Regni Veg. 27: 34. 1929

Bolivia, Hacienda Casana sobre el camino a Tipuani, 26 Sept 1922, O. BUCHTIEN 7236,  
HBG501357: ISO

*Bulbophyllum angustatifolium* J. J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 63. 1927

Indonesia, West-Borneo, auf dem Bukit Raja, 18 Dec 1924, H. WINKLER 941.A, HBG501407: HOLO

= *Bulbophyllum deltoideum* AMES & C. SCHWEINF. (see WOOD & CRIBB 1994)

*Bulbophyllum beccarii* RCHB. F., Gard. Chron. 1, n. ser., 11: 41. 1879

(Malaysia), Borneo, O. BECCARI 3515, HBG502103: TYPUS-fragment? (=ISO?)

*Bulbophyllum bilobipetalum* J. J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 60. 1927

Indonesia, West-Borneo, auf dem Bukit Raja, 20 Dec 1924, H. WINKLER 975, HBG501359: HOLO

= *Bulbophyllum schefferi* (KUNTZE) SCHLTR. (see WOOD & CRIBB 1994)

*Bulbophyllum brookeanum* KRAENZL., Bot. Jahrb. Syst. 34: 250. 1905

Malaysia, Borneo, Sarawak, O. BECCARI 306, HBG501360: HOLO-fragment (=ISO)

ann. KRÄNZLIN: Typus

ann. CHRISTENSON: HOLO-FI

= *Bulbophyllum vermiculare* HOOK. F. (see WOOD & CRIBB 1994)

*Bulbophyllum compressum* TEIJSM. & BINN., Natuurk. Tijdschr. Nederlandsch-Indie

24: 307. 1862

Indonesia, Sumatra, [coll.?], HBG502106: HOLO-fragment (=ISO)

ann. KRÄNZLIN: vom Originalexemplar in Leyden

*Bulbophyllum conspectum* J. J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 65. 1927

Indonesia, West-Borneo, auf dem Bukit Raja, 22 Dec 1924, H. WINKLER 1029,

HBG502105: HOLO; HBG501400: ISO

ann. VERMEULEN: *Bulbophyllum sopoetanense* SCHLTR.

*Bulbophyllum cryptophoranthoides* KRAENZL., Bot. Jahrb. Syst. 34: 251. 1905

Malaysia, Borneo, Sarawak, O. BECCARI 1874, HBG501362: HOLO-fragment (=ISO)

ann. KRÄNZLIN: Typus

ann. CHRISTENSON: HOLO-FI

= *Bulbophyllum membranifolium* HOOK. F. (see WOOD & CRIBB 1994)

*Bulbophyllum dusenii* KRAENZL., Kongl. Svenska Vet. Akad. Handl. 46(10): 69. 1911

Brazil, Paraná, Jaguariahyva, 25 Aug 1910, P. DUSÉN 10110, HBG501363: ISO

ann. KRÄNZLIN: Typus!

***Bulbophyllum ebracteolatum*** KRAENZL., Ann. Naturhist. Hofmus. Wien 30: 58. 1916

(Philippines, [A. LOHER]), Hort. München-Nymphenburg, HBG501347: HOLO?  
ann. CHRISTENSON: ?HOLO, there is no such *Bulbophyllaria*

**Note** Originally labelled by KRÄNZLIN as “*Bulbophyllaria ebracteolata* KRAENZL., Typus!”.

***Bulbophyllum exiliscapum*** J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 64. 1927

Indonesia, West-Borneo, auf dem Bukit Mehipit, 29 Dec 1924, H. WINKLER 1146,  
HBG501365: HOLO  
= *Bulbophyllum flavescens* (BLUME) LINDL. (see WOOD & CRIBB 1994)

***Bulbophyllum fernandopoanum*** SCHLTR. in MILDBRAED, Wiss. Erg. zweit. deut. Zentr.-Afr. Exped., Bot. 2: 180. 1922 *nom. nud.*

Equatorial Guinea, Fernando Poo, Südwestküste, Bokoko 14 km nördlich der Punta de Sagre, Oct 1910, J. MILDBRAED 6892, HBG501367: TYPUS?

***Bulbophyllum filiforme*** KRAENZL., Bot. Jahrb. Syst. 22: 25. 1895

Cameroon, Victoria & Bimbie, P. PREUSS [1242], HBG501368: LECTO  
ann. CHRISTENSON: probably HOLO, “Preuss 1242”  
= *Bulbophyllum resupinatum* RIDL. var. *filiforme* (KRAENZL.) J.J. VERM. (see SZLACHETKO & OLSZEWSKI 2001)

***Bulbophyllum finetianum*** SCHLTR., Bot. Jahrb. Syst. 39: 83. 1906

New Caledonia, Oubatche, 13 Dec 1902, R. SCHLECHTER 15416, HBG501366: ISO

***Bulbophyllum forsythianum*** KRAENZL., Bot. Jahrb. 28: 163–164. 1928 non sensu H. PERIER 1930

Madagascar, Ambohitombo-forest (Tanala), 26 Dec 1894, C.I. FORSYTHE-MAJOR 480,  
HBG501369: ISO

***Bulbophyllum humblotianum*** KRAENZL., Bot. Jahrb. Syst. 33: 71. 1904

Comoros, L. HUMBLOT 1530, HBG501370: HOLO-fragment (=ISO)  
ann. KRÄNZLIN: Typus  
ann. CHRISTENSON: HOLO-LE

*Bulbophyllum hymenochilum* KRAENZL., Bot. Jahrb. Syst. 34: 252. 1905

Malaysia, Borneo, Sarawak, Mattau, O. BECCARI 1536, HBG501371: HOLO-fragment (=ISO)

ann. KRÄNZLIN: Typus

ann. CHRISTENSON: HOLO-FI

*Bulbophyllum incurum* KRAENZL., Repert. Spec. Nov. Regni Veg. 1: 86. 1905

Peru, "Dr. Ebermeyer" [A. WEBERBAUER] 951, HBG501372: HOLO

ann. KRÄNZLIN: Typus

*Bulbophyllum insulanum* SCHLTR. in MILDBRAED, Wiss. Erg. zweit. deut. Zentr.-Afr.

Exped., Bot. 2: 180. 1922 *nom. nud.*

Equatorial Guinea, Fernando Poo, Südwestküste, Bokoko 14 km nördlich der Punta de Sagre, Oct 1911, J. MILDBRAED 6955, HBG501373: TYPUS?

*Bulbophyllum jaguariahyvae* KRAENZL., Ark. Bot. 16(8): 21. 1920(1921)

Brazil, Paraná, Jaguariahyva, 17 Apr 1911, P. DUSÉN 11721, HBG501374: ISO

ann. KRÄNZLIN: Typus!

*Bulbophyllum johannis-winkleri* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 59. 1927 (as "*Johannis Winkleri*")

Indonesia, West-Borneo, auf dem Bukit Raja, 17 Dec 1924, H. WINKLER 899, HBG501375: HOLO

= *Bulbophyllum nematocaulon* RIDL. (see WOOD & CRIBB 1994)

*Bulbophyllum lacinulosum* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 61. 1927

Indonesia, West-Borneo, auf dem Bukit Raja, 17 Dec 1914, H. WINKLER 939, HBG501376: HOLO

*Bulbophyllum leucopogon* KRAENZL., Bot. Jahrb. Syst. 48: 391. 1912

Cameroon, Bipinde, 1909, G. ZENKER 3903, HBG501377: HOLO

= *Bulbophyllum pumilum* (Sw.) LINDL. (see SZLACHETKO & OLSZEWSKI 2001)

*Bulbophyllum macrophyllum* KRAENZL., Bot. Jahrb. Syst. 34: 249. 1905

Malaysia, Borneo, O. BECCARI 1344, 3113, HBG501378: SYN-fragments (=ISOSYN)

ann. KRÄNZLIN: Typus!

ann. CHRISTENSON: SYN-FI

= *Bulbophyllum penduliscapum* J.J. SM. (see WOOD & CRIBB 1994)

***Bulbophyllum maleolens*** KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 55. 1928

Madagascar, [coll. ?], HBG501379: HOLO  
ann. KRÄNZLIN: Typus!

***Bulbophyllum masdevalliacum*** KRAENZL., Bot. Jahrb. Syst. 34: 251. 1905

[Indonesia, Soron, Kei-Inseln], “Borneo”, O. BECCARI “486”[494], HBG501380: ISO  
ann. CLEMENTS: isotype

**Note** The locality “Borneo” written by KRÄNZLIN on the flower packet is wrong. The correct locality cited above is taken from his diagnosis (KRÄNZLIN 1904b: 251). Confusingly, the collection number written by KRÄNZLIN on the flower packet is correct, but has been misprinted as “486” in the diagnosis. “Beccari 486, Borneo” is the type of *Bulbophyllum saccatum* KRAENZL. (see there).

***Bulbophyllum mindanaense*** AMES, Leafl. Philipp. Bot. 5: 1585. 1912

Philippines, Mindanao, Todaya (Mt. Apo), District of Davao, June 1909, A.D.E. ELMER 11307, HBG501381: ISO

***Bulbophyllum multiflexum*** J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 66. 1927

Indonesia, West-Borneo, auf dem Bukit Tilung, 9 Feb 1925, H. WINKLER 1533, HBG501382: HOLO

***Bulbophyllum napelloides*** KRAENZL., Kongl. Svenska Vet. Akad. Handl. 46(10): 67, pl. 10. 1911 (Fig.4)

Brazil, Rio Grande do Sul, Colonia Ijuhý, 5 Apr 1893, C.A.M. LINDMAN A.1359, HBG501383: ISO

***Bulbophyllum neocaledonicum*** SCHLTR., Bot. Jahrb. Syst. 39: 84. 1906 (as “neo-caledonicum”)

New Caledonia, Oubatche, 19 Dec 1902, R. SCHLECHTER 15492, HBG501384: ISO

***Bulbophyllum ngoyense*** SCHLTR., Bot. Jahrb. Syst. 39: 84. 1906

New Caledonia, Ngoye, 13 Nov 1902, R. SCHLECHTER 15278, HBG501385: ISOSYN



**Fig.4** Plate 10 from KRÄNZLIN (1911b) with floral details of some South American orchids. HBG hold many isotypes of species described by KRÄNZLIN in that publication, most of them collected by P. DUSÉN and C.A.M. LINDMAN in Brazil. An example is *Bulbophyllum napelloides* KRAENZL. (fig. 5 on plate).

***Bulbophyllum oncidiochilum* KRAENZL.**, Bot. Jahrb. Syst. 17: 485. 1893

Indonesia, West Sumatra (Distr. Padang), 1892, W. MICHOLITZ, HBG501387: HOLO  
 Papua New Guinea, Sabai-Island, 1885, H. HARTMANN, HBG501554: PARA  
 Papua New Guinea, New Britain, 1886, R. PARKINSON, HBG501549, HBG501553: PARA  
 Papua New Guinea, Friedr. Wilh. Hafen, June 1893, W. MICHOLITZ, HBG501555: PARA  
 Papua New Guinea, Stirling Range, 1894, L. E. KENNEDY, HBG500400: PARA  
 Papua New Guinea, Duke of Yorks, E. BETCHE, HBG501552: PARA  
 New Guinea [Papua New Guinea?], J. CHALMERS, HBG501551: PARA  
 ann. KRÄNZLIN (HBG501387): Typus!  
 = *Dendrobium bifalce* LINDL. (see CHRISTENSON 1994: 346)

**Note** KRÄNZLIN (1894: 336–337) proposed *Latourea oncidiochila* (KRAENZL.) KRAENZL. as the new name for his earlier described *Bulbophyllum oncidiochilum* KRAENZL. and provided an emended diagnosis based on additional material he was able to study after the printing of the original diagnosis. This material is extent in HBG and the specimens are interpreted here as paratypes.

***Bulbophyllum perpusillum* KRAENZL.**, Gard. Chron. 2, ser. 3, 16: 592. 1894

(Madagascar, J. M. BRAUN), Hort. Herrenhausen, Hannover, HBG501389: HOLO?  
 ann. KRÄNZLIN: specim. typic.

***Bulbophyllum polypodioides* SCHLTR.**, Bot. Jahrb. Syst. 39: 86. 1906

New Caledonia, auf den Bergen bei Oubatche, 4 Dec 1902, R. SCHLECHTER 15422,  
 HBG501390: ISO

***Bulbophyllum porphyroglossum* KRAENZL.**, Bot. Jahrb. Syst. 22: 24. 1895

Cameroon, Victoria, P. PREUSS [1279], HBG501391: HOLO?  
 ann. CHRISTENSON: “Preuss 1279”

***Bulbophyllum propinquum* KRAENZL.**, Orchis 2: 62. 1908

(Thailand), Hort. FUERSTENBERG-HUGENPOET, Mintard, HBG501392: HOLO?

***Bulbophyllum purpurascens* TEIJSM. & BINN.**, Natuurk. Tijdschr. Nederlandsch-Indie 24: 308. 1862

(Indonesia?, Java?), HBG501473: TYPUS-fragment (=ISO)  
 ann. KRÄNZLIN: *Cirrhopetalum purpurascens* Kränzl.: *Bulbophyllum purp.* T. & B., Originalexemplar, Java, Mus. Lugd. Bat.

*Bulbophyllum rajaicum* J. J. Sm., Mitt. Inst. Allg. Bot. Hamburg 7: 62. 1927

Indonesia, West-Borneo, auf dem Bukit Raja, 21 Dec 1924, H. WINKLER 1018, HBG501397: HOLO; HBG501396: ISO

*Bulbophyllum rhopalochilum* KRAENZL., Bot. Jahrb. Syst. 51: 384. 1914

Congo (Democr. Rep.), Kantu, 24 Jan 1908, Th. KASSNER 2381[2380], HBG501406: ISO ann. VERMEULEN: = *Bulbophyllum oreonastes* RCHB. F.

**Note** Due to an error in the numbering of the KASSNER collection at HBG the collection number should read KASSNER no. 2380 (not no. 2381 as printed on the label).

*Bulbophyllum saccatum* KRAENZL., Bot. Jahrb. Syst. 34: 250. 1905

Malaysia, Borneo, O. BECCARI 486, HBG501398: HOLO-fragment (=ISO) ann. KRÄNZLIN: Typus!  
ann. CHRISTENSON: HOLO-FI  
= *Bulbophyllum apodum* HOOK. F. (see WOOD & CRIBB 1994)

*Bulbophyllum schultzeanum* SCHLTR. in MILDBRAED, Wiss. Erg. zweit. deut. Zentr.-Afr. Exped., Bot. 2: 180. 1922 *nom. nud.*

Equatorial Guinea, Fernando Poo, Südwestküste, Bokoko 14 km nördlich der Punta de Sagre, Oct 1910, J. MILDBRAED 6951, HBG501399: TYPUS?

*Bulbophyllum spinulipes* J. J. Sm., Mitt. Inst. Allg. Bot. Hamburg 7: 61. 1927

Indonesia, West-Borneo, auf dem Bukit Mehipit, 10 Dec 1924, H. WINKLER 737, HBG501402: HOLO; HBG500002, HBG501386, HBG501401: ISO  
ann. VERMEULEN (HBG501386): = *Bulbophyllum obtusipetalum* J. J. Sm.

*Bulbophyllum stenopetalum* KRAENZL., Bot. Jahrb. Syst. 22: 25. 1895

Cameroon, P. PREUSS [1217], HBG501403: HOLO or ISO  
ann. KRÄNZLIN: Typus!  
ann. CHRISTENSON: holotype? ["Preuss 1217"]

**Note** This material is listed by CHRISTENSON (1994: 348) as "holo?", whereas SZLACHETKO & OLSZEWSKI (2001: 399–401) cited it as isotype.

*Bulbophyllum stolzii* SCHLTR., Bot. Jahrb. Syst. 53: 571. 1915

Tanzania, Nyassa Hochland, Station Kyimbila, 14 June 1911, A. STOLZ 767, HBG501404: ISO

*Bulbophyllum succedaneum* J. J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 67. 1927

Indonesia, West-Borneo, auf dem Bukit Raja, 15 Dec 1924, H. WINKLER 861, HBG501405: HOLO

*Bulbophyllum triurum* KRAENZL., Bot. Jahrb. Syst. 34: 252. 1905

Indonesia, West-Sumatra, Atjermatjoer, O. BECCARI, HBG501409: HOLO-fragment (=ISO)

ann. KRÄNZLIN: Typus

ann. CHRISTENSON: HOLO-FI

*Bulbophyllum vulcanicum* KRAENZL., Bot. Jahrb. Syst. 51: 383. 1914

Congo (Democr. Rep.), Mt. Ruwenzori, Mabuka, Oct 1908, Th. KASSNER 3240, HBG502107: ISO

*Bulbophyllum weberbauerianum* KRAENZL., Repert. Spec. Nov. Regni Veg. 1: 85. 1905

Peru, A. WEBERBAUER 450, HBG501410: HOLO

ann. KRÄNZLIN: Typus

*Bulbophyllum zenkerianum* KRAENZL., Bot. Jahrb. Syst. 48: 391. 1912

Cameroon, Bipinde, 1909, G. ZENKER 3902, HBG500853: HOLO

*Caladenia deformis* R. BR. var. *albiflora* BENTH., Fl. Austral.: 6. 1873

Australia, prope Limekiln, Perth, 19 Jan 1839, L. PREISS 2191, HBG501414: ISOSYN

*Caladenia gigas* RCHB. F., Linnaea 41: 56. 1877

New Caledonia, 1864?, E. DEPLANCHE?, E. VIEILLARD?, HBG506710: SYN?

≡ *Hyperanthus gigas* (RCHB. F.) ROLFE

*Caladenia latifolia* R. BR. var. *glandula* EWART & E. WOOD, Proc. Roy. Soc. Vict. Ser. 2, 23(2): 290. 1911

Australia, Swan Mills prope Lowden, Nov 1910, M. KOCH 1944, HBG501413: ISO?

**Note** Collection number and locality match the information given in the diagnosis, except for the date which is given as "Nov. and Dec., 1909".

*Caladenia pulcherrima* F. MUELL., Fragm. 5: 93. 1865 *nom. illeg.*

Australia, N. Holl. austr., F. MUELLER 6, HBG517019: TYPUS?

= *Arachnorchis patersonii* (R. BR.) D. L. JONES & M. A. CLEM.

*Calanthe delphinoides* KRAENZL., Bot. Jahrb. Syst. 17: 55. 1893

Cameroon, Buea, 1891, P. PREUSS 1061, HBG501418: HOLO

*Calanthe engleriana* KRAENZL., Nachtr. Fl. Deutsch. Schutzgeb.: 142. 1905

Papua New Guinea, Ramu-Fluss-Gebiet, K. LAUTERBACH 3191, HBG501419: HOLO?  
ann. KRÄNZLIN: Typus

*Calanthe rajana* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 39. 1927

Indonesia, West-Borneo, auf dem Bukit Raja, 18 Dec 1924, H. WINKLER 944,  
HBG501420: HOLO

*Calanthe stolzii* SCHLTR., Bot. Jahrb. Syst. 53: 569. 1915

Tanzania, Nyassa Hochland, Station Kyimbila, feuchter Waldgrund, am Bache Kihsi,  
1899, A. STOLZ 3, HBG506865: ISO  
= *Calanthe sylvatica* (THOUARS) LINDL.

*Callostylis rigida* BLUME, Bijdr. Fl. Ned. Ind. 7: 341. 1825

(Indonesia, Java), C. L. BLUME, HBG501677: TYPUS-fragment (=ISO)  
ann. KRÄNZLIN: vom Orig. Ex. in Leyden  
= *Eria pulchella* LINDL.

*Camaridium exaltatum* KRAENZL., Bot. Jahrb. Syst. 37: 386. 1906

Peru, Moyobamba, A. WEBERBAUER 4620, HBG501421: HOLO  
ann. KRÄNZLIN: Typus

*Camaridium flavum* SCHLTR., Repert. Spec. Nov. Regni Veg. 27: 76. 1929

Bolivia, Haciendo Simaco sobre el camino a Tipuani, Feb 1920, O. BUCHTIEN 5057,  
HBG501422: ISOSYN

*Camaridium polyanthum* F. LEHM. & KRAENZL., Bot. Jahrb. Syst. 26: 488. 1899

Ecuador, F.C. LEHMANN 8151, HBG501423: HOLO

*Campylocentrum ulaei* COGN. in MARTIUS, Fl. Bras. 3(6): 514. 1906

Brazil, Est. St. Catharina, Serra do Oratorio, Jan 1890, E. ULE 1628, HBG500252: ISO-  
SYN

*Catasetum buchtienii* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 27. 1928

Bolivia, Región de Mapiri, San Carlos, 28 Jan 1927, O. BUCHTIEN 494, HBG501425:  
HOLO

ann. KRÄNZLIN: Typus!

*Catasetum discolor* LINDL. f. *margine labelli integerrimo* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 27. 1928

Bolivia, Región de Mapiri, San Carlos, 10 Mar 1927, O. BUCHTIEN 503, HBG501426:  
HOLO

**Note** Originally labelled by KRÄNZLIN as “*Catasetum discolor forma margine labelli integro*”.

*Catasetum gongoroides* KRAENZL., Repert. Spec. Nov. Regni Veg. 27: 254. 1930

(Colombia), Hort. Bot. Hamburg, HBG501427: LECTO; HBG501424: ISOLECTO? (see CHRISTENSON 1994: 348)

ann. KRÄNZLIN (HBG501424): Typus!

ann. IRMSCHER (HBG501427): Typus!

*Catasetum guentherianum* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 28. 1928

Bolivia, Región de Mapiri, San Carlos, 17 May 1927, O. BUCHTIEN 536, HBG500450:  
HOLO

ann. KRÄNZLIN: Typus!

ann. MANNSFELD:  $\equiv$  *Mormodes guentherianum* (KRAENZL.) MANSF.

*Catasetum kraenzlinianum* MANSF., Repert. Spec. Nov. Regni Veg. 31: 104. 1932

Brazil, HBG501428: HOLO

ann. KRÄNZLIN: Typus!

**Note** This is a substitute name for *Catasetum micranthum* KRAENZL. non BARB. ROD. 1881  
(see there).

*Catasetum micranthum* KRAENZL., Repert. Spec. Nov. Regni Veg. 27: 26. 1929 *nom. inval.* non BARB. ROD. 1881

see *Catasetum kraenzlinianum* MANSF.

*Catasetum rolfeanum* MANSF., Notizbl. Bot. Mus. Gart. Berlin-Dahlem 10: 476. 1928

(Brazil, HÜBNER), Hort. Bot. Hamburg, fl. 17 Jan 1929, HBG506525: SYN?

ann. ROMERO: *Catasetum atratum* LINDL.

*Catasetum stenochilum* KRAENZL., Repert. Spec. Nov. Regni Veg. 26: 255. 1929

Brazil, HBG501429: LECTO

ann. KRÄNZLIN: Typus!

ann. ROMERO: "Lectotype" "=*Catasetum rolfeanum* MANSF."

*Catasetum tenebrosum* KRAENZL., Gard. Chron. 2, ser. 3, 48: 229. 1910

Peru, P. WOLTER, HBG500254: HOLO

*Centrogenium schlechteranum* PORTO & BRADE, An. Prim. Reun. Sul-Amer. Bot. 3: 32. 1938

Brazil, S. Paulo, Ribeira-Gebiet, Jacupiranga, Apr 1911, A.C. BRADE 5071, HBG501431: TYPUS

≡ *Eltroplectris schlechterana* (PORTO & BRADE) PABST

*Centroglossa peruviana* COGN., Bull. Soc. Roy. Bot. Belgique 43: 331. 1906

Peru, Departamento Loreto, Cerro de Ponasa, Mar 1903, E. ULE 6688, HBG501482: ISO

*Cephalangraecum acrodontum* SCHLTR. in MILFDBRAED, Wiss. Erg. zweit. deut. Zentr.-Afr. Exped., Bot. 2: 180. 1922 nom. nud.

Equatorial Guinea, Fernando Poo, J. MILFDBRAED 7149, HBG500875: TYPUS?

*Cephalanthera kurdica* BORNM. ex KRAENZL., Bull. Herb. Boissier 3: 143. 1895

Iraq, Kurdistania (Assyria orient.), in montis Kuh-Sefin reg. infer supra pagum Schak-lava (ditionis Erbil), 27 May 1893, J. BORNMÜLLER 1833, HBG501440: TYPUS

*Ceratostylis borneensis* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 45. 1927

Indonesia, West-Borneo, auf dem Bukit Tilung, 8 Feb 1925, H. WINKLER 1496, HBG501441: HOLO

*Ceratostylis micrantha* SCHLTR., Bot. Jahrb. Syst. 39: 63. 1906

New Caledonia, auf den Bergen bei Oubatche, 12 Feb 1902, R. SCHLECHTER 15392, HBG501443, HBG501444: ISO

*Cheirostylis sarcopus* SCHLTR., Bot. Jahrb. Syst. 53: 558. 1915

Tanzania, Nyassa Hochland, Station Kyimbila, 30 Aug 1912, A. STOLZ 1530, HBG501445: ISO

*Chloraea alborosea* KRAENZL. & SPEG., Anales Mus. Nac. Buenos Aires 7: 166. 1902 (as "albo-rosea")

Argentina, Territorio del Chubut, región del Río Corcovado, Río Corcovado, 22 Feb 1901, N. ILLIN 142, HBG501446: HOLO

**Note** SPEGAZZINI (1902: 166) announced in a footnote that the descriptions of new species marked as "Kraenzl. & Speg. n. sp." will appear in KRÄNZLIN's monograph of the genus *Chloraea* (KRÄNZLIN 1904a). Therefore, these names are considered provisional with valid description published later in KRÄNZLIN (1904a). *Chl. alborosea*, however, has not been included in that monograph. The present material has been annotated by SZLACHETKO as "Holotype". However, the collection details given on the HBG sheet do not seem to match those printed in SPEGAZZINI (1902: 166).

*Chloraea alpina* POEPP., Fragm. Syn. Pl.: 17. 1833

Chile, Antuco, E. F. PÖPPIG, HBG501447: ISO  
ann. KRÄNZLIN?: spec. typ.

*Chloraea arechavaletae* KRAENZL., Bot. Jahrb. Syst. 9: 316. 1888

Uruguay, J. ARECHAVALETA, HBG500263: TYPUS?

*Chloraea berteroana* KRAENZL., Orchid. gen. sp. 2: 70. 1903 (1904)

Chile, Roncagua, C. G. BERTERO, HBG501449: SYN

*Chloraea bicalllosa* PHIL. ex KRAENZL., Orchid. gen. sp. 2: 69. 1903(1904)

[Chile, Cordillere de Chillan, R. A. PHILIPPI], HBG500928: HOLO  
= *Chloraea bidentata* (POEPP. & ENDL.) M. D. CORREA?

*Chloraea calanthe* KRAENZL., Bot. Jahrb. Syst. 37: 395. 1906

Bolivia, Süd-Bolivia, Escayache, K. FIEBRIG 3560, HBG501450: HOLO

*Chloraea campestris* POEPP., Fragm. Syn. Pl.: 15. 1833

Chile, Antuco, E. F. PÖPPIG, HBG501451: TYPUS-fragment (=ISO)  
ann. KRÄNZLIN: Blüte vom Wiener Orig. Ex.

*Chloraea chica* SPEG. & KRAENZL. in KRAENZL., Orchid. gen. sp. 2: 131. 1904

Chile, Patagonien, Rio Chico, C. L. SPEGAZZINI 52, HBG501453: TYPUS

**Note** *Chloraea chica* KRAENZL. & SPEG. (SPEGAZZINI 1902: 167) is a *nomen nudum*.

*Chloraea chrysantha* POEPP., Fragm. Syn. Pl.: 15. 1833

Chile, E. F. PÖPPIG, HBG501454: TYPUS-fragment (=ISO)  
ann. KRÄNZLIN: Blüte vom Wiener Orig. Ex.

*Chloraea cygnaea* PHIL., Linnaea 33: 241. 1864

Chile, [leg. R. A. PHILIPPI?], HBG501456: TYPUS  
ann. KRÄNZLIN: Blüte vom typischen Exemplar, das einzige welches existiert  
ann. SZLACHETKO: = *Chloraea crispa* LINDL.

*Chloraea falklandica* KRAENZL., Bot. Jahrb. Syst. 44, Beih. 101: 5. 1910

Falkland Islands (Malvinas), Ostfalkland, Port Williams, Sparrow Cove, 16 Jan 1908,  
C. SKOTTSBERG 34, HBG500911: SYN  
ann. KRÄNZLIN: Specim. typ. aut.

*Chloraea ferruginea* SPEG. & KRAENZL. in KRAENZL., Orchid. gen. sp. 2: 76. 1903(1904)

Argentina, Carrenleofú, C. L. SPEGAZZINI 52, HBG501457: TYPUS

**Note** See note under *Chloraea alborosea* first two sentences.

*Chloraea fonkii* PHIL., Linnaea 29: 55. 1858

Chile, Chonos Isl., Fr. FONK, HBG501458: TYPUS

**Note** Originally labelled as “*Chl. gymnoglossa* Phil.”.

*Chloraea hemichloris* KRAENZL., Orchid. gen. sp. 2: 99. 1904

Chile, [Cordillera Pemahue], F. W. NEGER 9, HBG517020: SYN

**Note** Originally labelled as “*Chloraea hemimelas* Krzl.”, but see notes by KRÄNZLIN (1904a: 100).

*Chloraea hystrix* SPEG. & KRAENZL. in KRAENZL., Orchid. gen. sp. 2: 87. 1903(1904)

Chile, [Prov. Curicó], N. ILLÍN 100, HBG500923: TYPUS?

**Note** See note under *Chloraea alborosea* first two sentences.

*Chloraea incisa* POEPP., Fragm. Syn. Pl.: 17. 1833

Chile, [coll. E. F. PÖPPIG?] 339, HBG501461: TYPUS-fragment (=ISO)

*Chloraea peruviana* KRAENZL., Bot. Jahrb. Syst. 37: 526. 1906

Peru, Lima, Amancaes Berge, A. WEBERBAUER, HBG501465: HOLO  
ann. SZLACHETKO: = *Chloraea venosa* RCHB. f.

*Chloraea spegazziniana* KRAENZL., Anales Mus. Nac. Buenos Aires 7: 167. 1902

Argentina, Patagonien, La Fontana, C.L. SPEGAZZINI, HBG501467: TYPUS

**Note** See note under *Chloraea alborosea* first two sentences. *Chl. spegazziniana* is not treated in KRÄNZLIN (1904a). The present material has been annotated by Szlachetko as “type”, however, the collection details given on the HBG sheet do not seem to match those provided by SPEGAZZINI (1902: 167) in his provisional diagnosis.

*Chloraea stenantha* KRAENZL., Orchid. gen. sp. 2: 98. 1904

Chile, Curico, Mar 1901, [coll.?], HBG501468: HOLO?  
ann. KRÄNZLIN: spec. typ. aut.  
ann. SZLACHETKO: = *Chloraea multiflora* LINDL.

*Cirrhopetalum africanum* SCHLTR., Bot. Jahrb. Syst. 53: 573. 1915

Tanzania, Nyassa Hochland, Station Kyimbila, 1911, A. STOLZ 1411, HBG501470: ISO-SYN

*Cirrhopetalum layardi* F. MUELL. & KRAENZL. ex KRAENZL., Oesterr. Bot. Z. 44: 210.

1894

New Caledonia, L. LAYARD, HBG501471: HOLO?

*Coelogynbeccarii* RCHB. f., Bot. Centralbl. 28: 345. 1886

[New Guinea?, O. BECCARI?], HBG501480: TYPUS-fragment? (=ISO?)  
ann. KRÄNZLIN: Typus!

*Coelogynbihamata* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 29. 1927

Indonesia, West-Borneo, auf dem Bukit Mulu, Urwald, Epiphyt, 2 Dec 1924, H. WINKLER 517, HBG500266: HOLO; HBG500029, HBG500030, HBG500267: ISO  
= *Coelogynetenuis* ROLFE (see Wood & CRIBB 1994)

*Coelogynecrassiloba* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 28. 1927

Indonesia, West-Borneo, auf dem Bukit Mulu, Urwald, 1 Dec 1924, H. WINKLER 481, HBG500711: HOLO; HBG500027, HBG500711: ISO

*Coelogyne elegantula* KRAENZL., Repert. Spec. Nov. Regni Veg. 17: 111. 1921

China, Yun-nan, Pang trin, 10 Oct 1919, S. TÉN 1186, HBG501474: HOLO-fragment (=ISO)

ann. KRÄNZLIN: Typus!

*Coelogyne elmeri* AMES, Leafl. Philipp. Bot. 5: 1556. 1912

Philippines, Mindanao, Todaya (Mt. Apo), May 1909, A.D.E. ELMER 10694, HBG501475: ISO

*Coelogyne harana* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 27. 1927

Indonesia, West-Borneo, bei Lebang Hara, 24 Nov 1924, H. WINKLER 346, HBG501476: HOLO; HBG501477: ISO

*Coelogyne macroloba* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 30. 1927

Indonesia, West-Borneo, auf dem Bukit Raja, 15 Dec 1924, H. WINKLER 860, HBG503755: HOLO; HBG500024: ISO

ann. GRAVENDEEL (HBG503755): = *Coleogyne gibbifera* J.J. SM.

*Coelogyne monilirachis* CARR, Gard. Bull. Straits Settlem. 8: 206. 1935

Malaysia, Tenompok, 21 Aug 1931, J. & M.S. CLEMENS 26127, HBG506787: ISOSYN

Malaysia, Tenompok, 20 Nov 1931, J. & M.S. CLEMENS 27166, HBG506788: ISOSYN

*Coelogyne peltastes* RCHB. F. var. *unguiculata* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7:

33. 1927

Indonesia, West-Borneo, bei Lebang Hara, 24 Nov 1924, H. WINKLER 347, HBG501479: HOLO; HBG500022, HBG500023: ISO

*Collabium nebulosum* BLUME, Bijdr. Fl. Ned. Ind.: 358. 1825

Indonesia, Java, C.L. BLUME, HBG506519: TYPUS-fragment (=ISO)

ann. KRÄNZLIN: vom Orig. Ex. Blumes

*Comperia karduchorum* Bornm. & KRAENZL., Bull. Herb. Boissier. 3: 141. 1895

Turkey, Kurdistan, an d. persischen Grenze, J. BORNMÜLLER [1828?], HBG501833: HOLO?

ann. KRÄNZLIN: Typus!, Unicum!

= *Orchis taurica* C. Koch

*Corallorrhiza macrantha* SCHLTR., Beih. Bot. Centralbl., 2. Abt., 36: 411. 1918

Mexico, Oaxaca, Sierra de San Felipe, Jun 1894, C.G. PRINGLE 4723, HBG519472: ISOLECTO (see FREUDENSTEIN 1997)

*Corallorrhiza pringlei* GREENM., Proc. Amer. Acad. Arts 33: 475. 1898

Mexico, Oaxaca, Sierra de San Felipe, 13 Dec 1895, C.G. PRINGLE 6295, HBG519471: ISOLECTO

≡ *Corallorrhiza odontorhiza* (WILLD.) NUTT. var. *pringlei* (GREENM.) FEUDENSTEIN (see FREUDENSTEIN 1997)

*Corybas bryophilus* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 15. 1927

[Indonesia, West-Borneo, Grat zwischen Bukit Raja und Bidang Menabai, 25 Dec 1924], H. WINKLER 1057, HBG500938: HOLO

*Corybas crenulatus* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 16. 1927

[Indonesia, West-Borneo, Bukit Mulu, 2 Dec 1924], H. WINKLER 494, HBG500939: HOLO

*Corybas geminigibbus* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 13. 1927

[Indonesia, West-Borneo, Buki Mulu, 2 Dec 1924], H. WINKLER 496, HBG500940: HOLO

*Corybas johannis-winkleri* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 14. 1927 (as "*Johannis Winkleri*")

Indonesia, West-Borneo, auf dem Bukit Mulu, Urwald, in Moos eingebettet, 2 Dec 1924, H. WINKLER 495, HBG500942: PARA

Indonesia, West-Borneo, auf dem Bukit Mulu, Urwald, in Moos eingebettet, 2 Dec 1924, H. WINKLER 497, HBG502102, HBG500290: PARA

= *Corybas carinatus* (J.J. SM.) SCHLTR. (see WOOD & CRIBB 1994)

**Note** SMITH (1927: 14) designated WINKLER 498 as (holo)type. WOOD & CRIBB (1994) cite the holotype to be present at HBG and list an isotype at the Herbarium Bogoriense (BO), Bogor. However, the HBG holotype is lost. SMITH also listed WINKLER 495 and 497 which are interpreted here as paratypes. One of the duplicates of WINKLER 497 (HBG502102) has been annotated by VAN ROYEN as neotype. However, there is no neotypification in VAN ROYEN (1983).

*Corybas johannis-winkleri* J.J. Sm. var. *interruptus* J.J. Sm., Mitt. Inst. Allg. Bot. Hamburg 7: 14. 1927

Indonesia, West-Borneo, Bukit Raja und Bidang Menabei, Urwald, 25 Dec 1924, H. WINKLER 1056, HBG500941: HOLO

= *Corybas carinatus* (J.J. Sm.) SCHLTR. (see Wood & CRIBB 1994)

*Cranichis schaffneri* RCHB. f., Bonplandia 3: 238. 1855

Mexico, Valle de Mexico, Sep 1875, J.G. SCHAFFNER, HBG506518: TOPO?

≡ *Ponthieva schaffneri* (RCHB. f.) E.W. GREENW.

*Cranichis thysanochila* B.L. ROB. & GREENM., Proc. Amer. Acad. Arts 32: 35. 1896

Mexico, Oaxaca, Las Hoyas Canyon, 2 Nov 1894, C.G. PRINGLE 6023, HBG506456: ISO  
ann. ALVAREZ: ≡ *Pseudocranichis thysanochila* (B.L. ROB. & GREENM.) GARAY

*Cryptostylis acutata* J.J. Sm. var. *borneensis* J.J. Sm., Mitt. Inst. Allg. Bot. Hamburg 7:  
17. 1927

Indonesia, West-Borneo, auf dem Bukit Mulu, 2 Dec 1924, H. WINKLER 515,  
HBG501483: SYN

Indonesia, West-Borneo, auf dem Bukit Raja, 18 Dec 1924, H. WINKLER 933,  
HBG501484: SYN

*Cyclopogon dusenii* SCHLTR., Repert. Spec. Nov. Regni Veg. 16: 323. 1920

Brazil, Paraná, Alexandra, in truncis arb., 1 Oct 1909, P. DUSÉN 8596, HBG502037: ISO-  
SYN

ann. SZLACHETKO: = *Cyclopogon alexandrae* (KRAENZL.) SCHLTR.

*Cyclopogon torusus* MYTNIK, SZLACH. & RUTIK, Die Orchidee 57: 487. 2006

Brazil, S. Paulo, Jaraguá, Aug 1912, A.C. BRADE 6207, HBG501744: ISO

**Note** Originally labelled as *Hapalorchis micrantha* (BARB. ROD.) HOEHNE.

*Cycnoches albidum* KRAENZL., Repert. Spec. Nov. Regni Veg. 7: 38. 1909

Brazil, [coll. ?], HBG501486: HOLO

ann. KRÄNZLIN: Typus!

*Cycnoches buchtienii* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 26. 1928

Bolivia, Región de Mapiri, San Carlos, 5 Mar 1927, O. BUCHTIEN 500, HBG501487: HOLO

ann. KRÄNZLIN: Typus!

= *Polycycnis muscifera* (Lindl. & Paxton) RCHB. F.

*Cynorkis anacamptoides* KRAENZL. in ENGLER, Pflanzenw. Ost-Afrikas C: 151. 1895 (19 Jul) (as "Cynosorchis")

Uganda, Runssoro, "Baumann" [F. STUHLMANN] 2346, HBG501493: HOLO

ann. KRÄNZLIN: Typus

**Note** The diagnosis has been reprinted in KRÄNZLIN (1895: 18; as "Cynorchis").

*Cynorkis betsileensis* KRAENZL., Orchid. gen. sp. 1: 492. 1898 (as "Cynosorchis")

Madagascar, R. BARON 285, HBG500951: HOLO

*Cynorkis boiviniana* KRAENZL., Orchid. gen. sp. 1: 483. 1898 (as "Cynosorchis")

Comoros, B. BOIVIN, HBG500953: HOLO

*Cynorkis sigmoidea* KRAENZL., Orchid. gen. sp. 1: 490. 1898 (as "Cynosorchis")

Comoros, B. BOIVIN, HBG500947: HOLO

*Cynorkis usambarae* ROLFE, Fl. Trop. Afr. 7: 260. 1898 (as "Cynorchis")

Tanzania, Mtai, Feb 1893, C. HOLST 2474, HBG501285: ISO

Tanzania, Usambara, C. HOLST 2474, HBG501333: ISO

*Cypripedium pubescens* WILLD., Hort. Berol. (Willdenow) 1, t 13. 1804

America borealis, coll.? [in herb. C.L. WILLDENOW], HBG501495: ISO

≡ *Cypridium calceolus* var. *pubescens* (WILLD.) CORRELL

*Cyrtopodium hatschbachii* PABST, Bradea 2(40): 273. 1978

Brazil, Ro. Jataí-Caiapônia (mun. Jataí), Goiás, do brejo, 24 July 1977, G. HATSCHBACH 40066, HBG501496: ISO

*Cyrtopodium paranaense* SCHLTR., Repert. Spec. Nov. Regni Veg. 16: 333. 1920

Brazil, Jacarehy, P. DUSÉN 6644, HBG506871: ISOSYN

(Brazil, Paraná), P. DUSÉN 13758 [13750?], HBG506870: ISOSYN?

*Cyrtostylis huegelii* ENDL. in LEHM., Pl. Preiss. 2: 6. 1846

Australia, in arenosis conchyliosis umbrosis inter muscos prope lacum insulae Rotten-nest, 22 Aug 1839, J. A. L. PREISS 2204, HBG501485: ISOLECTO (see CLEMENTS & JONES 2008)

*Cystoporus serriformis* J. J. Sm., Mitt. Inst. Allg. Bot. Hamburg 7: 25. 1927 (Fig. 5)

Indonesia, auf dem Bukit Raja, 20 Dec 1924, H. WINKLER 995, HBG501497: HOLO

*Cystorchis saccosepala* J. J. Sm., Mitt. Inst. Allg. Bot. Hamburg 7: 22. 1927

Indonesia, West-Borneo, auf dem Bukit Mulu, 2 Dec 1924, H. WINKLER 521, HBG500722: SYN; HBG500540: ISOSYN

*Cystorchis saccosepala* J. J. Sm. var. *menabaiensis* J. J. Sm., Mitt. Inst. Allg. Bot. Hamburg 7: 23. 1927

Indonesia, West-Borneo, auf dem Bidang Menabei, 12 Dec 1924, H. WINKLER 823, HBG500723: HOLO

*Cystorchis saprophytica* J. J. Sm., Mitt. Inst. Allg. Bot. 7: 24. 1927

Indonesia, West-Borneo, auf dem Bukit Mulu, 1 Dec 1924, H. WINKLER 465, HBG500717: HOLO

Indonesia, West-Borneo, auf dem Bukit Mehipeit, 9 Dec 1924, H. WINKLER 696, HBG500545, HBG500720: PARA

Indonesia, West-Borneo, West-Borneo, auf dem Bidang Menabei, 14 Dec 1924, H. WINKLER 855, HBG500719: PARA

Indonesia, West-Borneo, auf dem Bidang Menabei, 27 Dec 1924, H. WINKLER 1107, HBG500718: PARA

Indonesia, West-Borneo, auf dem Bukit Tilung, 8 Feb 1925, H. WINKLER 1487, HBG500721: PARA

**Note** SMITH (1927: 24) designated WINKLER no. 465 as “(holo)type” and further cited WINKLER nos. 696, 855, 1107, 1487 all listed here as paratypes.

*Dendrobium alpestre* LINDL. ex ROYLE, Ill. Bot. Himal. Mts. 370, t. 88. 1839 *nom. illeg.*  
non Sw. 1799

India, J. F. ROYLE 1006, HBG500771: ISO  
ann. KRÄNZLIN: Typus!



**Fig. 5** Holotype of *Cystopus serriformis* J.J. Sm. collected by H.K.A. WINKLER. WINKLER was director of the Institut für Allgemeine Botanik Hamburg and made a significant collection of orchids during a prolonged visit to the interior of Borneo in the mid 1920ies. To the left original field labels with pencil notes by Winkler; the printed label has annotations by J.J. SMITH.

*Dendrobium aphanochilum* KRAENZL. in ENGLER, Pflanzenr. 50(1): 110. 1910

Indonesia, Amboina, O. BECCARI, HBG501500: HOLO  
ann. KRÄNZLIN: Typus!

*Dendrobium aruanum* KRAENZL. in ENGLER, Pflanzenr. 50(1): 242. 1910

Indonesia, Neu-Guinea, Aru-Inseln, O. BECCARI, HBG501501: HOLO

*Dendrobium asworthiae* O'BRIEN, Gard. Chron. 1, ser. 3, 29: 86. 1901

New Guinea?, Hort. F. SANDER, St. Albans, HBG500399: ISO

*Dendrobium augustae-victoriae* KRAENZL., Gartenfl.: 115. 1894 (as "Augustae Victoriae")

Papua New Guinea, Dallmann Hafen, Sept 1893, L. KÄRNACH, HBG501498: HOLO;  
HBG501499: ISO  
ann. KRÄNZLIN: specimen autoris

*Dendrobium baeuerleni* F. MUELL. & KRAENZL. ex KRAENZL., Oesterr. Bot. Z. 44: 163.  
1894 (Fig. 6)

(Papua New Guinea?, W. BÄURLEN?), HBG501502: TYPUS?  
ann. KRÄNZLIN: specim. typicum

*Dendrobium brachythecum* F. MUELL. & KRAENZL. ex KRAENZL., Oesterr. Bot. Z. 44: 161.  
1894

(Papua New Guinea?), New Guinea, 1893, W. ANDERSON, HBG501503: HOLO  
ann. KRÄNZLIN: specimen typ. autorum!

*Dendrobium brandtiae* KRAENZL., Gard. Chron. 2, ser. 3, 40: 404. 1906

(North Australia or New Guinea), Hort. I. BRANDT, Zürich, HBG501504: HOLO  
ann. KRÄNZLIN: Typus!

*Dendrobium bursigerum* LINDL., J. Proc. Linn Soc. Botany 3: 17. 1859

Philippines, H. CUMING 2066, HBG519470: TYPUS-fragment?  
ann. DAUNCEY: = *Dendrobium decundum* (BLUME) LINDL.



Fig. 7. A—C *Dendrobium inamoenum* Kränzl. A Habitus (magn. nat.). B Flos. C Labellum (aucta). — D—F *D. Baeuerlenii* F. Müll. et Kränzl. D Inflorescentia (magn. nat.). E Labellum. F Gynostemium (aucta). — G—H *D. vitellinum* Kränzl. G Flos. H Labellum (aucta). (Icones originariae.)

A. Engler, Das Pflanzenreich. IV. (Embryophyta siphonogama) 50.

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**Fig. 6** HBG holds (holo)type material of *Dendrobium baeuerlenii* KRAENZL., *D. inamoenum* KRAENZL. and *D. vitellinum* KRAENZL., three species illustrated – and the latter two described – in KRÄNZLIN's monograph of one of the largest genera of orchids (from KRÄNZLIN 1910: 113, pl. 7).

*Dendrobium casuarinae* SCHLTR., Repert. Spec. Nov. Regni Veg. 15: 211, 212. 1918

New Caledonia, auf den Hügeln bei Yaouhé, 20 Sept 1902, R. SCHLECHTER 14728, HBG506652: ISO

Orig. sub *Dendrobium silvanum* RCHB. f.

ann. CLEMENTS:  $\equiv$  *Dockrillia casuarinae* (SCHLTR.) M. A. CLEM. & D. L. JONES

*Dendrobium ceratostyloides* J. J. SM., Bull. Dep. Agric. Indes Neerl. 19: 14. 1908

Indonesia, New Guinea, W. DEN BERGER, HBG506659: ISO

*Dendrobium chordiforme* KRAENZL., ENGLER, Pflanzenr. 50(1): 292. 1910

Papua New Guinea, Sattelberg, K. LAUTERBACH 484, HBG501506: HOLO

ann. KRÄNZLIN: Typus!

**Note** This name was first published by KRÄNZLIN in SCHUMANN & LAUTERBACH (1901: 246) as a *nomen nudum* and has been validated later by KRÄNZLIN (1910: 292).

*Dendrobium cleistogamum* SCHLTR., Bot. Jahrb. Syst. 39: 74. 1906

New Caledonia, auf den Bergen am Ngoye, 1 Nov 1902, R. SCHLECHTER 15194, HBG501507: ISO

*Dendrobium coccineum* KRAENZL. in ENGLER, Pflanzenr. 50(1): 129. 1910

Indonesia, Moluccas, O. BECCARI, HBG501508: HOLO

ann. KRÄNZLIN: Typus

ann. CHRISTENSON: holotype

ann. DAUNCEY: fragment of holotype, = *Glossorhyncha* sp.

*Dendrobium cogniauxianum* KRAENZL. in WARBURG, Bot. Jahrb. Syst. 13: 281. 1891

Papua New Guinea, Finschhafen, O. WARBURG, HBG501509: HOLO

ann. KRÄNZLIN: Typus!

*Dendrobium confundens* KRAENZL. in ENGLER, Pflanzenr. 50(1): 205. 1910

Indonesia, Aru-Inseln, O. BECCARI, HBG501510: HOLO

ann. KRÄNZLIN: Typus

*Dendrobium copelandianum* F. MUELL. & KRAENZL. ex KRAENZL., Oesterr. Bot. Z. 45: 179. 1895

Papua New Guinea, eastern New Guinea, Bartle Bay, 1894, COP. KING, HBG501511: HOLO

ann. KRÄNZLIN: specimen autoris

*Dendrobium correlianum* HAWKES & HELLER, Lloydia 20: 119. 1957

Papua New Guinea, mountains near Mita, Milne Bay, Feb 1895, W. MICHOLITZ, HBG500298: HOLO; HBG500297: ISO

**Note** This is a substitute name for *Dendrobium tricolor* KRAENZL. 1910 *nom. illeg.* non (RUIZ & PAV.) PERS. 1807 (see there).

*Dendrobium crassicaule* SCHLTR., Bot. Jahrb. Syst. 39: 75. 1906

New Caledonia, auf den Abhängen des Mont Humboldt, 15 Nov 1902, R. SCHLECHTER 15351, HBG501512: ISO

*Dendrobium crucilabre* J. J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 55. 1927

Indonesia, West-Borneo, auf dem Bukit Raja, 18 Dec 1924, H. WINKLER 942, HBG501513: HOLO

*Dendrobium cuthbertsonii* F. MUELL., Trans. & Proc. Roy. Soc. Victoria 24: 175. 1888

Papua New Guinea, Mount Obree, W.R. CUTHBERTSON & W.A. SAYER, HBG501514: ISO?

*Dendrobium cyanopterum* KRAENZL. in ENGLER, Pflanzenr. 50(1): 170. 1910

[Papua New Guinea, Bartle Bay], 1895, COP. KING, HBG500963: HOLO

*Dendrobium cymatolegum* SCHLTR., Bot. Jahrb. Syst. 39: 73. 1906

New Caledonia, auf den Hügeln am Ngoye, 29 Nov 1902, R. SCHLECHTER 15141, HBG500328: ISO

*Dendrobium cymbulipes* J. J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 51. 1927

Indonesia, West-Borneo, auf dem Bukit Raja, 20 Dec 1924, H. WINKLER 962, HBG501517: HOLO; HBG501518: ISO

Indonesia, West-Borneo, auf dem Bukit Raja, 16 Dec 1924, H. WINKLER 885, HBG501516: PARA; 17 Dec 1924, H. WINKLER 926, HBG501515: PARA; 21 Dec 1924, H. WINKLER 1009, HBG501519: PARA

**Note** SMITH (1927: 52) cited three specimens collected by WINKLER as original material but did not assign a type. However, he wrote that he based his diagnosis on no. 962 ("Beschreibung nach der n.962"), and therefore the corresponding specimen is interpreted here as the holotype.

*Dendrobium delicatulum* KRAENZL. ex WARB., Bot. Jahrb. Syst. 16: 17. 1892(1893)

[Papua New Guinea, Finisterreberge], F. HELLWIG 303, HBG500959: HOLO

*Dendrobium delicatulum* F. MUELL. & KRAENZL. ex KRAENZL., Oesterr. Bot. Z. 44: 162.  
1894 nom. illeg. non KRAENZL. 1892

[(Papua New Guinea, Moreton Bai), cult. 1893], F. v. MUELLER, HBG500967: HOLO

**Note** This is a later homonym of *Dendrobium delicatulum* KRAENZL. published in WARBURG (1892: 17).

*Dendrobium eboracense* KRAENZL., Oesterr. Bot. Zeitschr. 44: 419. 1894

Papua New Guinea, Mioko, Duke of York group, on trees very common, Oct 1893, W. MICHLITZ, HBG500768: HOLO; HBG500767: ISO

*Dendrobium eleutheroglossum* SCHLTR., Bot. Jahrb. Syst. 39: 70. 1906

New Caledonia, auf den Bergen bei Ou-Hinna, 31 Dec 1902, R. SCHLECHTER 15593, HBG501522: ISOSYN

*Dendrobium epidendropsis* KRAENZL., Orchis 2: 79. 1908

(Philippines, A. LOHER) Hort. Bot. Erlangen, HBG500397: HOLO

*Dendrobium equitans* KRAENZL. in ENGLER, Pflanzenr. 50(1): 228. 1910

(Taiwan), Hort. H. GOLDSCHMIDT, Essen, HBG501523: HOLO  
ann. KRÄNZLIN: Typus

*Dendrobium finetianum* SCHLTR., Bot. Jahrb. Syst. 39: 73. 1906

New Caledonia, auf den Bergen bei Oubatche, 19 Dec 1902, R. SCHLECHTER 15505, HBG501526, HBG501527: ISO

*Dendrobium gemmiferum* KRAENZL. in ENGLER, Pflanzenr. 50(1): 237. 1910

[Indonesia, Sulawesi, Nord-Celebes, Tondano], O. WARBURG [15745], HBG500965: HOLO; HBG500966: ISO?

*Dendrobium glomeriflorum* KRAENZL., Gard. Chron. 2, ser. 3, 18: 206. 1895

[loc.?], 1895, Hort. F. SANDER, St. Albans, HBG501529: HOLO  
ann. KRÄNZLIN: spec. typ. aut.!  
ann. DAUNCEY: holotype

**Dendrobium goldschmidtianum** KRAENZL., Repert. Spec. Nov. Regni Veg. 7: 40. 1909  
 (Philippines, Formosa), Hort. H. GOLDSCHMIDT, Essen, HBG501530: HOLO  
 ann. KRÄNZLIN: Typus!

**Dendrobium hastilabium** KRAENZL. in ENGLER, Pflanzenr. 50(1): 52. 1910  
 [Papua New Guinea, Andai, O. BECCARI 617], HBG500962: HOLO?

**Dendrobium hellwigianum** KRAENZL. ex WARB., Bot. Jahrb. Syst. 16: 16. 1893  
 Papua New Guinea, K. Wilh. L., F.C. HELIWIG 323, HBG501532: HOLO

**Dendrobium hollrungii** KRAENZL. in SCHUMANN & HOLLRUNG, Fl. Kais. Wilh. Land: 32.  
 1889

(Papua New Guinea), M. HOLLRUNG 699, HBG500978: LECTO  
 = *Coelandria smilliae* (F. MUELL.) FITZG. (see CLEMENTS & JONES 2008)

**Dendrobium hymenophyllum** LINDL., Gen. Spec. Orchid. Pl.: 86. 1830 *nom. inval.*  
 Indonesia, Java, C.L. BLUME, HBG501533: TYPUS-fragment (=ISO)

**Note** This is an invalid, superfluous name based on the same type as *Pedilonum undulatum* BLUME (see there).

**Dendrobium hypopogon** KRAENZL. in ENGLER, Pflanzenr. 50(1): 232. 1910  
 Indonesia, Sumatra, O. BECCARI, HBG501534: HOLO  
 ann. KRÄNZLIN: Typus!

**Dendrobium imperatrix** KRAENZL., Gard. Chron. 2, ser. 3, 18: 34. 1895  
 (Papua New Guinea, W. MICHLITZ), Hort. F. SANDER, St. Albans, HBG501535: SYN  
 Papua New Guinea, K. Wilh. L., F.C. HELIWIG 199, HBG501536: SYN  
 Papua New Guinea, Hatzfeldthafen, 1886, M. HOLLRUNG 348, HBG501537, HBG501595,  
 HBG506879: SYN

**Note** HBG501535 has been annotated as holotype (CHRISTENSON 1994: 348).

**Dendrobium inamoenum** KRAENZL. in ENGLER, Pflanzenr. 50(1): 112. 1910 (Fig. 6)  
 Papua New Guinea, Musgrave Range, 1889, W. MACGREGOR 19, HBG501538: HOLO  
 Papua New Guinea, Mt. Musgrave, 25 June 1889, W. MACGREGOR, HBG501539: ISO?

**Note** Both sheets were marked by KRÄNZLIN as type. In his diagnosis KRÄNZLIN cited MACGREGOR no. 19 as type and, therefore, HBG501538 constitutes the holotype whereas HBG501539 is most certainly an isotype.

*Dendrobium isochiloides* KRAENZL., Oesterr. Bot. Z. 44: 334. 1894

Papua New Guinea, New Ireland, Port Praslin and Port Carteret, Jan 1894, W. MICHOLITZ, HBG500333: HOLO; HBG500332: ISO

*Dendrobium jennyanum* KRAENZL., Gard. Chron. 2, ser. 3, 20: 329. 1896

(Australasia?), Hort. ZOLLINGER-JENNY, Zürich, HBG501541: HOLO  
ann. KRÄNZLIN: specim. typ.

*Dendrobium johnsoniae* F. MUELL., S. Sci. Rec. 2: 95. 1882

Papua New Guinea, S.E. Nuew Guinea, 1878, J. CHALMERS, HBG501542: ISO

*Dendrobium kanakorum* KRAENZL. in ENGLER, Pflanzenr. 50(1): 107. 1910

New Caledonia, 1886, J. ROBERTS, HBG501543: HOLO  
ann. KRÄNZLIN: Typus!

*Dendrobium kandarianum* KRAENZL. in ENGLER, Pflanzenr. 50(1): 190. 1910

Indonesia, Sulawesi, O. BECCARI, HBG501544: HOLO  
ann. KRÄNZLIN: sub "Dendrob." *kandarinum* KRAENZL., Typus

*Dendrobium kennedyi* SCHLTR., Repert. Spec. Nov. Regni Veg. 17: 374. 1921

Papua New Guinea, Stirling Range, 1894, L.E. KENNEDY, HBG500042, HBG500043, HBG501597: ISO

*Dendrobium kraenzlinii* O.L. WILLIAMS, Bot. Mus. Lefl. 5(7): 122. 1938

Fiji, Levu, Th. KLEINSCHMIDT, HBG501545: HOLO

**Note** This is a substitute name for *Dendrobium vitiense* KRAENZL. (KRÄNZLIN 1923: 236) an illegitimate later homonym of *D. vitiense* ROLFE 1921.

*Dendrobium lacteum* KRAENZL., Oesterr. Bot. Z. 44: 334. 1894

Papua New Guinea, New Ireland, Port Carteret and Praslin, W. MICHOLITZ, HBG501546: HOLO; HBG501547: ISO

*Dendrobium lamelluliferum* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 52. 1927

Indonesia, West-Borneo, am Serawai unterhalb Lebang Hara, 24 Nov 1924, H. WINKLER 341, HBG500322: HOLO; HBG500558, HBG500559: ISO

*Dendrobium lawesii* F. MUELL., Australas. Chem. Druggist. 1884 (June)

New Guinea, 1880, J. CHALMERS (native searchers), HBG501548: TYPUS?  
ann. KRÄNZLIN: unic.

*Dendrobium lepidochilum* KRAENZL. in ENGLER, Pflanzenr. 50(1): 186. 1910

Samoa, Upolu, F. REINECKE 233, HBG501540: ISO  
ann. CLEMENTS: *Grastidium lepidochilum* (KRAENZL.) M. A. CLEM. & D. L. JONES

*Dendrobium lucae* F. MUELL. ex KRAENZL. in ENGLER, Pflanzenr. 50(1): 247. 1910, *pro*  
*syn.*

Fiji, Ovalau, very rare, only two specimens on trees, 1884, A. H. S. LUCAS, HBG501556:  
TYPUS?

= *Dendrobium gordoni* S. MOORE

*Dendrobium hyperanthiflorum* KRAENZL., Oesterr. Bot. Z. 44: 333. 1894

Papua New Guinea, New Britain, Port Weber, Dec 1893, W. MICHLITZ, HBG501557:  
HOLO  
ann. KRÄNZLIN: Typus!

*Dendrobium macgregorii* F. MUELL. & KRAENZL. ex KRAENZL., Oesterr. Bot. Z. 44: 301.  
1894 (as "M'Gregorii")

Papua New Guinea, Sudest-Island, Louisiades, 1889, W. MACGREGOR 14, HBG501558:  
HOLO  
ann. KRÄNZLIN: Typus!  
= *Dendrobium atroviolaceum* ROLFE (see CHRISTENSON 1994: 346)

*Dendrobium madonnae* ROLFE, Bot. Mag. 129: 7900. 1903

(New Guinea), Roy. Botan. Garden-Glarnevin, Dublin, Mar 1901, HBG506658:  
CLONO?  
ann. CHRISTENSON: probably the same plant (clone) described as *Dendrobium madonnae* ROLFE ex J. D. HOOK., Bot. Mag. T. 7900. 1903

*Dendrobium malacanthum* KRAENZL. in ENGLER, Pflanzenr. 50(1): 194. 1910

[Papua New Guinea, Bourawari], W. A. SAYER 1807, HBG500969: HOLO

*Dendrobium mastersianum* F. MUELL. & KRAENZL. in ENGLER, Pflanzenr. 50(1): 38. 1910

Papua New Guinea, Brit. New Guinea, W. V. FITZGERALD 41, HBG501559: SYN

Papua New Guinea, eastern New Guinea, Bartle Bay, 1894, Cop. KING, HBG501560:  
SYN

ann. KRÄNZLIN (both sheets): Typus!

*Dendrobium minahassae* KRAENZL. in ENGLER, Pflanzenr. 50(1): 107. 1910

Indonesia, Celebes, Minahassa, O. WARBURG, HBG501563: HOLO

ann. KRÄNZLIN: spec. typ. aut!

*Dendrobium monodon* KRAENZL. in ENGLER, Pflanzenr. 50(1): 254. 1910

Papua New Guinea, Finschhafen, Kako, Jul 1890, K. A. F. WEINLAND 314, HBG501565:  
HOLO

ann. KRÄNZLIN: spec. typ. aut!

*Dendrobium montis-sellae* KRAENZL. in ENGLER, Pflanzenr. 50(1): 105. 1910 (as “*montis  
Sellae*”)

Papua New Guinea, Sattelberg, K. LAUTERBACH 750, HBG501566: HOLO

ann. KRÄNZLIN: specim. aut.

*Dendrobium montis-yulei* KRAENZL. in ENGLER, Pflanzenr. 50(1): 150. 1910 (as “*Montis  
Yulei*”)

Papua New Guinea, near Mount Yule, W. MACGREGOR, HBG501567: HOLO

ann. KRÄNZLIN: Typus!

*Dendrobium navicula* KRAENZL. in ENGLER, Pflanzenr. 50(1): 129. 1910

Papua New Guinea, mountains near Mita, Milne Bay, Feb 1895, W. MICHOLITZ,  
HBG501570: SYN

ann. KRÄNZLIN: Typus!

*Dendrobium novae-hiberniae* KRAENZL., Oesterr. Bot. Z. 44: 301. 1894 (as “*Novae Hiber-  
niae*”)

Papua New Guinea, New Ireland (Neu Mecklenburg), Port Carteret & Praslin, Jan

1894, W. MICHOLITZ, HBG500402: LECTO; HBG500401, HBG500403: ISOLECTO

ann. DAUNCEY: “Lectotype” (HBG500402) “Isolectotype” (HBG500401, HBG500403)

*Dendrobium obrienianum* KRAENZL., Gard. Chron. 1, ser. 3, 11: 266. 1892 (as "O'Brienianum")

Philippines, Nov 1891, W. MICHLITZ, HBG501574: HOLO  
ann. KRÄNZLIN: specimen autoris!

*Dendrobium osmophytopsis* KRAENZL. in ENGLER, Pflanzenr. 50(1): 172. 1910

Malaysia, Borneo, O. BECCARI, HBG501575: HOLO  
ann. KRÄNZLIN: Typus!

*Dendrobium pachyceras* F. MUELL. & KRAENZL. ex KRAENZL., Oesterr. Bot. Z. 44: 164.  
1894

[Papua New Guinea, Dogura, 1893], COP. KING, HBG500974: HOLO; HBG500976:  
HOLO-fragment (=ISO)

*Dendrobium pentactis* KRAENZL. in ENGLER, Pflanzenr. 50(1): 200. 1910

Indonesia, Aru Islands, O. BECCARI, HBG501576: HOLO  
ann. KRÄNZLIN: Typus

*Dendrobium pentagonum* KRAENZL. in ENGLER, Pflanzenr. 50(1): 128. 1910

Papua New Guinea, Mt. Dayman, summit, 1894, W.E. ARMIT, HBG501577: HOLO  
ann. KRÄNZLIN: Typus!

*Dendrobium poissonianum* SCHLTR., Bot. Jahrb. Syst. 39: 71. 1906

New Caledonia, auf den Bergen bei Ou-Hinna, 31 Dec 1902, R. SCHLECHTER 15590,  
HBG501571: ISO

*Dendrobium praeustum* KRAENZL. in ENGLER, Pflanzenr. 50(1): 118. 1910

Indonesia, Amboina (Moluccas), O. BECCARI, HBG501579: HOLO  
ann. KRÄNZLIN: Typus

*Dendrobium prionochilum* F. MUELL. & KRAENZL. ex KRAENZL., Oesterr. Bot. Z. 44: 162.  
1894

Papua New Guinea, New Guinea (Dinner Island), 1889, H.O. FORBES, HBG501580:  
HOLO  
ann. KRÄNZLIN: specimen typicum autorum!

*Dendrobium pseudodichaea* KRAENZL. in ENGLER, Pflanzenr. 50(1): 171. 1910

Malaysia, Borneo, O. BECCARI, HBG501581: HOLO  
ann. KRÄNZLIN: Typus!

*Dendrobium psyche* KRAENZL. in ENGLER, Pflanzenr. 50(1): 246. 1910

Vanuatu, New Hebrides, 1883, G. BRAITHWAITE, HBG501582: HOLO  
ann. KRÄNZLIN: orig. sub *Dendrobium papilio* KRAENZL. Typus!

*Dendrobium puberulilingue* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 53. 1927

Indonesia, West-Borneo, auf dem Bukit Raja, 17 Dec 1924, H. WINKLER 900,  
HBG501583: HOLO

*Dendrobium rajanum* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 56. 1927

Indonesia, West-Borneo, auf dem Bukit Raja, 18 Dec 1924, H. WINKLER 940,  
HBG500284: HOLO; HBG500551: ISO  
= *Dendrobium kiauense* AMES & C. SCHWEINF. (see WOOD & CRIBB 1994)

*Dendrobium reflexibarbatulum* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 54. 1927

Indonesia, West-Borneo, bei Nanga Kroebab, 10 Nov 1924, H. WINKLER 89, HBG500286:  
HOLO; HBG500549, HBG500550: ISO

*Dendrobium reineckei* SCHLTR., Repert. Spec. Nov. Regni Veg. 9: 102. 1911

Samoa, Upolu, F. REINECKE 234, HBG501528: ISO

*Dendrobium rhodostictum* F. MUELL. & KRAENZL. ex KRAENZL., Oesterr. Bot. Z. 44: 300.  
1894

Papua New Guinea, Bounawarri (camp 9), 1887, W.A. SAYER, HBG501584: HOLO  
ann. KRÄNZLIN: specim. typ. auctorum

*Dendrobium robertsii* F. MUELL. ex RUPP, Queensland Naturalist 9: 52. 1934

(Australia) South Queensland, 1875, C.H. HARTMANN, HBG519110: ISO?  
ann. KRÄNZLIN: *Dendrobium mortii* F. MUELL.  
= *Dockrillia mortii* (F. MUELL.) RAUSCHERT (see CLEMENTS & JONES 2008)

*Dendrobium samoense* P.J. CRIBB, Bull. Misc. Inform. Kew 37: 584. 1983

Samoa, Safai, 31 Mar 1905, F. VAUPEL 282, HBG500664: ISO

*Dendrobium scabripes* KRAENZL. in ENGLER, Pflanzenr. 50(1): 137. 1910

Indonesia, Kay-Insel, O. BECCARI, HBG501587: HOLO  
ann. KRÄNZLIN: Typus!

*Dendrobium schmidtianum* KRAENZL., Bot. Tidskr. 24: 7. 1902

Thailand, Siam, 1900, JOH. SCHMIDT 550a, HBG501588: TYPUS?

ann. KRÄNZLIN: spec. typ.

ann. CHRISTENSON: not the type which is "s.n."

**Note** KRÄNZLIN (1902) did not cite collection numbers for any of the orchids collected by J. SCHMIDT and treated in that publication. The locality data on the label cannot be safely linked with the information provided in the printed diagnosis ("Lem Dan and Koh Kadat, epiphytic, near the sea"), but KRÄNZLIN's annotation suggests that he considered the specimen to be typical.

*Dendrobium schwartzkopfianum* KRAENZL., Notizbl. Bot. Gart. Berlin-Dahlem 2: 106.

1898

Papua New Guinea, Bismark-Archipel, Insel Ralum, F.O. DAHL, HBG501589: HOLO

ann. KRÄNZLIN: Typus!

*Dendrobium senile* PARISH & RCHB. F., Gard. Chron.: 434. 1865

Myanmar, Burmah, C.S.P. PARISH, HBG519469: TYPUS-fragment?

*Dendrobium singalanense* KRAENZL. in ENGLER, Pflanzenr. 50(1): 167. 1910

Indonesia, Sumatra, O. BECCARI, HBG501591: HOLO

ann. KRÄNZLIN: Typus!

*Dendrobium sphenocheilum* F. MUELL. & KRAENZL. ex KRAENZL., Oesterr. Bot. Z. 44: 254.

1894

Papua New Guinea, 1884, C.A.G. BRIDGE & J. CHALMERS, HBG500970: HOLO

*Dendrobium tokai* RCHB. F., Hamburger Garten- Blumenzeitung 21: 293. 1865 (Fig. 7)

Fiji, Levu, E. GRAEFFE 1244, HBG500659: SYN

**Note** Collections by SEEMANN and GRAEFFE (the latter from Fiji but without collection number) are cited following the diagnosis. Unlike sometimes seen, the reference to plate 92 does not refer to the place of the original publication, but to SEEMANN's "Flora Vitiensis" (1865–1873). From the explanation of plate 92 on page 304 it remains unclear if SEEMANN's or GRAEFFE's specimen has been used for illustration.

*Dendrobium torquisepalum* KRAENZL. in ENGLER, Pflanzenr. 50(1): 187. 1910

Malaysia, Borneo, O. BECCARI, HBG501592: HOLO

ann. KRÄNZLIN: Typus



**Fig. 7** Illustration of *Dendrobium tokai* RCHB. f. (from SEEMANN 1865–1873: pl. 92), a showy orchid described from Fiji Islands. Part of the original material is extant at HBG and was collected by E. GRAEFFE for J.C. GODEFFROY VI., a wealthy Hamburg trader and ship owner who ran a private natural history museum in Hamburg during the 1860ies and 1870ies.

*Dendrobium tricolor* KRAENZL. in ENGLER, Pflanzenr. 50(1): 187. 1910 *nom. illeg.* non (RUIZ & PAV.) PERS. 1807

see *Dendrobium correlianum* HAWKES & HELLER

*Dendrobium trigonellodorum* KRAENZL. in ENGLER, Pflanzenr. 50(1): 186. 1910

[Papua New Guinea, Kaiser Wilhelmsland, W. MICHOLITZ], 1904, HBG500960: HOLO?; HBG500961: ISO?

*Dendrobium trisaccatum* KRAENZL. in ENGLER, Pflanzenr. 50(1): 107. 1910

New Guinea, O. BECCARI, HBG501593: HOLO

ann. KRÄNZLIN: Typus

*Dendrobium triviale* KRAENZL., Bot. Jahrb. Syst. 25: 604. 1898

Samoa, 1896, F. REINECKE, HBG501594: HOLO-fragment (=ISO)

ann. KRÄNZLIN: Typus

ann. DAUNCEY: = *Dendrobium calcaratum* A. RICH. ssp. *calcaratum*

**Note** KRÄNZLIN (1898: 605) cited the original collection of REINECKE as “Savaii: auf *Inocarpus*, Sept. 1894 (n. 422)”.

*Dendrobium violaceum* KRAENZL. in ENGLER, Pflanzenr. 50(1): 108. 1910

Papua New Guinea, mountains near Mita, Milne Bay, 13 Feb 1895, W. MICHOLITZ, HBG500320: HOLO

*Dendrobium vitellinum* KRAENZL. in ENGLER, Pflanzenr. 50(1): 124. 1910 (Fig. 6)

Vanuatu, New Hebrides, Sep 1894, M. McDONALD 3, HBG501564: HOLO

ann. KRÄNZLIN: specim. typic. auctoris. (sub *Dendrobium (Pedilonum) vitellinum* F. v. M. & Krzl.)

ann. CRIBB: = *Dendrobium mohlianum* RCHB. f.

*Dendrobium vitiense* KRAENZL., Mitt. Inst. Allg. Bot. Hamburg 5: 236. 1923 *nom. illeg.* non ROLFE 1921

see *Dendrobium kraenzlinii* O.L. WILLIAMS

*Dendrobium warburgianum* KRAENZL., Bot. Jahrb. Syst. 13: 281. 1891

Papua New Guinea, Finschhafen, Bergwälder, O. WARBURG, HBG501596: HOLO  
ann. KRÄNZLIN: Typus!

*Dendrobium whitmeei* KRAENZL. in ENGLER, Pflanzenr. 50(1): 189. 1910

Samoa, Upolu, Apia, 28 Aug 1880, E. BETCHE, HBG501520: SYN

Samoa, 1875, S.J. WHITMEE 46, HBG501521: SYN

ann. KRÄNZLIN: Typus!

ann. CRIBB: = *Dendrobium dactyloides* RCHB. F.

*Dendrochilum cruciforme* J.J. WOOD, Checklist Orchids Borneo: 169. 1994

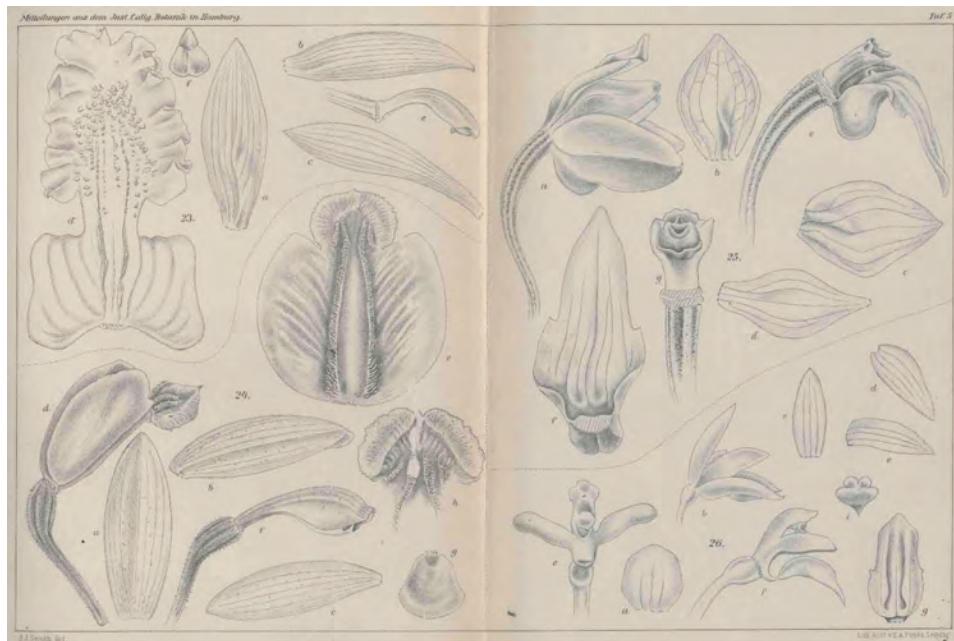
Malaysia, Borneo, Mount Kinabalu, Penibukan, Jan 1932, J. & M.S. CLEMENS, HBG501599: ISO

*Dendrochilum johannis-winkleri* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 36. 1927 (as "Johannis Winkleri") (Fig. 8)

Indonesia, West-Borneo, auf dem Bukit Tilung, 8 Feb 1925, H. WINKLER 1495, HBG501600: HOLO

*Dendrochilum leuserense* J.J. WOOD & J.B. COMBER, Lindleyana 10(2): 62. 1995

Indonesia, North Sumatra, Atjeh, Gunung Leuser Nature Reserve, 4 Apr 1975, W.J.J.O. DE WILDE & B.E.E. DE WILDE-DUYFJES 16072, HBG501601: ISO



**Fig. 8** The prolific Dutch orchideologist J.J. SMITH worked on orchid material brought to Hamburg from central Borneo by H.K.A. WINKLER, former director of the Institut für Allgemeine Botanik Hamburg. SMITH (1927) described no less than 53 taxa new to science based on WINKLER's collection. The figure shows plate 5, fig. 26a-i from SMITH (1927) with illustrations of floral details of *Dendrochilum johannis-winkleri* J.J. Sm. based on H. WINKLER no. 1495 preserved at HBG.

*Dendrochilum lucbanense* AMES, Leafl. Philipp. Bot. 5: 1559. 1912

Philippines, Lucban, Province of Zayabas, Luzon, May 1907, A.D.E. ELMER 7571,  
HBG501602: ISO  
ann. PEDERSEN: = *Dendrochilum longibulbum* AMES

*Dendrolirium erectum* BLUME, Bijdr. Fl. Ned. Ind. 7: 348. 1825

Indonesia, Java, Salak, C.L. BLUME, HBG506667: TYPUS-fragment (=ISO)  
ann. KRÄNZLIN: Blume; accomp. drawing by KRÄNZLIN with pencil note "Nach Bl's Orig.  
Ex. In Leyden"  
≡ *Eria erecta* (BLUME) LINDL.

*Dendrolirium hyacinthoides* BLUME, Bijdr. Fl. Ned. Ind. 7: 346. 1825

Indonesia, Java, C.L. BLUME, HBG501657: TYPUS-fragment (=ISO)  
ann. KRÄNZLIN: vom Orig. Ex. Blumes  
≡ *Eria hyacinthoides* (BLUME) LINDL.

*Dendrolirium multiflorum* BLUME, Bijdr. Fl. Ned. Ind. 7: 349. 1825

[Indonesia, Java, Salak], C.L. BLUME, HBG506664: TYPUS-fragment (=ISO)  
≡ *Eria multiflora* (BLUME) LINDL.

*Dendrolirium retusum* BLUME, Bijdr. Fl. Ned. Ind. 7: 351. 1825

[Indonesia, Java], C.L. BLUME, HBG506662: TYPUS-fragment? (=ISO?)  
≡ *Eria retusa* (BLUME) RCHB. F.

*Dendrolirium robustum* BLUME, Bijdr. Fl. Ned. Ind. 7: 347. 1825

[Indonesia, Java], C.L. BLUME, HBG506662: TYPE-fragment (=ISO)  
≡ *Eria robusta* (BLUME) LINDL.

*Desmotrichum cymbidioides* BLUME, Bijdr. Fl. Ned. Ind.: 332. 1825

[Malaysia, Salak, C.L. BLUME], HBG501990: TYPUS-fragment (=ISO)  
ann. KRÄNZLIN: Typus!, vom Original-Ex. in Leyden, *Sarcopodium cymbidioides*  
(BLUME) KRAENZL.  
ann. CHRISTENSON: ≡ *Epigeneium cymbidioides* (BLUME) SUMMERH.

*Desmotrichum forcipatum* KRAENZL. in ENGLER, Pflanzenr. 50(1): 357. 1910

Indonesia, Sumatra, O. BECCARI, HBG501724: HOLO  
ann. KRÄNZLIN: Typus!  
ann. CHRISTENSON: = *Flickingeria*

*Dichaea anguina* SCHLTR., Repert. Spec. Nov. Regni Veg. 27: 82. 1929.

Bolivia, Hacienda Simaco sobre el camino a Tipuani, Feb 1920, O. BUCHTIEN 5027, HBG501607: ISO

*Dichaea stenophylla* SCHLTR., Repert. Spec. Nov. Regni Veg. 27: 84. 1929

Bolivia, Hacienda Simaco sobre el camino a Tipuani, Feb 1920, O. BUCHTIEN 5056, HBG501608: ISOSYN

*Didymoplexis forcipata* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 18. 1927

Indonesia, West-Borneo, am Sungei Raun, 10 Feb 1925, H. WINKLER 1545, HBG500852: HOLO

≡ *Didymoplexiella forcipata* (J.J. SM.) GARAY (see WOOD & CRIBB 1994)

*Dinklageella liberica* MANSF., Repert. Spec. Nov. Regni Veg. 36: 64. 1934

Liberia, Sinoe, M. DINKLAGE 2321, HBG501610: ISO

*Disa aconitoides* SOND., Linnaea 19: 91. 1847

South Africa, Uitenhaag, Urwälder von Olifantshock, zwischen den Mündungen der Flüsse Boshmansrivier und Zondagsrivier, C.F. ECKLON & C.L.P. ZEYHER, HBG502643: ISO

*Disa bisetosa* KRAENZL., Bot. Jahrb. Syst. 51: 379. 1914

(Zambia), N.W. Rhodesia, Malangushi R., under trees, Dec 1907, TH. KASSNER 2067, HBG502114: ISO

*Disa brachyceras* LINDL., Gen. Sp. Orchid. Pl.: 355. 1838

South Africa, Worcester Div., between Slangenheuvel, French Hoek and Donker Hoek, F.J. DRÈGE 1246, HBG502640: ISO

*Disa calophylla* KRAENZL., Bot. Jahrb. Syst. 33: 58. 1902

Tanzania, O. Afrika, bei Ssongea, W. BUSSE 834, HBG501612: HOLO  
ann. KRÄNZLIN: Typus

*Disa caulescens* LINDL., Gen. Sp. Orchid. Pl.: 351. 1838

South Africa, Dutoitskloof, J.F. DRÈGE 1248, HBG502638: ISO

*Disa coccinea* KRAENZL., Bot. Jahrb. Syst. 33: 59. 1902

Tanzania, Ost-Afrika, Matogoro-Berge b. Ssongea, W. BUSSE 819, HBG501613: HOLO  
ann. KRÄNZLIN: Typus!

*Disa englerana* KRAENZL., Bot. Jahrb. Syst. 33: 58. 1902

Tanzania, O. Afrika, Isoko b. Bundali, A. STOLZ 1, HBG501614: HOLO  
ann. KRÄNZLIN: Typus!

*Disa ignea* KRAENZL., Bot. Jahrb. Syst. 33: 57. 1902

Tanzania, O.-Afrika, A. STOLZ 12, HBG502794: HOLO  
ann. KRÄNZLIN: Typus

*Disa jacottetiae* KRAENZL., Vierteljahresschr. Naturf. Ges. Zürich 60: 391. 1915

South Africa, Basutoland, Feb 1912, H. JACOTTET 68, HBG501616: ISO

*Disa leptostachys* SOND., Linnaea 19: 98. 1847

South Africa, Stellenbosch, Berge bei Grietjesgat, zwischen Lowryspas und Palmierri-  
vier, C. F. ECKLON & C. L. P. ZEYHER, HBG502608: ISO  
= *Disa tenuis* LINDL.

*Disa longifolia* LINDL., Gen. Sp. Orchid. Pl.: 349. 1838

South Africa, Coast Region, Piquetberg Div., Piquet Berg, J.F. DRÈGE 564, HBG502633:  
ISO

*Disa marlothii* BOLUS, Trans. S. African Philos. Soc. 16: 148. 1905

South Africa, Koude Bokkeveld, Klyn Vley, 30 Jan 1897, R. SCHLECHTER 10204,  
HBG501617: ISOLECTO (see LINDER 1981a)

*Disa ornithantha* SCHLTR., Bot. Jahrb. Syst. 53: 538. 1915

Tanzania, Nyassa-Hochland, Station Kyimbila, 18 Jan 1906, A. STOLZ 135, HBG506699:  
ISO

*Disa poikilantha* KRAENZL., Vierteljahresschr. Naturf. Ges. Zürich 60: 393. 1915

South Africa, Belfort, Dec 1911, H. JACOTTET 79, HBG501618: ISO

*Disa praestans* KRAENZL., Bot. Jahrb. Syst. 33: 59. 1902

Tanzania, O.-Afrika, Ungoni, W. BUSSE 1381, HBG501619: HOLO  
ann. KRÄNZLIN: Typus!

*Disa pulchra* SOND., Linnaea 19: 94. 1847

South Africa, Kafferland, Winterberg, C.F. ECKLON & C.L.P. ZEYHER, HBG502629, HBG502630: ISO

*Disa roeperocharoides* KRAENZL., Bot. Jahrb. Syst. 51: 379. 1914

Congo (Democr. Rep.), Kantu, in bush between trees, 26 Jan 1908, TH. KASSNER 2379[2378], HBG502097: ISO

**Note** Due to an error in the numbering of the KASSNER collection in HBG the collection no. should read 2378 and not 2379 as printed on the label.

*Disa stricta* SOND., Linnaea 19: 91. 1847

South Africa, Kafferland, Winterberg, C.F. ECKLON & C.L.P. ZEYHER, HBG502624, HBG502625: ISO

*Disa triloba* LINDL., Gen. Sp. Orchid. Pl.: 351. 1838

South Africa, Worcester Div., on mountains near De Liefde, J.F. DRÈGE 1236, HBG502623: ISO

*Disa wissmannii* KRAENZL. in ENGLER, Pflanzenw. Ost-Afrikas C: 154. 1895

Tanzania, am Kifiniba-Vulkan, G. VOLKENS 1893, HBG501620: HOLO (see note below)

**Note on authorship** Authorship of *Disa wissmannii* is sometimes given as "KRAENZL. ex GILG" which appears to be incorrect since GILG (in ENGLER 1895: 151) clearly attributed the orchid treatment to KRÄNZLIN ("nach den Bestimmungen von F. Kränzlin"). Furthermore, KRÄNZLIN is explicitly indicated as the author of the new names established in that publication.

**Note on typification** Originally three specimens of VOLKENS (nos. 1171, 1893 and 1948) have been cited by KRÄNZLIN (in ENGLER 1895: 151; publ. 19 Jul) and apparently these should be considered the original material or syntypes. Half a year later, this first diagnosis reappeared in unchanged form in KRÄNZLIN (1895: 21, publ. 19 Nov), and this time VOLKENS no. 1893 is the only material cited (a holotype, but technically rather a lectotype). This may explain why the several sheets of VOLKENS no. 1893 are widely cited as isotypes. Interestingly, CHRISTENSON annotated the HBG sheet as holotype giving reference to the later published (repeated) diagnosis. This sheet is also listed as holotype in CHRISTENSON (1994: 349). However, the HBG sheet does not belong to the private herbarium of KRÄNZLIN at HBG (which in fact contains many holotypes), but is very likely a duplicate from the collection of VOLKENS distributed from the Berlin Botanical Museum to several herbaria including HBG which holds a large set of VOLKENS' Kilimanjaro

plants. It is assumed here that KRÄNZLIN based his diagnosis on the Berlin set of VOLKENS' "Flora des Kilimandscharo" which seems to have been lost during World War II.

*Disa zeyheri* SOND., Linnaea 19: 95. 1847

South Africa, Ylandrivier, C.F. ECKLON & C.L.P. ZEYHER, HBG502631: ISO  
= *Disa porrecta* Sw.

*Disperis crassicaulis* RCHB. F., Linnaea 22: 860. 1849

Ethiopia, in media regione montana inter Enschedcap et Schoata, 6 Aug 1838, G.H.W. SCHIMPER, It. Abyss. II, 570, HBG516890: ISO

*Disperis leuconeura* SCHLTR., Bot. Jahrb. Syst. 53: 549. 1915

Tanzania, Nyassa Hochland, Station Kyimbila, 1913, A. STOLZ 1902, HBG501621: ISO

*Disperis mildbraedii* SCHLTR. ex SUMMERH., Bull. Misc. Inform. Kew 47: 253. 1933

Equatorial Guinea, Fernando Poo, Nordseite d. Pics v. Sta. Isabel oberhalb Basilé, Aug 1911, J. MILDBRAED 6312, HBG500360: ISO

*Disperis stolzii* SCHLTR., Bot. Jahrb. Syst. 53: 548. 1915

Tanzania, Nyassa Hochland, Station Kyimbila, 1911, A. STOLZ 672, HBG501622: ISO

*Drymoda siamensis* SCHLTR., Repert. Spec. Nov. Regni Veg. 2: 170. 1906

Thailand, Siam, Doi Sutep, C.C. HOSSEUS [473], HBG501624: ISO

*Epidendrum alopecurum* SCHLTR., Repert. Spec. Nov. Regni Veg. 27: 58. 1929

Bolivia, Hacienda Simaco sobre el camino a Tipuani, Feb 1920, O. BUCHTIEN 5006, HBG501626: ISOSYN

*Epidendrum ardens* KRAENZL., Bot. Jahrb. Syst. 37: 526. 1906

Peru, Weg von Cuzco nach Sta Anna, A. WEBERBAUER 4978, HBG501627: HOLO

*Epidendrum blandum* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 58. 1911

Brazil, Matto Grosso, Sta Anna de Chapada pr. Boca da Serra, 15 Aug 1902, G.O.A. MALME 2266, HBG501628: ISO

*Epidendrum bradeanum* KRAENZL., Ark. Bot. 14(10): 3. 1915

Brazil, S. Paulo, Guaranjá, A.C. BRADE 6272, HBG501629: ISO

*Epidendrum brassavoliforme* F. LEHM. & KRAENZL., Bot. Jahrb. Syst. 26: 461. 1899 (as "brassavolaeforme")

Colombia, F.C. LEHMANN 6846, HBG501630: HOLO

*Epidendrum brevicolle* KRAENZL., Ark. Bot. 16(8): 20. 1920(1921)

Brazil, Paraná, Jaguariahyva, in silva primaeva, 17 Apr 1917, P. DUSÉN 11712, HBG501631: ISO

ann. KRÄNZLIN: Typus!

*Epidendrum eggersii* COGN. in URBAN, Symb. Antill. 6: 496. 1916

Dominican Rep., Sto. Domingo, savana de Buena Moca, in *Coccoloba macrophylla*, 20 Jun 1887, H.F.A. v. EGgers 2553, HBG506675: ISO

*Epidendrum gastrochilum* KRAENZL., Bot. Jahrb. Syst. 37: 384. 1906

Peru, Huambos, A. WEBERBAUER 4172, HBG501633: HOLO

*Epidendrum guentherianum* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 20. 1928

Bolivia, Región de Mapiri, San Carlos, bei Sanampiuni, 12 Mar 1927, O. BUCHTIEN 490, HBG501635: HOLO

ann. KRÄNZLIN: Typus!

ann. CHRISTENSON: = *Epidendrum compressum* GRISEB.

*Epidendrum hagsateri* CHRISTENSON, Brittonia 47: 32. 1995

Mexico, Oaxaca, Sierra de San Felipe, hanging from oaks, 14 Jun 1894, C.G. PRINGLE 4728, HBG506797: ISO

*Epidendrum heteroglossum* KRAENZL., Ark. Bot. 16(8): 19. 1920(1921)

(Mexico), Hort., Wiesbaden, HBG501636: HOLO

ann. KRÄNZLIN: Typus!

*Epidendrum huacapistanae* KRAENZL., Repert. Spec. Nov. Regni Veg. 1: 183. 1905

Peru, Prov. Tarma. ops Junin, zwischen Palca & Huacapistana, A. WEBERBAUER 1778, HBG501637: HOLO

ann. KRÄNZLIN: Typus!

*Epidendrum inamoenum* KRAENZL., Bot. Jahrb. Syst. 37: 525. 1906

Peru, Berge östlich von Tarma, A. WEBERBAUER 2456, HBG501638: HOLO

*Epidendrum juruaense* COGN. in MARTIUS, Fl. Bras. 3(6): 570. 1906

Brazil, Rio Juruá sup., v. Estrema Juruá Miry, Sept 1901, E. ULE 5789, HBG506676: ISO  
ann. CHRISTENSON: = *Epidendrum anceps* JACQ.

*Epidendrum linearifolioides* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl.  
46(10): 55. 1911

Paraguay, Paraguaré, ad arbores, 18 Feb 1894, C. A. M. LINDMAN A.3815, HBG501639:  
ISO

*Epidendrum mapiriense* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 21. 1928

Bolivia, Región de Mapiri, San Carlos, 25 Jan 1927, O. BUCHTIEN 496, HBG500159:  
HOLO; HBG500157, HBG500158, HBG500163: ISO

**Note** The label and a small packet of HBG500163 give “*Epidendrum guentherianum* Krzl. n. spec.” as determination. However, BUCHTIEN no. 496 refers to *Epidendrum mapiriense* KRAENZL.

*Epidendrum mixtum* SCHLTR., Repert. Spec. Nov. Regni Veg. 10: 294. 1912

Guatemala, Dep. Alta Verapáz, Cobán, epiph. im Hochwald, Jan 1913, H. v. TÜRCKHEIM [4170], HBG501640: TOPO

**Note** Type is TÜRCKHEIM II. no. 1868.

*Epidendrum monzonense* KRAENZL., Repert. Spec. Nov. Regni Veg. 1: 88. 1905

Peru, Berge westlich von Monzon, A. WEBERBAUER 3351, HBG501641: HOLO  
ann. KRÄNZLIN: Typus!

*Epidendrum nocturnum* JACQ. var. *minus* COGN., Bull. Soc. Roy. Bot. Belgique 43: 323.  
1906

Peru, Dept. Loreto, Cerro de Escaler, Mar 1903, E. ULE 6698, HBG501642: ISO

*Epidendrum oligophyllum* F. LEHM. & KRAENZL., Bot. Jahrb. Syst. 26: 477. 1899

Colombia, Staat Cauca, la Caja, F.C. LEHMANN 6850, HBG501643: HOLO  
ann. KRÄNZLIN: Typus!

*Epidendrum physopus* KRAENZL., Repert. Spec. Nov. Regni Veg. 1: 87. 1905

Peru, Yanangu, A. WEBERBAUER 2121, HBG501644: HOLO  
ann. KRÄNZLIN: Typus!

*Epidendrum pseudavicula* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 57. 1911

Brazil, Paraná, Serrinha, P. DUSÉN 7190, HBG501645: ISO  
ann. KRÄNZLIN: Typus!

*Epidendrum robustum* COGN. in MARTIUS, Fl. Bras. 3(6): 571. 1906

Brazil, an Felsen des Pedro so Conico bei Nova-Friburgo, Jan 1898, E. ULE 4644, HBG501647: ISO

*Epidendrum saccharatum* KRAENZL., Orchis 2: 113. 1908

(Peru), Hort. O. BEYRODT, Berlin-Marienfelde, HBG501625: HOLO  
ann. KRÄNZLIN: Typus!  
ann. CHRISTENSON: = *Encyclia vespa* (VELL.) DRESSL.

*Epidendrum schenckianum* KRAENZL., Repert. Spec. Nov. Regni Veg. 7: 114. 1909

(Mexico, Zazuapan, A. PURPUS), Hort. Bot. Darmstadt, HBG501646: HOLO  
ann. KRÄNZLIN: Typus!

*Epidendrum trichorhizum* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 21. 1928

Bolivia, región de Mapiri, San Carlos, auf humusreichem Boden, 30 Dec 1926, O. BUCH-TIEN 510, HBG500654: HOLO; HBG500651, HBG500652, HBG500653: ISO  
ann. CHRISTENSON: ≡ *Xerorchis trichirhiza* (KRAENZL.) GARAY

*Epipactis wilsonii* SCHLTR., Repert. Spec. Nov. Regni Veg. 20: 382. 1924

China, W. China, Nanto, E. H. WILSON 1159, HBG501648, HBG501649, HBG501650: ISO

*Epipogon kassnerianum* KRAENZL., Bot. Jahrb. Syst. 51: 371. 1914

Congo (Democr. Rep.), Kitimbo, river, 18 Jan 1908, TH. KASSNER 2356, HBG502099: ISO

*Epistephium herzogianum* KRAENZL., Repert. Spec. Nov. Regni Veg. 6: 21. 1908

Bolivia, an Felsen der Quebrada Cunucú, 1907, TH. HERZOG 85, HBG501651: HOLO  
ann. KRÄNZLIN: die Blüte stammt vom specim. typ. aut.



**Fig. 9** Illustration of *Epistephium regis-alberti* KRAENZL. (from KRÄNZLIN 1890–1900: 158, pl. 291), a showy orchid from New Caledonia. Type material is extant at HBG.

*Epistephium regis-alberti* KRAENZL., Xenia orchid. 3(10): 158, pl. 291. 1900 (as "Regis Alberti") (Fig. 9)

New Caledonia, 1887, E. HODGSON, HBG501688: TYPUS  
ann. SZLACHETKO: = *Eriaxis rigida* RCHB. F.

**Note** KRÄNZLIN originally labelled the sheet as “*Epistephium fredirici-augusti* KRAENZL. Typus!”. Apparently, KRÄNZLIN changed this provisional name to *E. regis-alberti* because of the earlier described *E. fredirici-augusti* RCHB. f. 1854, an orchid which originates from northern South America (“Neu-Granada”).

***Eria baeuerleniana* KRAENZL.** in ENGLER, Pflanzenr. 50(2): 74. 1911

Papua New Guinea, Strickland River, 1885, W. BÄURLEN 16, HBG501652: HOLO  
ann. KRÄNZLIN: Typus!

***Eria choniana* KRAENZL.**, Bot. Jahrb. Syst. 8: 203. 1887

(Asia, coll.?), Hort. CHONÉ, Berlin, HBG501654: HOLO

***Eria coffeicolor* KRAENZL.** in ENGLER, Pflanzenr. 50(2): 34. 1911

Indonesia, Java, Malawar, O. BECCARI, HBG501655: TYPUS?  
ann. KRÄNZLIN: Typus  
ann. CHRISTENSON: “? type of *Eria coffeicolor* Kraenzl., Pflanzenr. 50(2): 34. 1911 – type cited as Jagor 517 not Beccari s.n.”

***Eria isochila* KRAENZL.** in ENGLER, Pflanzenr. 50(2): 116. 1911

Indonesia, Java, H.O. FORBES 778, HBG501659: HOLO  
ann. KRÄNZLIN: Typus

***Eria javensis* ZOLL. & MORITZI**, Syst. Verz. Zoll.: 86. 1846

Indonesia, Java, H. ZOLLINGER 206, HBG506666: TYPUS?

***Eria karikouyensis* SCHLTR.**, Bot. Jahrb. Syst. 39: 76. 1907

New Caledonia, auf den Bergen b. Paita, 7 Oct 1902, R. SCHLECHTER 14963, HBG501660: ISOSYN (?)

**Note** CHRISTENSON (1994: 353) lists the present material as isotype, but the diagnosis is based on Schlechter nos. 14963 and 15238. The name is given by KRÄNZLIN (1911a: 22) as “*Eria karikonyensis*”; elsewhere also cited as “*Eria karicouyensis*”. However, the original spelling is retained here.

***Eria lacinulata* J.J. SM.**, Mitt. Inst. Allg. Bot. Hamburg 7: 49–50. 1927

Indonesia, West-Borneo, auf dem Bukit Raja, 20 Dec 1924, H. WINKLER 996, HBG500644: HOLO; HBG500534, HBG500535, HBG500645: ISO  
≡ *Trichotosia lacinulata* (J.J. SM.) CARR (see WOOD & CRIBB 1994)

*Eria lactea* KRAENZL. in ENGLER, Pflanzenr. 50(2): 91. 1911

Papua New Guinea, near Suam, Nov 1894, W. MICHOLITZ, HBG501661: HOLO

*Eria laucheana* KRAENZL., Gard. Chron. 1, ser. 3, 11: 809. 1892

(from Asia?), Hort. LIECHTENSTEIN, Eisgrub (Lednice), HBG501679: HOLO  
ann. KRÄNZLIN: spec. typicum

*Eria loheriana* KRAENZL., Repert. Spec. Nov. Regni Veg. 17: 387. 1921

(Philippines, A. LOHER), Hort. München-Nymphenburg, fl. Jun 1916, HBG501663:  
TYPUS?  
ann. KRÄNZLIN: Typus!

*Eria malleifera* KRAENZL., Bot. Jahrb. Syst. 44, Beibl. 101: 28. 1910

Indonesia, Sumatra, Palembang, O. BECCARI, HBG501664: HOLO  
ann. KRÄNZLIN: Typus

*Eria merrillii* AMES, Philipp. J. Sci. 2: 2: 331. 1907

Philippines, Mindoro, Alang River, E.D. MERRILL 5519, HBG501668: TYPUS-fragment  
(=ISO)

*Eria micholitziana* KRAENZL., Notizbl. Bot. Gart. Berlin-Dahlem 3: 21. 1900

(Papua New Guinea?, W. MICHOLITZ?), Hort. Bot. Berlin, fl. Nov 1899, HBG501671:  
HOLO?

ann. KRÄNZLIN: spec. typ. aut.!

Papua New Guinea, Normanby Island, D'Entrecasteaux Group, Mar 1895, W. MICHOLITZ, HBG501481: TYPUS?

**Note** KRÄNZLIN (1900: 22) provided the following type information in his diagnosis: "Floruit Novembri in Horto Regio Berolinensi" and "Neu-Guinea (Micholitz 1895!)". Later, KRÄNZLIN (1911a: 116) cited material cultivated in Hort. SANDER, St. Albans, Hertfordshire as well as material collected by MICHOLITZ in Papua New Guinea and sent to England in 1895. Sheet HBG501671 contains material cultivated in the Botanical Garden Berlin marked by KRÄNZLIN as "spec. typ. aut!". This is most likely the holotype (CHRISTENSON 1994: 349 "as holotype?"). However, sheet HBG501481 – not listed by CHRISTENSON (1994) – most likely belongs to the *in situ* material collected by MICHOLITZ in 1895 and sent to Europe for cultivation.

*Eria micholitzii* KRAENZL., Oesterr. Bot. Z. 44: 459. 1894

Papua New Guinea, Friedrich Wilhelms Hafen, Sept 1893, W. MICHOLITZ, HBG501670: HOLO; HBG501669: ISO  
ann. KRÄNZLIN: *Eria papuana* KRAENZL. Typus!

**Note** KRÄNZLIN (1911a: 25) established *Eria papuana* KRAENZL. as a new name for his earlier described *E. micholitzii* KRAENZL. (KRÄNZLIN 1894). However, he cited the latter name in a corrected spelling (or by mistake?) as “*E. Micholitziana* Kränzl.” giving full reference to his 1894 paper. Obviously, KRÄNZLIN intended to avoid confusion with *E. micholitziana* KRAENZL. 1900 which he had published in the meantime (KRÄNZLIN 1900: 21). Thereby, KRÄNZLIN not only created a later homonym of *E. papuana* J.J. SM. (SMITH 1908: 23), but simultaneously violated the principle of priority since he coined the substitute name for *E. micholitzii* KRAENZL., a valid and legitimate name described in 1894. It seems, that he should have chosen the substitute name for the other species, *E. micholitziana* KRAENZL., likewise a valid name, but published later in 1900 and potentially homonymic because of the similar spelling of the epithet. It is not fully clear if KRÄNZLIN (1911a: 25) really intended to adopt the corrected spelling “*Micholitziana*” for the plant he had originally described as “*Micholitzii*”. However, based on the provisions of ICBN art. 53.3, Ex. 10 the two epithets “*micholitziana*” and “*micholitzii*” are acceptable. They are unlikely to be confused when used in the same genus for two different species because of the different genitive endings. Therefore, *E. papuana* KRAENZL. 1911 also appears to be a superfluous later synonym based on the same type as *E. micholitzii* KRAENZL. 1894.

*Eria mooreana* F. MUELL. ex KRAENZL. in ENGLER, Pflanzenr. 50(2): 79. 1911

(Papua New Guinea, near E. Kingu), Hort. Bot. Sydney, fl. Sep 1886, HBG506665: TYPUS?

ann. v. MUELLER: *Eria moorei* F. v. M.

*Eria papuana* KRAENZL. in ENGLER, Pflanzenr. 50(2): 25. 1911 *nom. illeg.* non J.J. SM. 1908

see *Eria micholitzii* KRAENZL.

*Eria paradoxa* KRAENZL., Bot. Jahrb. Syst. 25: 606. 1898

Samoa, Upolu, F. REINECKE 300, HBG501799: HOLO  
ann. CRIBB: *Mediocalar paradoxum* (KRAENZL.) SCHLTR.

*Eria porphyroglossa* KRAENZL. in ENGLER, Pflanzenr. 50(2): 90. 1911

(Indonesia, Sumatra), Hort. FUERSTENBERG-HUGENPOET, Mintard, HBG501675: HOLO  
ann. KRÄNZLIN: Typus!

*Eria pseudocymbiformis* J.J. Wood var. *hirsuta* J.J. Wood, Lindleyana 5: 97. 1990

Malaysia, Columbon river, 11 Jul 1933, J. & M.S. CLEMENS 33938, HBG506786: ISO

*Eria retusa* RCHB. f., Bonplandia 5: 54. 1857

(Indonesia?), C. L. BLUME, cult. Buitenzorg, HBG501678: TYPUS-fragment (=ISO)  
ann. KRÄNZLIN: Orig. Ex. Blumes

*Eria rhombilabris* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 50. 1927

Indonesia, West-Borneo, auf dem Bukit Mulu, 2 Feb 1924, H. WINKLER 524,  
HBG501680: HOLO; HBG500530, HBG500531: ISO  
= *Trichotosia aurea* (RIDL.) CARR (see Wood & CRIBB 1994)

*Eria rigida* BLUME, Bot. Mus. 2: 183. 1856

Indonesia, Borneo, P.W. KORTHALS, S. MÜLLER (in herb. BLUME), HBG502077: TYPUS-  
fragment (=ISO)  
ann. KRÄNZLIN: *Trichotosia rigida* KRAENZL., vom Orig. Ex. Blumes

*Eria sarrasinorum* KRAENZL., Bot. Jahrb. Syst. 44, Beibl. 101: 29. 1910

Malaysia, Borneo, Sarawak, O. BECCARI 2448, HBG501681: SYN  
Indonesia, Celebes, Tomohon, K.F. & P.B. SARASIN, HBG501682: SYN  
ann. KRÄNZLIN: Typus!

*Eria straminea* KRAENZL., Bot. Jahrb. Syst. 44, Beibl. 101: 27. 1910

Indonesia, Celebes, Mararang, K.F. & P.B. Sarasin 226, HBG501683: HOLO  
ann. KRÄNZLIN: Typus

*Eria umbonata* F. MUELL. & KRAENZL. ex KRAENZL., Oesterr. Bot. Z. 44: 161. 1894

Papua New Guinea, 1893, W. ANDERSON 1, HBG501684: HOLO  
ann. KRÄNZLIN: spec. typic.

*Eria validissima* KRAENZL., Bot. Jahrb. Syst. 44, Beibl. 101: 27. 1910

Indonesia, West-Sumatra, Palembang, O. BECCARI, HBG501685: HOLO  
ann. KRÄNZLIN: Typus

*Eria verticillaris* KRAENZL., Bot. Jahrb. Syst. 44, Beibl. 101: 29. 1910

Malaysia, Borneo, Sarawak, O. BECCARI 2453, HBG501686: HOLO

ann. KRÄNZLIN: Typus

= *Ascidieria longifolia* (HOOK. f.) SEIDENF. (see WOOD & CRIBB 1994)

*Eria woodiana* AMES, Philipp. J. Sci. 2: 332. 1907

Philippines, Mindoro, E. D. MERRILL 5490, HBG501687: ISO

ann. KRÄNZL.: ? *E. tenuifolia* Rich.

*Eriopsis fuerstenbergii* KRAENZL., Orchis 2: 62. 1908

(South America?, coll.?), Hort. FUERSTENBERG-HUGENPOET, Mintard, HBG501689: HOLO

ann. KRÄNZLIN: Typus!

*Eulophia arenicola* SCHLTR. in WARBURG, Kunene-Sambesi Exped.: 217. 1903

Angola, Kubango oberh. d. Kueio, 4 Nov 1899, H. BAUM 384, HBG501690: ISO

*Eulophia bisaccata* KRAENZL., Bot. Jahrb. Syst. 33: 68. 1904

Mozambique, H. JUNOD, HBG501692: HOLO

ann. KRÄNZLIN: Typus

*Eulophia bletilloides* SCHLTR., Bot. Jahrb. Syst. 53: 576. 1915

Tanzania, Nyassa Hochland, Station Kyimbila, 1913, A. STOLZ 1800, HBG501693 ISO

*Eulophia calantha* SCHLTR. in WARBURG, Kunene-Sambesi Exped.: 215. 1903

Angola, am Longa bei Chijija, 5 Jan 1900, H. BAUM 631, HBG500851: ISO

*Eulophia chlorotica* KRAENZL., Bot. Jahrb. Syst. 51: 389. 1914

Congo (Democr. Rep.), Kantu, between high grass, 24 Jan 1908, TH. KASSNER 2371[2370], HBG501703: ISO

**Note** Due to an error in the numbering of the KASSNER collection in HBG the collection no. should read 2370 and not 2371 as printed on the label.

*Eulophia coeloglossa* SCHLTR. in WARBURG, Kunene-Sambesi Exped.: 216. 1903

Angola, am Kubango unterh. Kabindere, 2 Nov 1899, H. BAUM 367, HBG501695: ISO

*Eulophia corymbosa* SCHLTR. in WARBURG, Kunene-Sambesi Exped.: 216. 1903

Angola, am Kubango unterh. d. Kueio, 4 Nov 1899, H. BAUM 377, HBG501696: ISO

*Eulophia dregeana* LINDL., Companion Bot. Mag. 2: 202. 1836

South Africa, zwischen Gekau und Basche, Grasfelder & Morley, im Grase, J. F. DRÈGE b, HBG502620: SYN

= *Eulophia ovalis* LINDL. var. *ovalis* (see LINDER & KURZWEIL 1999)

*Eulophia dregeana* LINDL. var. *angustior* SOND., Linnaea 19: 75. 1847

South Africa, Kapland, C. F. ECKLON & C. L. P. ZEYHER, HBG502619: ISO

= *Eulophia ovalis* Lindl. var. *ovalis* (see LINDER & KURZWEIL 1999: 369–370)

*Eulophia florulenta* KRAENZL., Bot. Jahrb. Syst. 33: 66. 1904

Tanzania, Mampqui-Rücken, Ssongea, W. BUSSE 691, HBG501698: HOLO

ann. KRÄNZLIN: Typus

*Eulophia grandibracteata* KRAENZL., Mitt. Inst. Allg. Bot. Hamburg 5: 238. 1923

Madagascar, Sahambandrana, 13 Jan 1899, A. MAJASTRE 2, HBG501699: HOLO; HBG501700: ISO

ann. KRÄNZLIN: Typus!

= *Eulophia plantaginea* (THOUARS) ROLFE ex HOCHR. (see DU PUY et al. 1999: 141)

*Eulophia limodoroides* KRAENZL., Bot. Jahrb. Syst. 51: 387. 1914

(Zambia), N. W. Rhodesia, under trees, Dec 1907, TH. KASSNER 2080, HBG501704: ISO

*Eulophia litoralis* SCHLTR., Bot. Jahrb. Syst. 26: 338. 1898

South Africa, Terra Capensis, Regio occidentalis, Hawston, 28 Nov 1896, R. SCHLECHTER 9468, HBG501701: ISO

*Eulophia macra* SCHLTR. in WARBURG, Kunene-Sambesi Exped.: 217. 1903 *nom. illeg.*

non RIDL. 1887

Angola, am Kubango unterhalb Kabindera, 30 Nov 1899, H. BAUM 341, HBG501705: ISO

= *Eulophia trilamellata* DE WILD. (see LA CROIX & CRIBB 1998: 510)

*Eulophia massokoensis* SCHLTR., Bot. Jahrb. Syst. 53: 580. 1915

Tanzania, Nyassa-Hochland, Station Kyimbila, 1913, A. STOLZ 1831, HBG501707: ISO

*Eulophia nana* SCHLTR., Bot. Jahrb. Syst. 53: 579. 1915

Tanzania, Nyassa-Hochland, Station Kyimbila, 1912, A. STOLZ 1748, HBG501708: ISO

*Eulophia nutans* SOND., Linnaea 19: 73. 1847

South Africa, Katberg, C.F. ECKLON & C.L.P. ZEYHER, HBG502621: SYN  
 ≡ *Eulophia hians* SPRENG. var. *nutans* (SOND.) S. THOMAS

*Eulophia paradoxa* KRAENZL., Bot. Jahrb. Syst. 33: 68. 1904

Tanzania, Ssongea, W. BUSSE 700, HBG501709: HOLO  
 ann. KRÄNZLIN: Typus!

*Eulophia preussii* KRAENZL., Bot. Jahrb. Syst. 17: 54. 1893

[Sierra Leone, Sugar Loaf, Sept 1887, P. PREUSS], HBG501710: HOLO  
 ann. KRÄNZLIN: *Eulophia preussiana* KRÄNZLIN, Typus  
 = *Eulophia gracilis* LINDL. (see HEPPER 1968: 247)

*Eulophia rigidifolia* KRAENZL., Bot. Jahrb. Syst. 51: 387. 1914

(Zambia), N.W. Rhodesia, Kataruna Hills, open field, Dec 1907, TH. KASSNER 2092,  
 HBG501711: ISOSYN  
 (Zambia), N.W. Rhodesia, Nyenyeshi R., 28 Dec 1907, TH. KASSNER 2233, HBG501712:  
 ISOSYN

**Note** KASSNER no. 2233 is not cited as type in CRIBB (1989: 434).

*Eulophia sordida* KRAENZL., Bot. Jahrb. Syst. 33: 67. 1904

Togo, Lome Gebiet, O. WARNECKE 95, HBG501714: HOLO  
 ann. KRÄNZLIN: Typus!  
 = *Eulophia pyrophila* (RCHB. f.) SUMMERH. (see CRIBB 1989: 479)

**Note** KRÄNZLIN gives “Kamerun, Lome Gebiet” as locality on his label. However, WARNECKE’s collections from the “Lome region” originate from Togo. It seems that KRÄNZLIN mistook “Lomie” in Cameroon for “Lome” in Togo.

*Eulophia tricristata* SCHLTR. in WARBURG, Kunene-Sambesi Exped.: 218. 1903

Angola, am Kubango unterh. Kabindere, 1 Nov 1899, H. BAUM 357, HBG501715: ISO

*Eulophia warburgii* SCHLTR. in WARBURG, Kunene-Sambesi Exped.: 214. 1903

Angola, am Habungo, 30 Nov 1899, H. BAUM 496, HBG501691: ISO  
 = *Eulophia malangana* (RCHB. f.) SUMMERH. (see LA CROIX & CRIBB 1998: 493)

*Eulophia warneckeana* KRAENZL., Bot. Jahrb. Syst. 33: 67. 1904

Togo, Lome, O. WARNECKE 328, HBG501718: HOLO

ann. KRÄNZLIN: Typus!

= *Eulophia milnei* RCHB. f. (see SZLACHTKO & OLSZEWSKI 2001)

**Note** KRÄNZLIN gives "Kamerun, Lome" as locality on his label. However, WARNECKE's collections from the "Lome region" originate from Togo. It seems that KRÄNZLIN mistook "Lomie" in Cameroon for "Lome" in Togo.

*Eulophidium nyassanum* SCHLTR., Bot. Jahrb. Syst. 53: 593. 1915

Tanzania, Nyassa Hochland, Station Kyimbila, 1912, A. STOLZ 1466, HBG501721: ISO-  
SYN

*Eulophiella peetersiana* KRAENZL., Gard. Chron. 1, ser. 3, 21: 182. 1897

Madagascar, MOCORIS, HBG501722: TYPUS

ann. KRÄNZLIN: specim. autoris. Von Mr. Peeters erhalten. Originalblüten des Sammlers Mr. Mocoris, auf Madagascar gesammelt. März 1897

= *Eulophia roempleriana* (RCHB. f.) SCHLTR. (see DU PUY et al. 1999: 143)

*Galeandra paranaensis* SCHLTR., Repert. Spec. Nov. Regni Veg. 16: 331. 1920

Brazil, Paraná, Capão Grande, in campis, P. DUSÉN 7297, HBG501725: LECTO

ann. ROMERO: "Lectotype" "= *Galeandra paraguayensis* COGN."

**Notes** Cited in CHRISTENSON (1994: 350) as isotype.

*Glossorhyncha macdonaldii* SCHLTR., Repert. Spec. Nov. Regni Veg. 3: 19, 20. 1906

(Vanuatu), New Hebrides, Aneitum, 1891, M. MACDONALD, HBG506655: ISO

*Gomeza duseniana* KRAENZL., Ark. Bot. 16(8): 26. 1920(1921)

Brazil, Paraná, Serra do Mar, Monte Alegre in truncis arb., 23 Nov 1909, P. DUSÉN 9029, HBG506727: ISO

*Gomphichis alba* F. LEHM. & KRAENZL., Bot. Jahrb. Syst. 26: 500. 1899

Colombia, F.C. LEHMANN 6034, HBG506649: SYN

ann. ALVAREZ: = *Gomphichis traceyae* ROLFE

*Gongora incarum* KRAENZL., Bot. Jahrb. Syst. 37: 388. 1906

Peru, Moyobamba, A. WEBERBAUER 4626, HBG501727: HOLO

ann. KRÄNZLIN: Typus

*Grammatophyllum guilelmi-secundi* KRAENZL., Gartenflora: 114. 1894 (as "Guilelmi II")

(New Guinea, coll.?), HBG501728: HOLO

*Habenaria achalensis* KRAENZL., Bot. Jahrb. Syst. 16: 133. 1893

Argentina, [Prov. Cordoba, Sierra Achala de Cordoba, Cuesta del Gaucho, 24 Feb 1876],

G. HIERONYMUS [447], HBG500982: HOLO

ann. KRÄNZLIN: Typus!

*Habenaria achalensis* KRAENZL. var. *angustifolia* KRAENZL., Kongl. Svenska Vetenskap-sakad. Handl. 46(10): 12. 1911

Argentina, civit. Misiones, Posadas, in palude graminoso prope La Granja, 12 Dec 1907, E. L. EKMAN 433, HBG500981: ISO

*Habenaria adenosepala* KRAENZL., Ark. Bot. 16(8): 6. 1920(1921)

Brazil, Paraná, Lago, in paludosis, 2 Dec 1910, P. DUSÉN 10923, HBG500985: ISO

ann. KRÄNZLIN: Typus!

*Habenaria anaphysema* RCHB. F., Flora 50: 101. 1867

[Angola, inter Humpata et Nene], F. M. J. WELWITSCH, HBG500991: TYPUS-fragment?  
 (=ISO?)

ann. KRAS: = *Bilabrella anaphysema* (RCHB. F.) SZLACH. & KRAS-LAP.

**Note** The collection data given on the flower packet are rudimentary. However, with some certainty the present material is part of the original collection.

*Habenaria arachnoides* RIDL., J. Linn. Soc., Bot. 21: 508. 1885 (non THOUARS 1825?)

Madagascar, Süd-Betsileo, Urwald von Ankafina, J. M. HILDEBRANDT 3982, HBG500092,  
 HBG500093: ISOSYN?

*Habenaria arechavaletae* KRAENZL. var. *elata* COGN. in MARTIUS, Fl. Bras. 3(4): 92.  
 1893

Brazil, Est. St. Catharina, in Sümpfen des Fundo des Capivare, Serra Geral, Feb 1891,  
 E. ULE 1904, HBG500094, HBG501311: ISO

*Habenaria atramentaria* KRAENZL., Repert. Spec. Nov. Regni Veg. 17: 105. 1921

China, Yun nan, Pe yen tsin, 10 Sept 1919, S. TÉN 1261, HBG501002: ISO

*Habenaria bakeriana* KING & PANTL., J. Asiat. Soc. Bengal 65(2): 132. 1895(1896)

India, Sikkim Himalaya, Lachen Valley, 9000 ft, Aug 1895, R. PANTLING 401, HBG501867: ISO

*Habenaria berroana* BARB. RODR., Contr. Jard. Bot. Rio de Janeiro 4: 97, tab. 19. 1907

Uruguay, hab. Carticeiras, 20 Dec 1901, M.B. BERRO 1890, HBG501007: ISO?

*Habenaria bicolor* CONRATH & KRAENZL., Vierteljahresschr. Naturf. Ges. Zürich 51: 131. 1906

South Africa, Transvaal, Modderfontein, P. CONRATH 1083, HBG501009: ISO ann. KRÄNZLIN: Typus!

*Habenaria bidentata* POEPP. ex STEUD., Nomencl. Bot. (ed. 2), 1: 716. 1841

Cuba, inudis savannarum Cubae ad Sumidero, Octbr., E.F. PÖPPIG, HBG506847: TYPUS?

*Habenaria boiviniana* KRAENZL., Orchid. gen. sp. 1: 238. 1897

Comoros, [Grand Comore und Bois de Moly], B. BOIVIN, HBG501011: HOLO

*Habenaria bosseriana* SZLACH. & OLSZEWSKI, Fl. Cameroun 34: 170. 1998

Cameroon, Lake Monoum, NNW of Foumbot, 11 Jul 1972, A.J.M. LEEUWENBERG 10199, HBG500887: ISO

*Habenaria brachiphyton* SCHLTR. Anexos Mem. Inst. Butantan, secc. Bot. 1(2): 22. 1921

Brazil, Paraná, Guaratuba, in litore arenoso, 3 Jan 1912, P. DUSÉN 13515, HBG500124: see BATISTA et al. 2011a: 14

Brazil, Sta. Catharina, Laguna, in arena mobili humida, 24 Jun 1909, P. DUSÉN 8429, HBG501161: ISOSYN of *Habenaria nana* SCHLTR. 1919

**Note** This is a substitute name for *Habenaria nana* SCHLTR. (SCHLECHTER 1919: 249), an illegitimate later homonym of *H. nana* SCHLTR. (SCHLECHTER 1911: 11). The latter is a species from Papua New Guinea which has been transferred to *Peristylus* and is now called *P. nanus* (SCHLTR.) P.F. HUNT (HUNT 1971: 177). *H. brachiphyton* SCHLTR. has been reintroduced later by MANSFELD (1930: 4).

*Habenaria bracteosa* HOCHST. ex A. RICH., Tent. Fl. Abyss. 2: 292. 1850

[Ethiopia, Entchedkab], G.H.W. SCHIMPER [It. Abyss. II, 1189], HBG501015: TYPUS? ann. SZLACHETKO & KRAS:  $\equiv$  *Montolivaea bracteosa* (HOCHST. ex A. RICH.) SZLACH.

**Note** The collection data given on the flower packet are rudimentary. However, with some certainty the present material is part of the original collection.

***Habenaria bradeana* KRAENZL.**, Ark. Bot. 14(10): 3. 1915

Brazil, S. Paulo, Alto da Serra, 16 Mar 1913, A.C. BRADE 6199, HBG501182: HOLO  
ann. BATISTA: = *H. josephensis* Barb. Rod.

***Habenaria bradei* SCHLTR.**, Anexos Mem. Inst. Butantan, Secç. Bot. 1(2): 22. 1921

Brazil, Moóca Sumpf, Mar 1913, A.C. BRADE 6200, HBG501250: ISO  
ann. BATISTA: = *H. johannensis* BARB. ROD.

***Habenaria buchananiana* KRAENZL.**, Bot. Jahrb. Syst. 19: 247. 1895

Tanzania, [Nyassaland, 1891], J. BUCHANAN, HBG501019: HOLO  
ann. KRÄNZLIN: Typus!  
ann. SZLACHETKO & KRAS: ≡ *Platycoryne buchananiana* (KRAENZL.) ROLFE

***Habenaria busseana* KRAENZL.**, Bot. Jahrb. Syst. 33: 54. 1902

Tanzania, Ost-Afrika, Matange-Hochland, W. BUSSE 923, HBG501020: HOLO  
ann. KRÄNZLIN: Typus!

***Habenaria chloroceras* KRAENZL.**, Repert. Spec. Nov. Regni Veg. 1: 89. 1905

Peru, [Berge östlich von Palca (Dpto. Junin)], A. WEBERBAUER 2424, HBG501031:  
LECTO (see BATISTA et al. 2011b: 244)  
ann. KRÄNZLIN: Typus!  
ann. CHRISTENSON: Holotype  
ann. SZLACHETKO & KRAS: Isotype

***Habenaria cogniauxiana* KRAENZL.**, Orchid. gen. sp. 1: 463. 1898

Ecuador, F.C. LEHMANN 6463, HBG501038: ISO

***Habenaria corcovadensis* KRAENZL.**, Bot. Jahrb. Syst. 16: 120. 1893

Brazil, [Rio, in monte Corcovado], HBG501039: ISO

***Habenaria crucifera* RCHB.F. & WARM.**, Otia Bot. Hamburg. 2: 80. 1881

Brazil, J.E.B. WARMINGS.n. (142), HBG500993: ISO?  
ann. BATISTA: Type of *H. crucifera* is a collection from WARMING from Lagoa Santa,  
Minas Gerais, Brazil (see also BATISTA et al. 2011a: 19)

*Habenaria cultriformis* KRAENZL., Bot. Jahrb. Syst. 16: 89. 1893

Ethiopia, G. H. W. SCHIMPER, HBG501045: HOLO?

ann. KRÄNZLIN: Typus!

**Note** According to the description types are from Ethiopia "Mettgalo, Schimper 548 und Amber-Sea, Schimper s.n."

*Habenaria decorata* HOCHST. ex A. RICH., Tent. Fl. Abyss. 2: 294. 1850

(Ethiopia), G. H. W. SCHIMPER [It. Abyss. II, 1253?], HBG502613: ISOSYN?

*Habenaria delessertiana* KRAENZL., Annuaire Conserv. Jard. Bot. Genève: 108. 1897

Philippines, H. CUMING 2086, HBG501053: HOLO

ann. KRÄNZLIN: Typus!

**Note** The diagnosis reappeared in KRÄNZLIN (1897–1904: 233) with that part of the book being published on 14 Dec 1897.

*Habenaria depauperata* KRAENZL., Abh. Naturwiss. Vereine Bremen 7: 259. 1882

Madagascar, [1877, D.C. RUTENBERG], HBG501872: HOLO?

ann. CRIBB: = *Platycoryne pervillei* RCHB. F.

*Habenaria dregeana* Lindl. var. *calva* RCHB. F., Flora 48: 179. 1865

Angola, Huilla, F.M.J. WELWITSCH [732?], HBG501058: ISO?

*Habenaria dyeriana* KING & PANTL., J. Asiat. Soc. Bengal 65(2): 133. 1895(1896)

India, Sikkim Himalaya, Lachen Valley, Aug 1895, R. PANTLING 407, HBG501869: ISO

*Habenaria ekmaniana* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 15. 1911

Argentina, civit. Misiones, Posadas, in palude graminoso prope La Granja, 17 Dec 1907, E.L. EKMAN 432, HBG501061: ISO

*Habenaria elegantula* KRAENZL., Bot. Jahrb. Syst. 51: 376. 1914

(Zambia), N.W. Rhodesia, Michinga Spr., Dec 1907, Th. KASSNER 2169, HBG501730: ISO

*Habenaria elegantula* HOEHNE, Bot. Jahrb. Syst. 68: 135. 1937 non KRAENZL. 1914

Brazil, S. Paulo, Villa Ema, 25 May 1913, A.C. BRADE 6196, HBG500147: ISO

ann. BATISTA: = *H. armata* RCHB. F.

*Habenaria ellottii* ROLFE ex ELLIOTT, J. Linn. Soc., Bot. 29: 57. 1891

Comoros, L. HUMBLOT 699, HBG506715: ISOSYN

*Habenaria ernesti-ulei* HOEHNE, Bot. Jahrb. Syst. 68: 136. 1937 (as "Ernesti-Ulei")

Brazil, im Capão der Sarra do Itatiaia, Mar 1894, E. ULE 279(3479), HBG501301: ISO

*Habenaria eustachya* RCHB. f., Ber. Deutsch. Bot. Ges. 3: 274. 1885

Puerto Rico, P. SINTENIS [511B?], HBG501064: TYPUS-fragmnet (=ISO?)

ann. SZLACHETKO & KRAS: = *Habenella eustachya* (RCHB. f.) SZLACH. & KRAS-LAP.

*Habenaria felipensis* AMES, Orchidaceae 4: 251. 1910

Mexico, Oaxaca, Sierra de San Felipe, Aug 1894, C.G. PRINGLE 4806, HBG501035: ISO

ann. SZLACHETKO & KRAS: *Habenaria clypeata* LINDL.

*Habenaria filifera* S. WATSON, Proc. Amer. Acad. Arts 26: 154. 1891

Mexico, State of Mexico, Flor de Maria, moist grassy slopes, 31 Jul 1890, C.G. PRINGLE 3187, HBG500100: ISO

*Habenaria flaccida* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 10. 1911

Brazil, Paraná, Curityba, in paludosis, 20 Jan 1910, R. LANGE 9835 A [P. DUSÉN 9385 A],

HBG501066: ISO

ann. KRÄNZLIN: Typus!

ann. SZLACHETKO & KRAS: = *Habenaria regnellii* COGN.

**Note** KRÄNZLIN cited "Dusén no. 9385 A" as type in his diagnosis, whereas he wrote "Lange n. 9835 A" on the label of the HBG sheet and marked it "Typus!". LANGE was co-working with DUSÉN in Paraná (KRÄNZLIN 1920: 1) and the collection number may have been changed erroneously from "9385 A" to "9835 A".

*Habenaria foliolosa* KRAENZL. Bot. Jahrb Syst.. 51: 372. 1914

Congo (Democr. Rep.), TH. KASSNER 2358, HBG501166: ISOSYN

Congo (Democr. Rep.), Kitimbo, forest, 18 Nov 1908, TH. KASSNER 2362, HBG501743: ISOSYN

Congo (Democr. Rep.), TH. KASSNER 2416[2415], HBG501167: ISOSYN

**Note** Due to an error in the numbering of the KASSNER collection in HBG the collection no. of HBG501167 should read 2415 and not 2416 as printed on the label.

*Habenaria galipanensis* KRAENZL., Repert. Spec. Nov. Regni Veg. 1: 88. 1905

Venezuela, Galipan b. Caracas, P. PREUSS 1901, HBG501069: see LECTO BATISTA[ ET AL. 2011a: 30  
 ann. CHRISTENSON: holotype  
 ann. SZLACHETKO & KRAS: Isotype

*Habenaria guentheriana* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 18. 1928

Bolivia, Región de Mapiri, San Carlos, bei Sarampiuni, 500 m, 30 Jan 1927, O. BUCHTIEN 465, HBG501075: HOLO; HBG501074, HBG501076, HBG501077: ISO  
 ann. KRÄNZLIN (HBG501075): Typus!

*Habenaria harmsiana* SCHLTR., Bot. Jahrb. Syst. 53: 511. 1915 (Fig. 10)

Tanzania, Nyassa Hochland, Station Kyimbila, 1100 m, 3 Mar 1911, A. STOLZ 583, HBG501083: ISO  
 ann. SZLACHETKO & KRAS: = *Ceratopetalorchis harmsiana* (SCHLTR.) SZLACH., GÓRN. & TUKALLO

*Habenaria hatschbachii* PABST, Bradea 2: 79. 1976

Brazil, [Matto Grosso, Rondonopolis, Serra da Petrolina, 18 Feb 1974], G. HATSCHBACH 34131, HBG501084: ISO

*Habenaria heptadactyla* RCHB. F., Linnaea 812. 1849

Venezuela, in graminetis uliginosis reg. Alpine Meridensis & Caracas, fl. Jul., K. MORITZ 615, HBG500775: ISOSYN (see BATISTA et al. 2011a: 35)

**Note** According to the protologue MORITZ no. 615 originates from Caripe, not Merida or Caracas as given on the label. Furthermore, REICHENBACH (1849: 812) listed two varieties: “ $\alpha$  spica densiflora (Caripe, Moritz 615)” and “ $\beta$  spica rario (Orinoco, Humboldt & Bonpland; Guiana, Schomburgk)”.

*Habenaria hieronymi* KRAENZL. Bot. Jahrb. Syst. 16: 187. 1892

Argentina, [Prov. Cordoba, Dep. Calamuchita, westlich von S. Rosa bei San Miguel, 6 Apr 1877], G. HIERONYMUS, HBG501090: ISO  
 ann. KRÄNZLIN: Typus

*Habenaria holothrix* SCHLTR. in WARBURG, Kunene-Sambesi Exped.: 204. 1903

Angola, am Longa unterh. Napalanka, 25 Dec 1899, H. BAUM 578, HBG500848: ISO

*Habenaria inaequiloba* SCHLTR., Bot. Jahrb. Syst. 53: 514. 1915

Tanzania, Nyassa Hochland, Station Kyimbila, 10 May 1911, A. STOLZ 713, HBG501731: ISO

*Habenaria jaguariahyvae* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 13. 1911

Brazil, Paraná, Jaguariahyva, in campo, 5 Feb 1910, P. DUSÉN 9532, HBG501105: HOLO ann. KRÄNZLIN: Unicum!

*Habenaria janeirensis* KRAENZL., Bot. Jahrb. Syst. 16: 127. 1893

Brazil, Itatiaia, A. F. M. GLAZIOU 6729, HBG501106: ISO

*Habenaria javanica* KRAENZL., Bot. Jahrb. Syst. 16: 162. 1893

[Indonesia, Java, T. LOBB 350 (?)], HBG501108: HOLO-fragment? (=ISO?)

*Habenaria juncea* KING & PANTL., J. Asiat. Soc. Bengal 65(2): 132. 1895(1896)

India, Sikkim, Singalelah Range, 12.000 ft, Aug 1896, R. PANTLING 406, HBG5000107, HBG5000108: TYPUS?

**Note** The locality information on the labels of the two sheets of PANTLING no. 406 differs slightly from that given in the description: "Lachen Valley, 11,000 ft., fl. August".

*Habenaria kassneriana* KRAENZL., Bot. Jahrb. Syst. 48: 388. 1912

Congo (Democr. Rep.), Kantu, in vlei, 24 Jan 1908, TH. KASSNER 2378[2377], HBG500110: ISO

**Note** Due to an error in the numbering of the KASSNER collection in HBG the collection no. should read 2377 and not 2378 as printed on the label.

*Habenaria kassneriana* KRAENZL., Vierteljahrsschr. Naturf. Ges. Zürich 74: 104. 1929  
nom. illeg. non KRAENZL. 1912

Congo (Democr. Rep.), Kushiba, vlei, 27 Jan 1908, TH. KASSNER 2413, HBG501110: ISO ann. SZLACHETKO & KRAS:  $\equiv$  *Bilabrella neokassneriana* (KRAENZL.) SZLACH. & KRAS ined.

*Habenaria kubangensis* SCHLTR. in WARBURG, Kunene-Sambesi Exped.: 205. 1903

Angola, am Kubango zw. Kalulo u. Kavungu, 19 Nov 1899, H. BAUM 425, HBG501732: ISO

*Habenaria lastelleana* KRAENZL., Orchid. gen. sp. 1: 357. 1898

Madagascar, [M. de LASTELLE], HBG501119: HOLO?

*Habenaria lehmanniana* KRAENZL., Bot. Jahrb. Syst. 16: 97. 1892

Colombia, [Estado del Cauca, auf Halbsavannen um Popayan, 1750 m, 23 Feb 1884], F.C. LEHMANN 3689, HBG501121: ISO

*Habenaria lindmaniana* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 5. 1911

Brazil, Matto Grosso, Pespinheiros, ad terram silvae umbrosae, 10 Feb 1894, C.A.M. LINDMAN A.2787, HBG500112: ISO

*Habenaria ludens* KRAENZL., Bot. Jahrb. Syst. 51: 374. 1914

(Zambia), N. W. Rhodesien, Lukanda R., Wiese, Dec 1907, TH. KASSNER 2132, HBG500089: ISO

*Habenaria macrodactyla* KRAENZL., Ark. Bot. 16(8): 5. 1920(1921)

Brazil, Jaguariahyva, in campo subuliginoso, 1 Nov 1910, P. DUSÉN 10404, HBG501079, HBG502098: ISO

*Habenaria macroplectron* SCHLTR. in WARBURG, Kunene-Sambesi Exped.: 206. 1903

Angola, am Longa oberh. Makroplectron, 1 Jan 1900, H. BAUM 603, HBG501733: ISO

*Habenaria mesophylla* KRAENZL. & SCHLTR. in KRAENZL., Orchid. gen. sp. 1: 204. 1897

Australia, [Victoria, Aug 1873, Herb. Melbourne sine coll.], HBG501146: HOLO

*Habenaria minimiflora* KRAENZL., Ark. Bot. 14(10): 2. 1915

Brazil, S. Paulo, S. Bernardo, Sumpf, A.C. BRADE 5084, HBG500123: SYN

Brazil, S. Paulo, V. Marianna, A.C. BRADE 5079, HBG501148: SYN

*Habenaria microstylina* RCHB.F., Xenia Orchid. 3: 17. 1878

[Bolivia, Provinz Larecaja, viciniis Soratae, Apr 1860], G. MANDON 1154, HBG519880: ISO

ann. BATISTA: isotype (see also BATISTA et al. 2011b: 238)

*Habenaria minutiflora* RIDL., J. Linn. Soc., Bot. 21: 503. 1885

Madagascar, Ost-Imerina, Andrangóaka, im Wald in Matten, Nov 1880, J.M. HILDEBRANDT 3729, HBG500730, HBG501149: ISO  
 = *Benthamia spiralis* (THOUARS) A. RICH. (see DU PUY et al. 1999: 60)

*Habenaria monophylla* SCHLTR. in WARBURG, Kunene-Sambesi Exped.: 206. 1903

Angola, an der Longamündung, 20 Dec 1899, H. BAUM 561, HBG500847: ISO  
 = *Habenaria verdickii* (DE WILD.) SCHLTR.

*Habenaria mutica* SPAN., Linnaea 15: 477. 1841

Indonesia, Timor, J.B. SPANOGHE, HBG501163: HOLO?

*Habenaria nana* SCHLTR., Repert. Spec. Nov. Regni Veg. 16: 249. 1919 *nom. illeg. non* SCHLTR. 1911

see *Habenaria brachiphyton* SCHLTR.

*Habenaria nasuta* RCHB. F. & WARM., Otia Bot. Hamburg., fasc. 2 (no. 7): 80[50]. 1881

Brazil, E. WARMING, HBG506875: TYPUS-fragment (=ISO)  
 ann. KRÄNZLIN: = *Habenaria nuda* LINDL.

*Habenaria nigripes* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 8. 1911

Brazil, Paraná, Serrinha, in palud., P. DUSÉN 7318, HBG500125: ISO

*Habenaria pantothrix* KRAENZL., Bot. Jahrb. Syst. 16: 89. 1893

Ethiopia, G. H. W. SCHIMPER, HBG500992: HOLO  
 ann. KRÄNZLIN: Typus!  
 ann. SZLACHETKO & KRAS: = *Bilabrella antennifera* (A. RICH.) SZLACH. & KRAS

*Habenaria papillosa* RIDL., J. Linn. Soc., Bot. 21: 504. 1885

Madagascar, Ankanatra-Gebirge, Sümpfe, Oct. 1881, J.M. HILDEBRANDT 3860, HBG500588: ISO  
 ≡ *Cynorkis papillosa* (RIDL.) SUMMERH. (see DU PUY et al. 1999: 123)

*Habenaria perpulchra* KRAENZL., Bot. Jahrb. Syst. 51: 373. 1914

Congo (Democr. Rep.), Kantu, in forest vlei, swampy, 24 Jan 1908, TH. KASSNER 2373[2372], HBG501215: ISO  
 ann. SZLACHETKO & KRAS: ≡ *Arachnaria perpulchra* (KRAENZL.) SZLACH.

**Note** Due to an error in the numbering of the KASSNER collection in HBG the collection no. should read 2372 not 2373 as printed on the label.

*Habenaria physophora* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 10.  
1911

Brazil, Paraná, Serrinha in paludoris, P. DUSÉN 7319, HBG500133: ISO

*Habenaria piraquarensis* HOEHNE, Arq. Bot. Estado São Paulo 2: 122. 1952  
Brazil, G. HATSCHBACH 2246, HBG501219: ISO

*Habenaria platydactyla* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 9.  
1911

Brazil, Paraná, Capao Grande, prope flumen Rio Guavirova, in pratis, 24 Jan 1910, P. DUSÉN 9089, HBG500131: ISO

*Habenaria poggeana* KRAENZL., Bot. Jahrb. Syst. 16: 207. 1893

[Congo (Democr. Rep.), Luluá], P. POGGE 1443, HBG501735 HOLO  
= *Platycoryne guingangae* (RCHB. F.) ROLFE (see SZLACHETKO & OLSZEWSKI 1998: 208)

**Note** KRÄNZLIN gives "West-Afrika, Kamerun" as locality data on the flower packet.

*Habenaria pontagrossensis* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 6. 1911

Brazil, Paraná, Ponta Grossa, Rio Tibagý, ad ripam, 26 Jan 1909, P. DUSÉN 7837, HBG501224: ISO

*Habenaria pringlei* B. L. ROB., Proc. Amer. Acad. Arts 27: 184. 1892

Mexico, San Luis Potosí, Las Canoas, bogs, 7 Aug 1891, C.G. PRINGLE 3823, HBG501228: ISO

*Habenaria pristichila* KRAENZL., Bot. Jahrb. Syst. 51: 372. 1914

Congo (Democr. Rep.), Kundelungu W., Mar 1908, Th. KASSNER 2931, HBG501048: ISO?

ann. GEERINCK: = *Habenaria cornuta* LINDL.

ann. SZLACHETKO & KRAS: *Ceratopetalorchis cornuta* (LINDL.) SZLACH., GÓRN. & TUKALLO

**Note** According to the protologue collected in Senga District, mountain slopes, end of June.

*Habenaria rautanenii* KRAENZL., Bull. Herb. Boiss., ser. 2, 4: 1008. 1904

Namibia, S. W. Afrika, M. RAUTANEN (ex herb. SCHINZ), HBG501737: TYPUS

ann. KRÄNZLIN: Typus!

ann. CHRISTENSON: ?Isotype

ann. SZLACHETKO: = *Platycoryne rautanenii* (KRAENZL.) SZLACH. & OLSZEWSKI

= *Platycorynoides rautanenii* (KRAENZL.) SZLACH. (see SZLACHETKO 2005: 207)

**Note** *Habenaria rautaneniana* KRAENZL. 1902 is an accepted taxon based on a different plant likewise collected by RAUTANEN in Namibia.

*Habenaria rhopaloceras* SCHLTR. in WARBURG, Kunene-Sambesi Exped.: 207. 1903

Angola, am Longa bei Napalanka, 28 Dec 1899, H. BAUM 598, HBG501738: ISO

= *Habenaria holubii* ROLFE (see LA CROIX & CRIBB 1995: 119)

*Habenaria rivae* KRAENZL., Orchid. gen. sp. 1: 238. 1897

Eritrea, E. RUSPOLI & D. RIVA [1506(1382)], HBG501241: HOLO

*Habenaria rutenbergiana* KRAENZL., Abh. Naturwiss. Vereine Bremen 7: 258. 1882

Madagascar, D.C. RUTENBERG, HBG501243: ISO

ann. KRÄNZLIN: Typus!

= *Bilabrella incarnata* (LYALL ex LINDL.) SZLACH. & KRAS-LAP.

*Habenaria schaffneri* S. WATSON, Proc. Amer. Acad. Arts 23: 283. 1888

Mexico, J.G. SCHAFFNER (in herb. VIGENER no. 6), HBG501255: SYN?

*Habenaria schlechteri* KRAENZL. ex SCHLTR., Bot. Jahrb. Syst. 20, Beibl. 50: 35. 1895

[South Africa, Transvaal, in Sümpfen zwischen Wilge Rivier und Middelburg, Jan 1894, R. SCHLECHTER 4121], HBG501258: TYPUS?

ann. SZLACHETKO & KRAS: = *Centrostigma occultans* (WELW. ex RCHB. F.) SCHLTR.

**Notes** The description provided by KRÄNZLIN (1896: 148) incorporates additional information from two complete specimens of the plant that he had received after the preparation of the initial diagnosis published shortly before by SCHLECHTER (1895: 35). This initial, incomplete description was based on a few flowers sent by SCHLECHTER to KRÄNZLIN in a letter (SCHLECHTER 1915: 522).

*Habenaria simeonis* KRAENZL., Repert. Spec. Nov. Regni Veg. 17: 107. 1921

China, [Yun nan, Pe yin tsin], S. TÉN 1253[1255], HBG501263: ISO

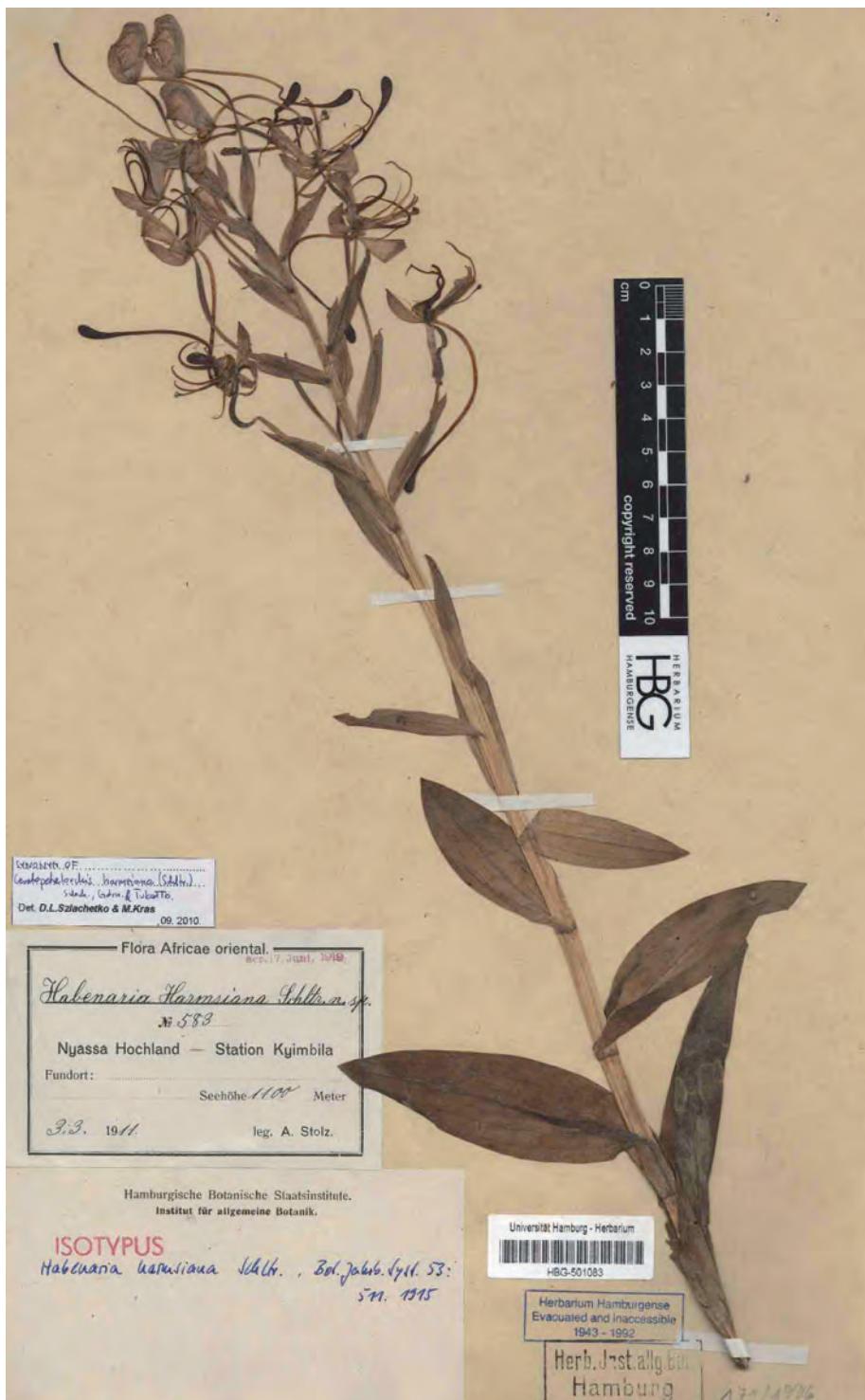


Fig.10 Isotype of *Habenaria harmsiana* SCHLTR. based on material collected by A. STOLZ in Tanzania. HBG holds a large duplicate set of STOLZ' orchids which was studied by R. SCHLECHTER, another prolific German orchidologist and contemporaneous of KRÄNZLIN.

*Habenaria spegazziniana* KRAENZL., Bot. Jahrb. Syst. 36, Beibl. 80: 10. 1905

Argentina, in stillicidio montano secus viam inter El Santuario y el Carmen calchaqui, Feb 1897, C. L. SPEGAZZINI 104753, HBG501265: HOLO

*Habenaria stolzii* KRAENZL. Bot. Jahrb. Syst. 48: 386. 1912 nom. illeg. non SCHLTR. 1906

Tanzania, Nyassa Hochland, Station Kyimbila, Bergwiesen, 18 Jun 1906, A. STOLZ 140, HBG501873: HOLO

*Habenaria subauriculata* B. L. ROB. & GREENM., Proc. Amer. Acad. Arts 32: 34. 1896

Mexico, Oaxaca, Las Sedas, grassy slopes, Aug 1894, C. G. PRINGLE 4830, HBG501271: ISO

*Habenaria taubertiana* COGN. in MARTIUS, Fl. Bras. 3(4): 69. 1893

Brazil, Est. Sta. Catharina, in Sümpfen auf dem Campo de Capivare, Serra Geral, Feb 1891, E. ULE 1903, HBG500145, HBG500146: ISO

*Habenaria theodorii* KRAENZL., Vierteljahrsschr. Naturf. Ges. Zürich 74: 107. 1929

nom. illeg. non SCHLTR. 1922 as ("theodori")

Congo (Democr. Rep.), Luente, near swamps, 24 Feb 1908, TH. KASSNER 2486["2086,2686"] HBG501095: ISO

ann. SZLACHETKO & KRAS.: = *Bilabrella kilimanjari* (RCHB. f.) SZLACH. & KRAS-LAP.

*Habenaria trachychila* KRAENZL., Bull. Herb. Boissier, sér. 2, 4: 1007. 1904

South Africa, [Transvaalkolonie], A. REHMANN, HBG501278: TYPUS

= *Habenaria rautaneniana* KRAENZL. (see KURZWEIL & ARCHER 2003)

*Habenaria trilobulata* SCHLTR., Bot. Jahrb. Syst. 26: 332. 1899

Mozambique, 25 Miles Station, 11 Apr 1898, R. SCHLECHTER 12251, HBG501741: ISO  
≡ *Arachnaria trilobulata* (SCHLTR.) SZLACH.

*Habenaria ulaei* COGN. in MARTIUS, Fl. Bras. 3(4): 74, 75. 1893

Brazil, Est. St. Catharina, auf dem Campo de Capivare, Serra Geral, Feb 1891, E. ULE 1902, HBG500143: ISO

*Habenaria volkensiana* KRAENZL., Bot. Jahrb. Syst. 19: 244. 1894

Tanzania, Kilimandjaro, G. VOLKENS 342, HBG501742: HOLO

ann. KRÄNZLIN: Typus!

≡ *Bonatea volkensiana* (KRAENZL.) ROLFE

*Hemipilia silvatica* KRAENZL., Repert. Spec. Nov. Regni Veg. 17: 110. 1921

China, [Yunnan, Ni thon, prope Pe tsoo lin], S. TÉN 1396, HBG501314: ISO

*Herminium jaffreyanum* KING & PANTL., Journ. As. Soc. Beng. 65: 130. 1894

India, Reg. Himal., [Sikkim, near the top of Sinchal], R. PANTLING 237, HBG501319: ISO

*Hetaeria connata* KRAENZL. in K. SCHUM. & LAUTERB., Fl. Schutzgeb. Südsee: 241.

1900(1901) *nom. nud.*

Papua New Guinea, Neu Guinea, K. LAUTERBACH [1038?], HBG501040: TYPUS?

*Hexisea tenuissima* H. WENDL. & KRAENZL., Xenia orchid. 3(10): 172, t. 300. 1900

(Mexico), Hort., HBG501746: HOLO

ann. KRÄNZLIN: Typus!

= *Ponera juncifolia* LINDL.

*Holothrix confusa* ROLFE, Fl. Cap. 5(3): 105. 1912

South Africa, Terra Capensis, Blauw Berg, 10 Aug 1996, R. SCHLECHTER 8465, HBG516704: ISOSYN?

= *Holothrix aspera* RCHB. F.

*Holothrix lindleyana* RCHB. F., Otia Bot. Hamburg., fasc. 2 (no. 8): 119[89]. 1881 *nom. inval.* (type as for *Tryphia secunda* LINDL.)

see *Tryphis secunda* LINDL.

*Houilletia buchtienii* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 28. 1928

Bolivia, Región de Mapiri, Pararani, 12 Dec 1926, O. BUCHTIEN 512, HBG501747: HOLO; HBG501748: ISO

ann. KRÄNZLIN: Typus!

*Ionopsis orchiooides* KRAENZL., Repert. Spec. Nov. Regni Veg. 17: 388. 1921

Colombia, W. KALBREYER, HBG501749: HOLO

ann. KRÄNZLIN: Typus!

ann. CHRISTENSON: = *Comparettia falcata* POEPP. & ENDL.

*Ionopsis utricularioides* (Sw.) LINDL. f. *latifolia* COGN. in URBAN, Symb. Antill. 4: 180.

1903

Puerto Rico, prope Adjuntas, la Vega, 22 May 1886, P. SINTENIS 4407, HBG506726: ISO

*Lacaena grandis* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 25. 1928

Bolivia, San Carlos (Mapiri-Region), 14 Feb 1927, O. BUCHTIEN 501, HBG501984: HOLO; HBG501751, HBG501985, HBG501986: ISO  
ann. ROMERO: = *Rudolfiella bicornaria* (RCHB. F.) HOEHNE

*Laelia reichenbachiana* H. Wendl. & KRAENZL., Xenia orchid. 3(6): 97, t. 254, fig. 1–7. 1892 (Fig. 11)

(South America), Hort., HBG501346: HOLO?

**Note** Originally labelled as “*Bletia (Laelia) reichenbachiana* sp. n.”.

*Laelia sincorana* SCHLTR., Orchis 11: 72. 1917

Brazil, Estado de Bahía, Serra Sincorá, Nov 1906, E. ULE 7093, HBG500691: NEO

*Liparis giraldiana* KRAENZL., Bot. Jahrb. Syst. 36, Beibl. 82: 27. 1905

China, Sten-si, P. G. GIRALDI in herb. BLOUDI no. 1885, HBG501335: HOLO

*Liparis laxa* SCHLTR., Bot. Jahrb. Syst. 39: 60. 1906

New Caledonia, auf den Bergen am Ngoye, 18 Nov 1902, R. SCHLECHTER 15368, HBG501334: ISOSYN



**Fig. 11** Illustration of *Laelia reichenbachiana* H. WENDL. & KRAENZL. (from KRÄNZLIN 1890–1900: 97, plate 254) which is named after H.G. REICHENBACH, the outstanding German orchideologist and director of the Hamburg Botanical Garden (1863–1889) who preceded KRÄNZLIN as editor of the famous “Xenia Orchidacea”. This attractive species is native to South America and has been grown in cultivation and illustrated in “Xenia Orchidacea”.

*Liparis nyassana* SCHLTR., Bot. Jahrb. Syst. 53: 560. 1915

Tanzania, Nyassa Hochland, Station Kyimbila, 17 Feb 1912, A. STOLZ 1124, HBG501752: ISO

*Liparis teniana* KRAENZL., Repert. Spec. Nov. Regni Veg. 17: 112. 1921

China, Yun-nan, Siao tsin ho, 1 Aug 1919, S. TÉN 1219, HBG501753: HOLO ann. KRÄNZLIN: Typus!

*Lissochilus amblyosepalus* SCHLTR., Bot. Jahrb. Syst. 53: 592. 1915

Tanzania, Nyassa Hochland, Station Kyimbila, Dec 1910, A. STOLZ 436, HBG501755: ISO

**Note** The sheet was originally labelled “*Lissochilus cyclopetalus* SCHLTR. n. sp.”, apparently a provisional, unpublished herbarium name.

*Lissochilus busseanus* KRAENZL., Bot. Jahrb. Syst. 33: 54. 1902

Tanzania, Ungoni, Gebiet der Makorro, W. BUSSE 1375, HBG501754: HOLO ann. KRÄNZLIN: Typus!

*Lissochilus hereroensis* KRAENZL., Bull. Herb. Boissier, sér. 2, 8: 626. 1908

Namibia, Hereroland, K. DINTER 816, HBG501756: ISO  
ann. KRÄNZLIN: spec. typ. aut.!

*Lissochilus kassnerianus* KRAENZL., Bot. Jahrb. Syst. 51: 391. 1914

(Zambia), N.W. Rhodesia, Dec 1907, TH. KASSNER 2105, HBG501757: ISO

*Lissochilus leucanthus* KRAENZL., Bull. Herb. Boissier, sér. 2, 4. : 1009. 1904

Namibia, Südwest-Afrika, Andunga-Unkuabé (?), M. RAUTANEN, HBG501758: HOLO ann. KRÄNZLIN: Typus!

*Lissochilus madagascariensis* KRAENZL., Abh. Naturwiss. Vereine Bremen 7: 256. 1882

Madagascar, D. C. RUTENBERG HBG501759: ISO(=SYN)  
= *Eulophia reticulata* RIDL.

*Lissochilus monoceras* KRAENZL., Bot. Jahrb. Syst. 51: 390. 1914

(Zambia), N.W. Rhodesia, Kafulafuka R.[river], bush, Dec 1907, TH. KASSNER 2251a[2251], HBG502654: ISO  
ann. GEERINCK: *Eulophia calantha* SCHLTR.

*Lissochilus multicolor* KRAENZL., Bot. Jahrb. Syst. 33: 65. 1904

Tanzania, Ost-Afrika, Matagoroberge, bei Ssongea, W. BUSSE 825, HBG501760: HOLO  
ann. KRÄNZLIN: Typus  
= *Eulophia rosea* (LINDL.) A.D. HAWKES

*Lissochilus platypetalus* LINDL., Comp. Bot. Mag. 2: 204. 1836

South Africa, Zuurberg, Grashöhen an Strubels, Dornnek und Bontjesrivier, J.F.  
DRÈGE c, HBG502651: SYN  
= *Eulophia tuberculata* BOLUS (see LINDER & KURZWEIL 1999)

*Lissochilus rutenbergianus* KRAENZL., Abh. Naturwiss. Vereine Bremen 7: 257. 1882

Madagascar, D.C. RUTENBERG, HBG501702: ISO  
ann. KRÄNZLIN: Typus; Blüte d. Orig. Exempl. in Bremen  
ann. CRIBB: *Eulophia livingstoniana* (RCHB. F.) SUMMERH.

*Lissochilus stuhlmannii* KRAENZL., Bot. Jahrb. Syst. 19: 249. 1894

Tanzania, [Seengebiet, Bukoba], F. STUHLMANN 3228[3220], HBG501761: HOLO?  
ann. KRÄNZLIN: Typus!  
= *Eulophia streptopetala* LINDL. var. *streptopetala*

*Listrostachys tenerrima* KRAENZL., Vierteljahrsschr. Naturf. Ges. Zürich 68: 424. 1923

Congo (Dem. Rep.), 28 Aug. 1908, TH. KASSNER 3239, HBG500897: ISO  
= *Rhipidoglossum mildbraedii* (KRAENZL.) GARAY

*Lycaste hennisiana* KRAENZL., Orchis 1: 33. 1906

(Colombia), Hort. W. HENNIS, Hildesheim, HBG501765: HOLO  
ann. KRÄNZLIN: Typus!

*Hyperanthus glandulosus* SCHLTR., Bot. Jahrb. Syst. 39: 44. 1906

New Caledonia, auf den Bergen bei Paita, 9 Oct 1902, R. SCHLECHTER 14971,  
HBG501768: ISOSYN  
New Caledonia, auf den Bergen am Ngoye, 19 Nov 1902, R. SCHLECHTER 15379,  
HBG501766: ISOSYN  
New Caledonia, auf den Bergen bei Ou Hinna, 6 Jan 1903, R. SCHLECHTER 15669,  
HBG501767: ISOSYN

*Lyperanthus latilabris* SCHLTR., Bot. Jahrb. Syst. 39: 44. 1906

New Caledonia, auf den Bergen am Ngoye, 31 Oct 1902, R. SCHLECHTER 15161,  
HBG517018: ISO

≡ *Megastylis latilabris* (SCHLTR.) SCHLTR.

*Masdevallia antioquiensis* F. LEHM. & KRAENZL. ex KRAENZL., Bot. Jahrb. Syst. 26: 456.  
1899

Colombia, F.C. LEHMANN 7227, HBG501770: HOLO

*Masdevallia aperta* KRAENZL., Repert. Spec. Nov. Regni Veg. 17: 430. 1921  
(Costa Rica), A.R. ENDRES 652, HBG501876: HOLO  
≡ *Pleurothallis aperta* (KRAENZL.) AMES

*Masdevallia chiquindensis* KRAENZL., Bull. Misc. Inform. Kew: 104. 1925  
Ecuador, F.C. LEHMANN 6528, HBG501771: HOLO-fragment (=ISO)

*Masdevallia chlorotica* KRAENZL., Bull. Misc. Inform. Kew: 107. 1925  
Colombia, F.C. LEHMANN 8506, HBG501772: HOLO-fragment (=ISO)

*Masdevallia fertilis* KRAENZL., Bull. Misc. Inform. Kew: 108. 1925  
Colombia, F.C. LEHMANN 7037, HBG501773: HOLO-fragment (=ISO)

*Masdevallia jalapensis* KRAENZL., Repert. Spec. Nov. Regni Veg. Beih. 34: 117. 1925  
Guatemala, an Felsen & am Boden in lichten Eichenwäldern auf d. Wege von Sa. Rosa  
nach Jalapa, F.C. LEHMANN 1296, HBG501775: HOLO  
ann. CHRISTENSON: ≡ *Pleurothallis jalapensis* (KRAENZL.) GARAY

*Masdevallia palmensis* KRAENZL., Bull. Misc. Inform. Kew: 100. 1925  
Colombia, F.C. LEHMANN 4286, HBG501776: HOLO-fragment (=ISO)

*Masdevallia pastensis* KRAENZL., Repert. Spec. Nov. Regni Veg. 17: 424. 1921  
Ecuador, La Laguna b. Pasto, E. & F. KLABOCH, HBG501777: HOLO  
ann. KRÄNZLIN: Typus!

*Masdevallia sanctae-fidei* KRAENZL., Repert. Spec. Nov. Regni Veg. 17: 414. 1921 (as  
“sanctae fidei”)  
(Columbia), Hort. F. SANDER, HBG501774: HOLO  
ann. KRÄNZLIN: Typus!

*Masdevallia schizopetala* KRAENZL., Bull. Misc. Inform. Kew: 101. 1925

Colombia, F.C. LEHMANN 3836, HBG501779: HOLO-fragment (=ISO)

*Masdevallia tovarensis* RCHB. f., Linnaea 22: 818. 1849 (Fig. 12)

Venezuela, Tovar, K. MORITZ 605, HBG506725: ISO

ann. LUER: Typus

*Masdevallia xanthura* SCHLTR., Repert. Spec. Nov. Regni Veg. 27: 39. 1929

Bolivia, Hacienda Simaco sobre el camino a Tipuani, Feb 1920, O. BUCHTIEN 5022, HBG501780: ISO

*Maxillaria casta* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 30. 1928

Bolivia, región Mapiri, San Carlos, 19 Feb 1927, O. BUCHTIEN 548, HBG500375: HOLO

*Maxillaria echinochila* KRAENZL., Ark. Bot. 16(8): 22. 1920(1921)

[Brazil, P. DUSÉN 7012A], HBG501782: ISO

ann. KRÄNZLIN: Typus

*Maxillaria fallax* SCHLTR., Repert. Spec. Nov. Regni Veg. 27: 70. 1929

Bolivia, Hacienda Simaco sobre el camino a Tipuani, Feb 1920, O. BUCHTIEN 5052, HBG501783: ISO

*Maxillaria gracilifolia* KRAENZL., Mitt. Inst. Allg. Bot. Hamburg 6: 420. 1927

(Guatemala, A. ULMCKE), Hort. Bot. Hamburg, fl. May 1927, HBG501784: HOLO  
ann. KRÄNZLIN: Typus!

*Maxillaria guentheriana* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 31: 1928

Bolivia, Región de Mapiri, San Carlos, bei Silvapata, 23 Jan 1917, O. BUCHTIEN 509, HBG500378: HOLO; HBG500379, HBG500380: ISO

*Maxillaria herzogiana* KRAENZL., Repert. Spec. Nov. Regni Veg. 6: 20. 1908

Bolivia, Epiphyt in d. Buschzone des Cerro Amboró, Oct 1904, Th. HERZOG 220, HBG501785: HOLO

ann. KRÄNZLIN: spec. typ. aut.!

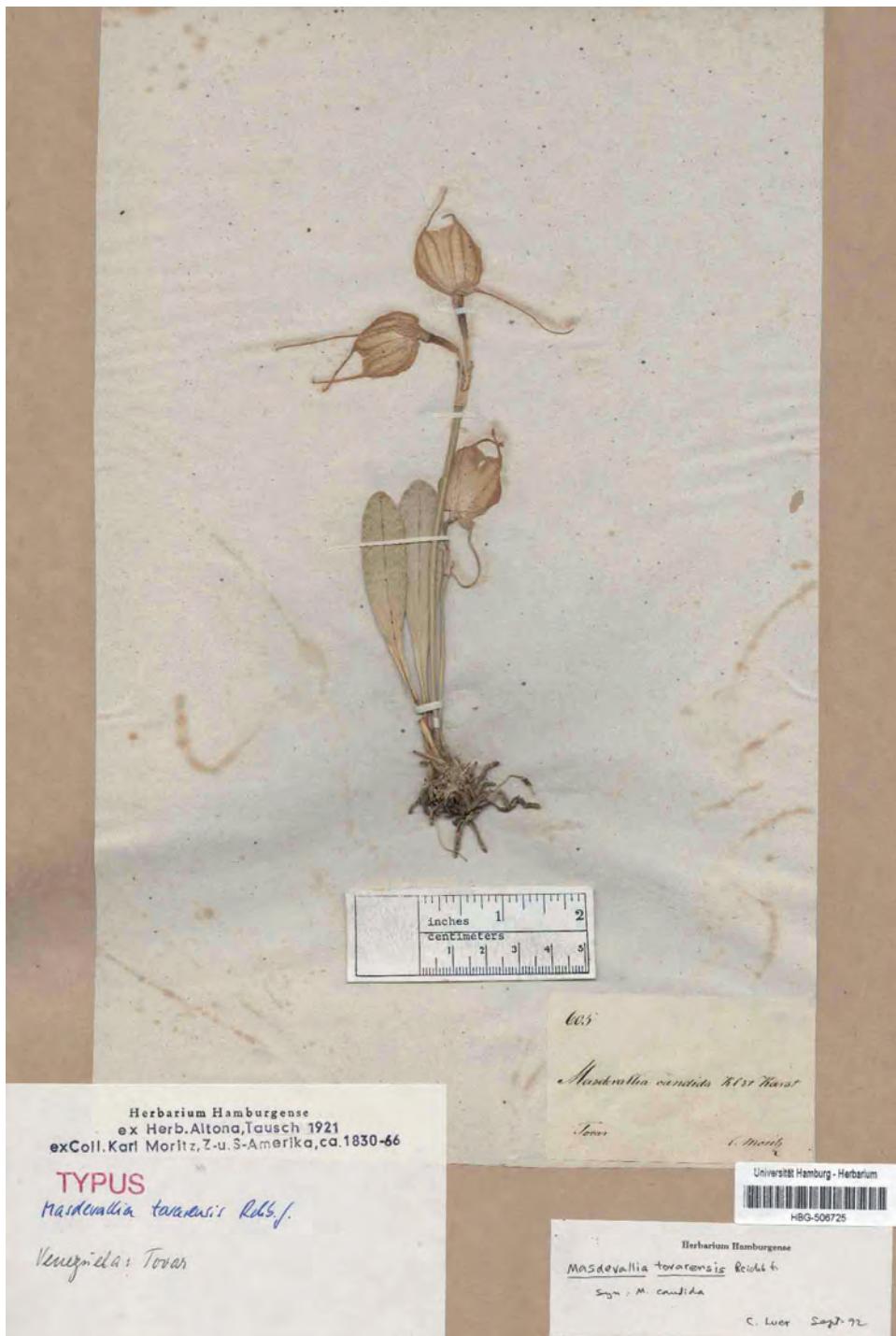


Fig. 12 Type of *Masdevallia tovarensis* Rchb. f., a species collected by K. Moritz in Venezuela in the Colonia Tovar near Caracas. A large set of Moritz specimens went to HBG when the botanical collection of the Museum Altona was taken over after World War II.

*Maxillaria johniana* KRAENZL., Gard. Chron. 1, ser. 3, 47: 66. 1910

(Peru, Pozuzo), Hort. K.W. JOHN, Andernach, fl. Dec 1909, HBG501786: HOLO;  
HBG501787: ISO?  
ann. KRÄNZLIN: Typus!

**Note** Both sheets have been marked as type by KRÄNZLIN with HBG501787 containing a single flower and probably being a duplicate of the holotype.

*Maxillaria monacensis* KRAENZL., Repert. Spec. Nov. Regni Veg. 24: 49. 1927

(Colombia?), Hort. Nymphenburg, München, HBG501788: HOLO  
ann. KRÄNZLIN: Typus!

*Maxillaria nardooides* KRAENZL., Repert. Spec. Nov. Regni Veg. 1: 90 1905

Peru, La Merced, A. WEBERBAUER 1422, HBG501790: HOLO  
ann. KRÄNZLIN: Typus

*Maxillaria nymphopolitana* KRAENZL., Repert. Spec. Nov. Regni Veg. 24: 50. 1927

(Colombia?), Hort. Nymphenburg, Munich, HBG501791: HOLO  
ann. KRÄNZLIN: Typus!

*Maxillaria polybulbon* KRAENZL., Repert. Spec. Nov. Regni Veg. 6: 19. 1908

Bolivia, in der Buschzone des Cerro Amboro, Oct 1907, Th. HERZOG 219, HBG501793:  
HOLO  
ann. KRÄNZLIN: spec. typ. aut.

*Maxillaria rhodosticta* KRAENZL., Repert. Spec. Nov. Regni Veg. 24: 223. 1928

(Mexico), Hort. Bot. Hamburg, fl. Jul 1927, HBG501794: HOLO  
ann. KRÄNZLIN: Typus!

*Maxillaria spegazziniana* KRAENZL., Orchis 2: 51. 1908

Argentina, Distr. las Misiones am Rio S. Antonia, May 1907, C.L. SPEGAZZINI,  
HBG501795: HOLO  
ann. KRÄNZLIN: Typus

*Maxillaria striatella* KRAENZL., Repert. Spec. Nov. Regni Veg. 24: 359. 1928

(Guatemala), Hort. Bot. Hamburg, HBG501434: HOLO

***Maxillaria urbaniana*** F. LEHM. & KRAENZL. ex KRAENZL., Bot. Jahrb. Syst. 26: 483. 1899

Ecuador, Cucuca, F.C. LEHMANN 6898, HBG501796: HOLO  
ann. KRÄNZLIN: Typus

***Maxillaria vulcanica*** F. LEHM. & KRAENZL. ex KRAENZL., Bot. Jahrb. Syst. 26: 484. 1899

Ecuador, F.C. LEHMANN 8103, HBG501797: HOLO  
ann. KRÄNZLIN: Typus

***Megaclinium buchenavianum*** KRAENZL., Bot. Jahrb. Syst. 36: 115. 1905

Cameroon, Bipindehof, G. ZENKER 2894, HBG501800: HOLO  
ann. SZLACHETKO:  $\equiv$  *Bulbophyllum buchenavianum* (KRAENZL.) DE WILD.  
 $=$  *Bulbophyllum calypratum* KRAENZL. (see SZLACHETKO & OLSZEWSKI 2001: 405)

***Megaclinium hebetatum*** KRAENZL., Vierteljahresschr. Naturf. Ges. Zürich 68: 423.  
1923

(Cameroon, [SPELLENBERG]), Hort. Zürich, HBG501801: HOLO?  
ann. CHRISTENSON: "Spellenberg" – ?, HOLO-Z.  
ann. SZLACHETKO:  $\equiv$  *Bulbophyllum hebetatum* (KRAENZL.)  
 $=$  *Bulbophyllum imbricatum* LINDL. (see SZLACHETKO & OLSZEWSKI 2001)

***Microstylis gracilis*** COGN. in MARTIUS, Fl. Bras. 3.6: 549, 550. 1904 nom. illeg. non RIDL.  
1888

Brazil [Minas Gerais, Serra do Itatiaia], in Wäldchen, 4 Jan 1896, E. ULE 3756,  
HBG500367: ISO  
ann. COGNIAUX "parsuit une espèce nouvelle. nomtré provisoirement M. ulei Cogn."  
ann. CHRISTENSON: = *Malaxis*

***Microstylis laxa*** J. J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 40. 1927 nom. illeg. non RIDL.  
1916

see *Microstylis rajana* J. J. WOOD

***Microstylis micholitzianus*** KRAENZL., Bot. Jahrb. Syst. 17: 482. 1893

(Papua New Guinea, Jan 1892, W. MICHOLITZ), Hort. F. SANDER, St. Albans,  
HBG501803: HOLO

***Microstylis ovatilabia*** SCHLTR., Repert. Spec. Nov. Regni Veg. 16: 330. 1920

Brazil, Paraná, Jaguariahyva, in silvula ad terram, 19 Apr 1910, P. DUSÉN 9780,  
HBG506869: ISO

*Microstylis partitiloba* J.J. Sm., Mitt. Inst. Allg. Bot. Hamburg 7: 41. 1927

Indonesia, West-Borneo, Bukit Raja, 15 Dec 1924, H. WINKLER 875, HBG500506: HOLO

ann. MARGONSKA: = *Crepidium lowii* (E. MORREN) SZLACH.

*Microstylis rajana* J.J. Wood in Wood & CRIBB, Checkl. Orchids Borneo: 102. 1994

Indonesia, West-Borneo, auf dem Bukit Raja, 21 Dec 1924, H. WINKLER 1017, HBG500504: HOLO

ann. MARGONSKA: = *Crepidium lowii* (E. MORREN) SZLACH.

*Microstylis schliebenii* Mansf., Notizbl. Bot. Gart. Berlin-Dahlem 11: 808. 1933

Tanzania, Tanganyika Terr., Bezirk Mahenge, Umgebung der Station Mahenge, Savanne, 1 Mar 1932, H.J. SCHLIEBEN 1848, HBG500366: ISO

*Microstylis streptopetala* B.L. ROB. & GREENM., Proc. Amer. Acad. Arts 32: 36. 1895

Mexico, Oaxaca, Siera de San Felipe, 30 Jul 1894, C.G. PRINGLE 4808, HBG501336: ISO

*Microstylis tenuis* S. WATSON, Proc. Amer. Acad. Arts 26: 152. 1891

Mexico, State of Mexico, Flor de Maria, 27 Jul 1890, C.G. PRINGLE 3186, HBG501338: ISO

*Microtis aemula* SCHLTR., Bot. Jahrb. Syst. 39: 37. 1906

New Caledonia, auf den Hügeln bei Yaouhe, 20 Sept 1902, R. SCHLECHTER 14724, HBG501805: ISO

*Microtis pulchella* LINDL. var. *vivax* LINDL., Gen. Sp. Orchid. Pl.: 395. 1840

Australia, Tasmania, J. MILLIGAN (=GUNN 918), HBG506707: ISO

ann. CLEMENTS: isotype

*Miltonia quadrijuga* DUSÉN & KRAENZL., Ark. Bot. 16(8): 23. 1920(1921)

Brazil, Serra do Mar, 24 Jun 1909, P. DUSÉN 11925, HBG501806: ISO

ann. KRÄNZLIN: Typus!

*Monadenia rufescens* LINDL., Gen. Sp. Orchid. Pl.: 356. 1838 non (THUNB.) RCHB. F. 1883

South Africa, Kapland, J.F. DRÈGE 1252, HBG502610: ISOLECTO? (see LINDER 1981b)  
= *Disa comosa* (RCHB. F.) SCHLTR.

**Note** LINDLEY (1830–1840) listed several specimens collected by DRÈGE under no. 1252. Specimens of a plant collected at different localities are normally indicated by letters a, b, c etc. in the DRÈGE herbarium. These letters are missing, however, for the HBG specimen so that the exact collecting locality remains uncertain.

***Mycaranthes lobata*** BLUME, Bijdr. Fl. Ned. Ind. 7: 352. 1825

Indonesia, Java, C. L. BLUME, HBG501662: TYPUS-fragment (=ISO)

ann. KRÄNZLIN: vom Orig. Ex. Blumes

≡ *Eria lobata* (BLUME) RCHB. F.

***Mycaranthes obliterata*** BLUME, Bijdr. Fl. Ned. Ind. 7: 353. 1825

[Indonesia, Java, Salak], C. L. BLUME, HBG506663: TYPUS-fragment (=ISO)

≡ *Eria obliterata* (BLUME) RCHB. F.

***Nabalua angustifolia*** DE VOGEL, Blumea 30: 202. 1984

Malaysia, upper Kinabalu, 13–15 Jan 1932, J. & M.S. CLEMENS 27159 (=27171), HBG506785: ISO

***Neolauchia pulchella*** KRAENZL., Bull. Herb. Boissier 5: 110. 1897

(Brazil), Hort. LIECHTENSTEIN, Eisgrub [Lednice], Mähren, HBG501808: HOLO

ann. KRÄNZLIN: Typus autoris

≡ *Isabelia pulchella* (KRAENZL.) VAN DEN BERG & M.W. CHASE

***Nephelaphyllum trapoides*** J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 37. 1927

Indonesia, West-Borneo, auf dem Bukit Raja, 19 Dec 1924, H. WINKLER 948, HBG501804: SYN

Indonesia, West-Borneo, auf dem Bukit Raja, 21 Dec 1924, H. WINKLER 1014, HBG500452, HBG500538: SYN

***Nervilia diantha*** SCHLTR., Bot. Jahrb. Syst. 53: 553. 1915

Tanzania, Nyassa Hochland, Station Kyimbila, 13 May 1912, A. STOLZ 1260, HBG506704: ISOLECTO

= *Nervilia kotschyi* (Rchb. f.) SCHLTR. (see PETTERSSON 1990)

***Neuwiedia inae*** DE VOGEL, Blumea 17: 333. 1969

Indonesia, West-Borneo, auf dem Bukit Tilung, 8 Feb 1925, H. WINKLER 1485, HBG500539: HOLO

*Notylia buchtienii* SCHLTR., Repert. Spec. Nov. Regni Veg. 10: 458. 1912

Bolivia, San Carlos bei Mapiri, auf Bäumen, Sept 1907, O. BUCHTIEN 1285, HBG506724: ISO

*Notylia lilacina* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 29. 1928

Bolivia, Región de Mapiri, San Miguel, auf Kaffeebäumen, 4 May 1927, O. BUCHTIEN 482, HBG500444: HOLO; HBG500443: ISO  
≡ *Macroclinium lilacinum* (KRAENZL.) CHRISTENSON

*Oberonia djongkongensis* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 43. 1927

Indonesia, West-Borneo, bei Djongkong, Ufer, 22 Jan 1925, H. WINKLER 1304, HBG501811: HOLO

*Oberonia hosseusii* SCHLTR., Repert. Spec. Nov. Regni Veg. 2: 84. 1906

Thailand, Chieng-Mai, Gipfel des Doi-Sutep, 11 Dec 1904, C.C. HOSSEUS 186, HBG501812: ISO

*Oberonia neocalledonica* SCHLTR., Bot. Jahrb. Syst. 39: 61. 1906 (as "neo-caledonica")

New Caledonia, auf den Bergen bei Yahouhé, 22 Sept 1902, R. SCHLECHTER 14766, HBG501813: ISO

*Octomeria alborosea* KRAENZL., Ark. Bot. 16(8): 16. 1920(1921)

Brazil, Paraná, Serra do Mar, Monte Allegre, in truncis arb., 23 Nov 1909, P. DUSÉN 9031, HBG501875: ISO

ann. KRÄNZLIN: Typus!

ann. CHRISTENSON: ≡ *Pleurothallis alborosea* (KRAENZL.) BRADE

*Octomeria chamaeleptotes* RCHB. f. var. *grandiflora* COGN. in MARTIUS, Fl. Bras. 3(4):

641. 1896

Brazil, Theresopolis (prov. Rio de Janeiro), Feb 1888, J. DE MOURA 111, HBG506723: ISOSYN

*Octomeria decumbens* COGN. in MARTIUS, Fl. Bras. 3(4): 642. 1896

Brazil, Theresopolis (prov. Rio de Janeiro), Feb 1888, J. DE MOURA 91, HBG506722: ISO

*Octomeria guentheriana* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 19. 1928

Bolivia, Region de Mapiri, San Carlos, 11 Mar 1927, O. BUCHTIEN 562, HBG501393: HOLO; HBG500439, HBG501394, HBG501395: ISO

*Odontochilus upoluensis* KRAENZL., Mitt. Inst. Allg. Bot. Hamburg 5: 236. 1923

Samoa, Upolu, E. GRAEFFE 1258, HBG500447: HOLO; HBG500448: ISO  
ann. KRÄNZLIN: Typus!

*Odontoglossum brandtii* KRAENZL. & WITTM., Gartenflora 38: 378. 1889

(Central-South America), Hort. I. BANDT, Zürich, HBG501816: HOLO  
ann. KRÄNZLIN: Typus

**Note** Originally labelled as “*Odontoglossa brandtsiae* Kraenzl.”

*Odontorrhynchus variabilis* GARAY, Bot. Mus. Leafl. 28: 287. 1982

Chile, Chiloé, Cucao, Mar 1924, E. WERDERMANN 303, HBG500793: ISO

*Oncidium angustisepalum* KRAENZL. in ENGLER, Pflanzenr. IV. 50(Heft 80): 203. 1922

Costa Rica, A.R. ENDRES, HBG501818: HOLO-fragment (=ISO)  
ann. KRÄNZLIN: Typus, ex herb. Vindob.

*Oncidium anomalum* RCHB. F., Linnaea 22: 845. 1849

(South America), HBG501819: TYPUS-fragment (=ISO)  
ann. KRÄNZLIN: Typus ex Herb. Rchb.

**Note** Not listed in CHRISTENSON (1994), but see page 345, middle left column.

*Oncidium arietinum* KRAENZL. in ENGLER, Pflanzenr. IV. 50(Heft 80): 131. 1922

(Central-South America), HBG501821: HOLO-fragment (=ISO)  
ann. KRÄNZLIN: Typus! Ex herb. Rchb.

*Oncidium asparagoides* KRAENZL. in ENGLER, Pflanzenr. IV. 50(Heft 80): 175. 1922

Costa Rica, A.R. ENDRES 127, HBG501822: HOLO  
ann. KRÄNZLIN: Typus

*Oncidium bilamellatum* KRAENZL. in ENGLER, Pflanzenr. IV. 50(Heft 80): 131. 1922

Colombia, Ocaña, A. BRUCHMÜLLER, HBG501823: HOLO

*Oncidium blanchetii* RCHB. F., Linnaea 22: 845. 1849

Brazil, Bahía, J.S. BLANCHET, HBG506796: TYPUS-fragment (=ISO)  
ann. KRÄNZLIN: ex Herb. Rchb.



Fig. 13 Topotype of *Orchis ruthei* M. SCHULZE, recollected by R. RUTHE at the *locus classicus* near Swinemünde (formerly Germany, today Poland) and sent as living plant to J. RUPPERT. Topotype material may become relevant in matters of species conservation and DNA barcoding.

***Oncidium boliviianum*** SCHLTR., Repert. Spec. Nov. Regni Veg. 10: 459. 1912

Bolivia, región tropical, Charopampa b. Mapiri, auf Bäumen, Nov 1907, O. BUCHTIEN 1287, HBG500424, HBG500425: ISO

***Oncidium boothianum*** RCHB. f., Bonplandia 2: 14. 1854

(Venezuela), Hort., HBG501824: TYPUS-fragment? (=ISO?)  
ann. KRÄNZLIN: Typus, ex herb. Rchb.

**Note** Not listed in CHRISTENSON (1994), but see page 345 middle left column.

***Oncidium cabagae*** SCHLTR., Repert. Spec. Nov. Regni Veg. 9: 292. 1911

[Costa Rica, Cabagra, H. PITTIER 6589], HBG501825: HOLO-fragment (=ISO)  
ann. KRÄNZLIN: Typus

***Oncidium calyptostalix*** KRAENZL. in ENGLER, Pflanzenr. IV. 50(Heft 80): 260. 1922

Costa Rica, A. R. ENDRES, HBG501826: HOLO-fragment (=ISO)  
ann. KRÄNZLIN: Typus

***Oncidium caucanum*** SCHLTR., Repert. Spec. Nov. Regni Veg., Beih. 7: 190. 1920

(Central-South America), HBG501827: HOLO?  
ann. KRÄNZLIN: = *O. drepanopterum* Rchb. in sched. Monogr. S. 321.

***Oncidium cheiri*** RCHB. f. ex KRAENZL. in ENGLER, Pflanzenr. IV. 50(Heft 80): 197. 1922

(South America), HBG501828: TYPUS-fragment (=ISO)  
ann. KRÄNZLIN: Typus, ex Herb. Rchb.

**Note** This name first appeared in LINDEN (1882: 99) as a *nomen nudum* ("*Oncidium cheiri* RCHB. f. ex Linden"). It has been validated later by KRÄNZLIN (1922: 197). Not listed in CHRISTENSON (1994), but see page 345 middle left column.

***Oncidium cheiophoroides*** KRAENZL. in ENGLER, Pflanzenr. IV. 50(Heft 80): 199. 1922

Costa Rica, A. R. ENDRES HBG501829: HOLO  
ann. KRÄNZLIN: Typus

***Oncidium costaricensis*** SCHLTR., Repert. Spec. Nov. Regni Veg. 9: 30. 1910

Costa Rica, [Terraba, H. PITTIER 3859], HBG501830: HOLO?  
ann. KRÄNZLIN: Typus!

*Oncidium dielsianum* KRAENZL. in ENGLER, Pflanzenr. IV. 50(Heft 80): 197. 1922

Costa Rica, A. R. ENDRES, HBG501834: HOLO-fragment (=ISO)

ann. KRÄNZLIN: Typus!

*Oncidium drepanopterum* KRAENZL. in ENGLER, Pflanzenr. IV. 50(Heft 80): 185. 1922

Note See *Oncidium caucanum* SCHLTR.

*Oncidium hrubyianum* RCHB. F., Gard. Chron. 1, n. ser., 19: 562. 1883

(Central-South America), cult., HBG501831: TYPUS-fragment (=ISO)

ann. KRÄNZLIN: Typus!, cult. ex herb. Rchb.

= *Oncidium cruciatum* RCHB. F.

*Ophrys oestrifera* M. BIEB. ssp. *akcaliensis* T. PERSCKE, J. Eur. Orch. 40(2): 237. 2008

Turkey, Kirshu, 2 May 2003, T. PERSCHKE, HBG506484: HOLO

*Ophrys umbilicata* DESF. ssp. *calycadniensis* T. PERSCKE, J. Eur. Orch. 40(2): 230. 2008

Turkey, Kalycadnos (Göksu), 16 Mar 2004, T. PERSCHKE, HBG506485: HOLO

*Orchis habenarioides* KING & PANTL., Ann. Roy. Bot. Gard., Calcutta 8: 302. 1898

India, Sikkim, Lachong Valley, Aug 1895, R. PANTLING 404, HBG501832: ISO

≡ *Gymnadenia habenarioides* (KING & PANTL.) VERM.

*Orchis lapponica* LAEST. ex RCHB. F., Icon. Fl. Germ. Helv. 13/14: 59. 1851

Sweden, Karesuando (Lapponiae), 1840, L. L. LAESTADT, HBG506849: ISO

*Orchis pratensis* SALZM. ex LINDL., Gen. Sp. Orchid. Pl.: 328. 1835

Brazil, Bahía, in pratis subhumidis, P. SALZMANN, HBG500134: ISOSYN (see BATISTA et al. 2011b: 248)

≡ *Habenaria pratensis* (LINDL.) RCHB. F.

*Orchis ruthei* M. SCHULZE in RUTHE, Deutsch. Bot. Monatsschr. 15: 237. 1897 (Fig. 13)

Poland, Pommern, Osterkopp bei Swinemünde, 14 Jun 1897, R. RUTHE, HBG506769: TYPUS

Poland, Pommern, bei Swinemünde, 10 May 1901, R. RUTHE, HBG506766, HBG506767, HBG506768: TOPO

Poland, Swinemünde, 16 Mar 1898, R. RUTHE, HBG500900: TOPO

Poland, Swinemünde, Jun 1900–1903, R. RUTHE, HBG500901: TOPO

= *Dactylorhiza traunsteineri* (SAUT. ex RCHB.) Soó

*Orchis sphagnicola* HÖPPNER, Sitzungsber. Naturhist. Verein Preuss. Rheinl. 1926: 23.

1927

Germany, Sphagnummoore zwischen Wahn und Spich, 1926, A. SCHUMACHER,  
HBG517021, HBG517022, HBG517023: TOPO

≡ *Dactylorhiza majalis* ssp. *sphagnicola* (HÖPPNER) H.A. PEDERSEN & HEDRÉN

*Orchis traunsteineri* SAUT. ex RCHB., Fl. Germ. Excurs.: 140.18. 1831

Austria, in sphagnosis ad Schwarzsee pr. Kitzbühl, A. SAUTER or J. TRAUNSTEINER,  
HBG506789: TYPUS? or TOPO?

Austria, Moorböden am Schwarzsee b. Kitzbühel, J. TRAUNSTEINER (REICHENBACH, Fl.  
Germ. exs. no. 949), HBG519468: TYPUS? or TOPO?

≡ *Dactylorhiza traunsteineri* (SAUT. ex RCHB.) Soó

**Note** The sheet HBG506789 bears two labels. One seems to have been written by A. SAUTER: "in sphagnos. ad Schwarzsee pr. Kitzbühl, A. Sauter", the other label is in the handwriting of J.N. BUEK from Hamburg: "l. pr. Kitzbühel e manu D<sup>r</sup>is. Sauter". Both labels suggest at first glance SAUTER as the collector. However, according to the protologue the type has been collected by J. TRAUNSTEINER. It remains uncertain if the present specimen is part of the original material that had been acquired by SAUTER (from TRAUNSTEINER?) who further distributed it to BUEK, or if the plant has been recollected at the *locus classicus* by SAUTER alone. In the latter case the present material would be a topo-type.

*Ornithidium flaccidum* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 31. 1928

Bolivia, Región de Mapiri, San Carlos, bei Sarampiuni, 7 Apr 1927, O. BUCHTIEN 526,  
HBG501836: HOLO

ann. KRÄNZLIN: Typus!

ann. CHRISTENSON: ≡ *Scaphyglottis flaccida* (KRAENZL.) GARAY

*Ornithidium lehmannii* KRAENZL., Bot. Jahrb. Syst. 26: 486. 1899

Colombia, Buenaventura, F.C. LEHMANN 5197, HBG501837: HOLO

ann. KRÄNZLIN: Typus

*Ornithidium mapiriense* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 23. 1928

Bolivia, región de Mapiri, San Carlos, 7 Mar 1927, O. BUCHTIEN 558, HBG500565,  
HBG500566, HBG500567, HBG500568, HBG500569: ISO

**Note** The sheets HBG500565 and HBG500566 of BUCHTIEN no. 558 have been originally labelled as "*Ornithidium deflexum* KRAENZL.", an unpublished herbarium name.

*Ornithidium pfitzerianum* F. LEHM. & KRAENZL. ex KRAENZL., Bot. Jahrb. Syst. 26: 486.  
1899

Colombia, F.C. LEHMANN 6292, HBG501839: HOLO  
ann. KRÄNZLIN: Typus

**Note** The article containing this new species was authored by KRÄNZLIN alone, whereas the name had been ascribed to “Lehm. & Krzl.”. However, there is no indication that Lehmann contributed in any way to the validating diagnosis and, therefore, full authorship is given here as “F. Lehm. & KRAENZL. ex KRAENZL.”.

*Ornithidium rhomboglossum* SCHLTR., Repert. Spec. Nov. Regni Veg. 27: 78. 1929

Bolivia, Hacienda Casana sobre el camino a Tipuani, auf Waldbäumen, 27 Jan 1923, O. BUCHTIEN 7220, HBG501840: ISO

*Ornithidium weberbauerianum* KRAENZL., Repert. Spec. Nov. Regni Veg. 1: 91. 1905

Peru, Berge bei Huacapistana, A. WEBERBAUER 2056, HBG501841: HOLO

*Ornithocephalus graciliscapus* COGN., Bull. Soc. Roy. Bot. Belgique 43: 334. 1907

Brazil, Epiphyt Estrema Juruá Miry, Rio Juruá sup., Sept 1901, E. ULE 6924, HBG501842: ISO

*Orthochilus welwitschii* RCHB. f., Flora 48: 186. 1865

[Angola, Huilla, F.M.J. WELWITSCH 720], HBG501719: TYPUS-fragment (=ISO)  
ann. KRÄNZLIN: vom Orig. Ex. Wien  
≡ *Eulophia welwitschii* (RCHB. f.) ROLFE

*Paphiopedilum fairieanum* (LINDL.) STEIN var. *bohlmannianum* MATHO, Orchideenbrief 1(42): 1. 1942

(Asia), Hort. Bot. Hamburg, fl. 5 Feb 1942, HBG501843: HOLO  
ann.: Original!

≡ *Paphiopedilum fairieanum* (LINDL.) STEIN f. *bohlmannianum* (MATHO) BRAEM

*Pedilonum kuhlii* BLUME, Bijdr. Fl. Ned. Ind. 7: 321. 1825

Indonesia, Java, Berg Salak, C.L. BLUME, HBG501531: TYPUS-fragment (=ISOLECTO or ISONEO?)  
ann. KRÄNZLIN: “Dendrob. kuhlii (Bl.) Lindl.”, vom Orig. Ex. BLUMES  
ann. DAUNCEY: ? Isolecto- or Isoneotype, = *Dendrobium hasseltii* (BLUME) LINDL.

*Pedilonum undulatum* BLUME, Bijdr. Fl. Ned. Ind. 7: 322. 1825

Indonesia, Java, C. L. BLUME, HBG501533: TYPUS-fragment (=ISO)  
 ann. KRÄNZLIN: Orig. Ex. Blumes, = *Dendrobium hymenopterum* HOOK. F.  
 ≡ *Eurycaulis undulatus* (BLUME) M. A. CLEM.

*Pelezia longicornu* COGN., Bot. Jahrb. Syst. 21: 425. 1896

Brazil, Chapadoes bei Cheia Ponte, Aug 1892, E. ULE 3118, HBG506538: ISO  
 ann. SZLACHETKO: ≡ *Eltroplectris longicornu* (COGN.) PABST

*Pelezia pringlei* FERNALD, Proc. Amer. Acad. Arts 35: 562. 1900

Mexico, Vera Cruz, wooded hills near Jalapa, Apr 1899, C.G. PRINGLE 8122,  
 HBG501847: ISO

*Pelezia roseoalba* RCHB. F., Bonplandia 2(2): 11. 1854

South America, K. MORITZ 41, HBG506657: TYPUS?  
 ann. SZLACHETKO: ≡ *Eltroplectris roseoalba* (RCHB. F.) HAMER & GARAY

*Peristylus ciliatus* CARR., Gard. Bull. Straits Settlem. 8: 169. 1935

Malaysia, Tenompok, 7 Jun 1932, J. & M.S. CLEMENS 29816, HBG500863: ISOSYN

*Peristylus filiformis* KRAENZL., Abh. Naturwiss. Vereine Bremen 7: 258. 1882

Madagascar, Antananarivo, 18 Dec. 1877, D.C. RUTENBERG, HBG500598: HOLO  
 = *Cynorkis papillosa* (RIDL.) SUMMERH.

**Note** CHRISTENSON (1994: 351) cites "Hildebrand 3860" as isotype, however, KRÄNZLIN (1882: 258) based his diagnosis on a RUTENBERG specimen. In fact, HILDEBRANDT 3860 is type of *Habenaria papillosa* RIDL. (≡ *Cynorkis papillosa* (RIDL.) SUMMERH., see DU PUY et al. 1999: 123).

*Peristylus warburgianus* KRAENZL., Orchid. gen. sp. 1: 519. 1898

Philippines, Süd-Mindanao, Zambauja, O. WARBURG, HBG501852: HOLO  
 ann. KRÄNZLIN: spec. typ. aut.

*Phaius pulchellus* KRAENZL., Abh. Naturwiss. Vereine Bremen 7: 254. 1882

[Madagascar, D.C. RUTENBERG], HBG501854: HOLO-fragment (=ISO)  
 ann. KRÄNZLIN: Typus

*Pholidota cyclopetala* KRAENZL. in ENGLER, Pflanzenr. IV. 50. 2(7): 151. 1907

(Indonesia, Süd-Sumatra), Hort. Bot. Berlin-Dahlem, fl. Mar 1907, HBG501855: HOLO  
ann. KRÄNZLIN: Typus!

*Phreatia hypsorrhynchos* SCHLTR., Bot. Jahrb. Syst. 39: 77. 1906

New Caledonia, auf den Bergen bei Oubatche, 15 Dec 1902, R. SCHLECHTER 15427,  
HBG501858: ISO

*Phreatia macrophylla* SCHLTR., Bot. Jahrb. Syst. 39: 78. 1906

New Caledonia, auf den Bergen bei Oubatche, 17 Dec 1902, R. SCHLECHTER 15465,  
HBG501861: ISO

*Phreatia neocalledonica* SCHLTR., Bot. Jahrb. Syst. 39: 78. 1906 (as "neo-caledonica")

New Caledonia, auf den Bergen bei Yahouhé, 22 Sep 1902, R. SCHLECHTER 14755,  
HBG501856: ISOSYN

New Caledonia, auf den Bergen am Ngoye, 5 Nov 1902, R. SCHLECHTER 15228,  
HBG501857: ISOSYN

*Phreatia oubatchensis* SCHLTR., Bot. Jahrb. Syst. 39: 79. 1906

New Caledonia, auf den Bergen bei Oubatche, 12 Dec 1902, R. SCHLECHTER 15393,  
HBG501859: ISO

*Phreatia pachyphylla* SCHLTR., Bot. Jahrb. Syst. 39: 79. 1906

New Caledonia, auf den Bergen bei Oubatche, 17 Dec 1902, R. SCHLECHTER 15471,  
HBG501860: ISO

*Phreatia petiolata* SCHLTR. in LAUTERBACH & SCHUMANN, Fl. Schutzgeb. Südsee, Nachtr:  
190. 1905

Papua New Guinea, Neu-Guinea, am Schumann-Fluss, Jan 1902, R. SCHLECHTER 13847,  
HBG501862: ISO

*Phreatia upoluensis* SCHLTR., Repert. Spec. Nov. Regni Veg. 3: 319, 320. 1907

Samoa, Bung Weiu, auf Baumstämmen, 16 May 1880, E. BETCHE 36, HBG500740:  
TYPUS

*Phreatia xantholeuca* KRAENZL., Repert. Spec. Nov. Regni Veg. 17: 386. 1921

(Philippines, A. LOHER), Hort. Nymphenburg, München, fl. May 1916, HBG501863:  
HOLO

ann. KRÄNZLIN: Typus!

*Physosiphon asaroides* KRAENZL., Orchis 2: 16. 1907

(Brazil, St. Catharina, FRANCKE), Hort. FUERSTENBERG-HUGENPOET, Mintard, HBG501864:  
HOLO

ann. KRÄNZLIN: Typus!

ann. Luer: = *Pleurothallis sarracenia* (KRAENZL.) LUER

*Physosiphon hystrix* KRAENZL., Ark. Bot. 16(8): 7. 1920(1921)

Brazil, Paraná, Jaguariahyva, in silvula, 27 Feb 1911, P. DUSÉN 11577, HBG500746: ISO  
ann. KRÄNZLIN: Typus!

*Physurus ulaei* COGN. in MARTIUS, Fl. Bras. 3(6): 548. 1906

Brazil, im Walde der Tijuca, 25 Apr 13896, E. ULE 4013, HBG506792: ISO

Brazil, im Walde der Tijuca, 20 Feb 1898, E. ULE (=4013), HBG506793: ISO

ann. COGNIAUX: poursuit une espèce nouvelles

*Piperia transversa* SUKSD., Allg. Bot. Zeitschr. 12: 43. 1906

USA, America borealis, Washington, in dichten Gebüschen am Columbia River bei  
Bingen, außerst selten!, 17 Jul 1902, W.N. SUCKSDORFF, HBG501865: TOPO

≡ *Platanthera transversa* (SUKSD.) R.M. BATEMAN

**Note** Type is SUCKSDORFF 2812, leg. July 1900.

*Platanthera angolensis* SCHLTR. in WARBURG, Kunene-Sambesi Exped.: 203. 1903

Angola, am Kuebe (Matungue), 26 Oct 1899, H. BAUM 326, HBG501866: ISO

*Platanthera canarensis* LINDL. ex RCHB. f., Linnaea 41: 100. 1877 *pro syn.*

India, prope urbem Mangalor, F. METZ (ed. HOHENACKER, Pl. Ind. or. (Terr. Canara)  
1851, no 142), HBG501051: TYPUS?

= *Habenaria crassifolia* A. RICH.

*Platanthera praeustipetala* KRAENZL., Repert. Spec. Nov. Regni Veg. 17: 103. 1921

China, Yunnan, Petsao lin, 25 Sept 1919, S. TÉN 1384, HBG501870: ISO

ann. KRÄNZLIN: Typus!

*Platanthera preussii* KRAENZL., Bot. Jahrb. Syst. 17: 63. 1893

Cameroon, Buea, 1891, P. PREUSS 967, HBG501851: HOLO

= *Pseudoperistylus microceras* (HOOK. F.) SZLACH. & OLSZEWSKI (see SZLACHETKO & OLSZEWSKI 1998: 212)

*Platanthera saprophytica* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 12. 1927

Indonesia, West-Borneo, auf dem Bukit Mulu, Urwald, Saprophyt, 2 Dec 1924, H. WINKLER 525, HBG501871: HOLO

*Platanthera wankelii* RCHB. F. in RCHB., Fl. Sax.: 89: 1842

Germany, Saxonia, ... (?) Obermuschutz b. Stollberg, WANKEL [WANCKEL], HBG506877: SYN

Germany, Saxonia, bei Markersdorf, WEIKER [WEICKER], HBG506876: SYN

= *Platanthera bifolia* (L.) RICH.

*Platyclinis bistorta* H. WENDL. & KRAENZL. in KRAENZL., Xen. Orchid. 3(10): 169. 1900

[(Indischer Archipel, Insel Maschate (?), W. MICHOLITZ), Hort. F. SANDER], HBG501598: TYPUS?

ann. (KRÄNZLIN?): Typus!

≡ *Dendrochilum bistortum* (H. WENDL. & KRAENZL.) J.J. SM.

*Pleione fargesii* GAGNEP., Bull. Soc. Bot. France 78: 26. 1931

China, Su-tchuen oriental., District de Tchen-Kéou-Tin, R.P. FARGES 534, HBG500605: ISO

*Pleurothallis albopurpurea* KRAENZL., Ark. Bot. 16(8): 11. 1920(1921)

Brazil, Paraná, Serrinha, 22 Jul 1909, P. DUSÉN 8516, HBG500467, HBG501874: ISO

ann. KRÄNZLIN: Typus!

*Pleurothallis beyrodtiana* KRAENZL., Repert. Spec. Nov. Regni Veg. 6: 65. 1908

(Colombia), Hort. O. BEYRODT, Berlin-Marienfelde, HBG501882: HOLO

**Note** This is a *nomen novum* for *Pleurothallis cogniauxiana* KRAENZL., an illegitimate later homonym of *Pl. cogniauxiana* SCHLTR. 1907.

*Pleurothallis cogniauxiana* KRAENZL., Orchis 2: 29. 1907 (Dec) *nom. illeg. non* SCHLTR.

1907 (15 Jan)

see *Pleurothallis beyrodtiana* KRAENZL.

*Pleurothallis convallium* KRAENZL., Ark. Bot. 16(8): 12. 1920(1921)

Brazil, Paraná, Vallinhos, in silva primaeva, 10 Nov 1910, P. DUSÉN 10786, HBG501913: ISO  
 ann. KRÄNZLIN: *Pleurothallis vallinhoriana* KRAENZL. Typus!

*Pleurothallis cuneifolia* COGN. var. *alboviridis* COGN. in MARTIUS, Fl. Bras. 3(4): 442. 1896

Brazil, Theresopolis (prov. Rio de Janeiro), Feb 1888, J. DE MOURA 113, HBG501900: TYPUS?

*Pleurothallis cuneifolia* COGN. var. *atrorubra* COGN. in MARTIUS, Fl. Bras. 3(4): 442. 1896

Brazil, Theresopolis (prov. Rio de Janeiro), Jun 1887, J. DE MOURA 25, HBG501901: TYPUS?

*Pleurothallis cuneifolia* COGN. var. *punctata* COGN. in MARTIUS, Fl. Bras. 3(4): 442. 1896

Brazil, Theresopolis (prov. Rio de Janeiro), Feb 1888, J. DE MOURA 95, HBG501903: TYPUS?

*Pleurothallis curitybensis* KRAENZL., Ark. Bot. 16(8): 8. 1920(1921)

Brazil, P. DUSÉN [R. LANGE] 9044, HBG501885: ISO

**Note** KRÄNZLIN (1920: 8) cited LANGE no. 9044 as type, whereas he wrote "Dusén no. 9044" on the label of the HBG sheet. LANGE was co-working with DUSÉN in Paraná (KRÄNZLIN 1920: 1).

*Pleurothallis glossochila* KRAENZL., Ark. Bot. 16(8): 14. 1920(1921)

Brazil, Paraná, Balsa Nova, 4 Aug 1909, R. LANGE & P. DUSÉN 8521, HBG501886: ISO  
 ann. KRÄNZLIN: Typus!

*Pleurothallis hamburgensis* KRAENZL., Kongl. Svenska Vet. Akad. Handl. 46(10): 49. 1911

Brazil, Rio Grande do Sul, Hamburger Berg, 27 Oct 1892, C.A.M. LINDMAN A459, HBG501887: ISO  
 ann. LUER: = *Brabosella crassifolia* (EDWALL) SCHLTR.

*Pleurothallis hartwegiiifolia* H. WENDL. & KRAENZL., Xenia orchid. 3(10): 165. t. 296.  
1900 (as "hartwiegiaefolia")

(Mexico, 1891, BERGE), fl. Hort. Herrenhausen, HBG501888: HOLO?

*Pleurothallis lentiginosa* F. LEHM. & KRAENZL. ex KRAENZL., Bot. Jahrb. Syst. 26: 446.  
1899

(Costa Rica), F.C. LEHMANN 1750, HBG501973: HOLO-fragment  
ann. CHRISTENSON: *Pseudooctomeria lentiginosa* (F. LEHM. & KRAENZL.) KRAENZL., Kew  
Bull.: 116. 1925. [HOLO-K]

*Pleurothallis longicornu* KRAENZL., Ark. Bot. 16(8): 13. 1920(1921)

Brazil, Paraná, Curityba, 24 Aug 1909, R. LANGE & P. DUSÉN 8518, HBG501890,  
HBG501891: ISO  
ann. KRÄNZLIN: Typus!

*Pleurothallis mentigera* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 50.  
1911

Brazil, Paraná, Roca Nova in tr. arb., 30 Dec 1908, P. DUSÉN 7433, HBG501892: ISO

*Pleurothallis mouraei* COGN. in MARTIUS, Fl. Bras. 3(4): 580. 1896

Brazil, Theresopolis (prov. Rio de Janeiro), Jul 1888, J. DE MOURA 302, HBG501893:  
ISOSYN

*Pleurothallis mouraei* COGN. var. *brevifolia* COGN. in MARTIUS, Fl. Bras. 3(4): 581. 1896

Brazil, Theresopolis (prov. Rio de Janeiro), Jul 1887, J. DE MOURA 46, HBG501894: ISO-  
SYN

*Pleurothallis ottonis* SCHLTR., Repert. Spec. Nov. Regni Veg. 27: 52. 1929

Bolivia, Hacienda Simaco sobre el camino a Tipuani, epiphytisch, 1920, O. BUCHTIEN  
5012, HBG501895: ISOLECTO (see CHRISTENSON 1996)

*Pleurothallis porphyrantha* KRAENZL., Ark. Bot. 16(8): 10. 1920(1921)

Brazil, Paraná, Serra da Prata, 1 Mar 1911, P. DUSÉN 11571, HBG501896: ISOSYN  
Brazil, São Paulo, Itarare in silvula, 9 Mar 1911, P. DUSÉN 11573, HBG501897,  
HBG501898: ISOSYN  
ann. KRÄNZLIN: Typus!

*Pleurothallis pringlei* SCHLTR., Repert. Spec. Nov. Regni Veg. 3: 20. 1906

Mexico, Oaxaca, on mossy oaks, Sierra de San Felipe, 14 Jun 1894, C.G. PRINGLE 4709,

HBG502075: ISO

ann. Luer:  $\equiv$  *Trichosalpinx pringlei* (SCHLTR.) LUER

*Pleurothallis resupinata* AMES, Orchidaceae 2: 272. 1908

Mexico, Michoacan, on oaks near Uruapan, 15 Nov 1905, C.G. PRINGLE 10135,

HBG501906: ISO

*Pleurothallis rhodosticta* KRAENZL., Repert. Spec. Nov. Regni Veg. 27: 255. 1930

(Central-South America), Hort. Bot. Hamburg, HBG501907: HOLO

ann. KRÄNZLIN: Typus!

*Pleurothallis sordida* KRAENZL., Arkiv. Bot. 16(8): 8. 1920

Brazil, Paraná, Curityba, 8 Aug 1909, R. LANGE & P. DUSÉN 8531, HBG501909: ISO

ann. KRÄNZLIN: Typus!

*Pleurothallis spathata* SCHLTR., Repert. Spec. Nov. Regni Veg. 27: 54. 1929

Bolivia, Hacienda Simaco sobre el camino a Tipuani, epiphytisch, Feb 1920, O. BUCHTIEN 5013, HBG501910: ISOLECTO (see CHRISTENSON 1996)

*Pleurothallis subulifolia* KRAENZL., Orchis 2: 91. 1908

(Brazil, Prov. Rio, Petropolis), Hort. I. BRANDT, Zürich, HBG501911: HOLO

ann. KRÄNZLIN: Typus!

*Pleurothallis umbraticola* SCHLTR., Repert. Spec. Nov. Regni Veg. 27: 56. 1929

Bolivia, Hacienda Simaco sobre el camino a Tipuani, Waldboden, Feb 1920, O. BUCH-

TIEN 5037, HBG501912: ISOLECTO (see CHRISTENSON 1996, LUER 2000)

*Pleurothallis valenzuelana* A. RICH., Hist. Fis. Cuba, Bot.: 234. 1850

Cuba, [J. M. VALENZUELA], C. WRIGHT, Pl. Cub. 3314, HBG501798: ISO?

ann. KRÄNZLIN: *Maxillaria wightiana* KRÄNZL. Typus

ann. CHRISTENSON:  $\equiv$  *Maxillaria valenzuelana* (A. RICH.) NASH (*M. Wrightiana* is unpublished)

*Pleurothallis vestita* KRAENZL., Repert. Spec. Nov. Regni Veg. 17: 392. 1921

(Brazil?), Hort. Nymphenburg, München, HBG501914: HOLO

ann. KRÄNZLIN: Typus!

*Pleurothallis xylobiochila* KRAENZL., Arkiv. Bot. 16(8): 9. 1920

Brazil, Paraná, Jaguariahyva, in silvula, 12 Mar 1911, P. DUSÉN 11583, HBG501815: ISO

ann. KRÄNZLIN: *Octomeria xylobiochila* KRAENZL., Typus!

*Pleurothallis ypirangae* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 50. 1911

Brazil, Paraná, Serra do Mar, Ypiranga, P. Dusén 6670, HBG501916: ISO

ann. KRÄNZLIN: Typus!

*Plocoglottis angulata* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 38. 1927

Indonesia, West-Borneo, bei Nanga Arung, Urwald, 11 Feb 1925, H. WINKLER 1566, HBG501919: HOLO

*Podochilus longilabris* AMES, Leafl. Philipp. Bot. 5: 1565. 1912

Philippines, Lucban, Province of Tayabas, Luzon, May 1907, A.D.E. ELMER 7585, HBG501921: ISO

*Podochilus obovatipetalus* J.J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 47. 1927

Indonesia, West-Borneo, auf dem Bukit Mehipit, 7 Dec 1924, H. WINKLER 622a, HBG501922: HOLO; HBG500560: ISO

**Note** Sheet HBG501922 misses the characteristic field label used by WINKLER to note ecological details, but has the original J.J. SMITH annotation label – and therefore most certainly constitutes the holotype. CHRISTENSON (1994: 354) lists no holo- but two isotypes.

*Pogonia mexicana* S. WATSON, Proc. Amer. Acad. Arts 26: 154. 1891

Mexico, San Luis Potosí, Tamasopa Canyon, in rich mould of limestone ledges, 17 Jul 1891, C.G. PRINGLE 3787, HBG501926: TOPO

ann. SZLACHETKO: = *Triphora* sp.

**Note** Type is PRINGLE no. 3557.

*Pogonia moritzii* RCHB. F., Xenia orchid. 2: 89. 1862

Venezuela, Merida, K. MORITZ 607, HBG506520: SYN

ann. CHRISTENSON: *Cleistes moritzii* ?

*Pogoniopsis schenckii* COGN. in MARTIUS, Fl. Bras. 3(4): 136. 1893

Brazil, Theresopolis (Prov. Rio de Janeiro), Jan 1888, J. DE MOURA 99, HBG501927: ISO-SYN

*Polystachya aconitiflora* SUMMERH., Bot. Mus. Leafl. 10. 295. 1942

Congo (Democr. Rep.), lava plain, 18 Aug 1908, TH. KASSNER 3236, HBG501963, HBG517836: ISOLECTO

**Note** Sometimes classified as *Polystachya vulcanica* KRAENZL. var. *aconitiflora* (SUMMERH.) CRIBB & PODZORSKI (PODZORSKI & CRIBB 1979) but accepted as distinct species by MYTNIK-EJSMONT (2011).

*Polystachya alboviolacea* KRAENZL., Bot. Jahrb. Syst. 17: 50. 1893 (as “*albo-violacea*”)

[Cameroon, Barombi-Station, P. PREUSS 298], HBG501929: ISOLECTO? (“HOLO”-fragment?)

= *Polystachya adansoniae* RCHB. F. (MYTNIK-EJSMONT 2011)

*Polystachya bicalcarata* KRAENZL., Bot. Jahrb. Syst. 36: 118. 1905

Cameroon, Buea, H. DEISTEL 62c & 79, HBG501930: LECTO  
ann. KRÄNZLIN: Typus!

**Note** DEISTEL 62c has been designated as lectotype by MYTNIK-EJSMONT (2011: 126).

*Polystachya calluniflora* KRAENZL., Bot. Jahrb. Syst. 28: 166. 1900

Cameroon, Buea, H. DEISTEL 75, HBG501933: ISOLECTO?

**Note** According to the protologue, the original collections were LEHMACH no. 3 and PREUSS no. 1009 both from Buea in Cameroon. Later, KRÄNZLIN (1926a) cited DEISTEL no. 75 as additional material in his monography of the genus. This material is listed as lectotype in B (lost) and as isolectotype in HBG (SZLACHETKO & OLSZEWSKI 2001: 578). MYTNIK-EJSMONT (2011: 106) however, cites PREUSS no. 1009 as lectotype in HBG. This latter sheet still seem to be on loan as has not yet been entered into the HBG database.

*Polystachya coelogynochila* KRAENZL., Bull. Misc. Inform. Kew: 292. 1926 *nom. rej.*

[(trop. Africa), Hort. A. J. CHOLMLEY, Rillington, Yorkshire], HBG501934: ISO  
ann. KRÄNZLIN: Typus!  
ann. CHRISTENSON: ISOTYPE

**Note** Because this name was based on discordant elements it should be rejected (MYTNIK-EJSMONT 2011: 363).

*Polystachya composita* KRAENZL., Repert. Spec. Nov. Regni Veg., Beih. 39: 103. 1926

Equatorial Guinea, Fernando Poo, Grasland von Moka im Süden, epiphytisch auf *Myrica*, Nov 1911, J. MILDBRAED 7068, HBG500840: SYN

= *Polystachya fusiformis* (THOUARS) LINDL. (MYTKI-EJSMONT 2011: 225), but earlier placed within *P. superposita* RCHB. f. (see SZLACHETKO & OLSZEWSKI 2001: 551)

*Polystachya convallarioidea* MANSF., Notizbl. Bot. Gart. Berlin-Dahlem 11: 1061. 1934

Tanzania, Ostafrika (Tanganjika Terr.), Bezirk Morogora, Uluguru-Gebirge, Nordwestseite, Nebelwald, große Felsen, schattig, Kraut zwischen Farn und Moos, 28 Sept 1932, H.J. SCHLIEBEN 2743, HBG501935: ISOLECTO

= *Polystachya caespitifica* KRAENZL. (see MYTKI-EJSMONT 2011: 323)

*Polystachya dagremondiana* KRAENZL., Vierteljahresschr. Naturf. Ges. Zürich 60: 428.

1915 (as "d'Agremondiana")

[Suriname, A. D'AGREMOND], HBG501928: ISO?

ann. CHRISTENSON: probably an isotype

= *Polystachya concreta* (JACQ.) GARAY & H.R. SWEET (see MYTKI-EJSMONT 2011: 86)

*Polystachya elegans* RCHB. f., Otia Bot. Hamburg, fasc. 2 (no. 8): 113[83]. 1881

(Cameroon, Mt. Cameroon, Nov 1862), G. MANN 2113, HBG506827: ISOLECTO ("SYN"-fragment)

ann. KRÄNZLIN: nach Mann 2113, sehr unbedeutend verkleinert, Wurzeln lang und dünn

≡ *Unguiculabia elegans* (RCHB. f.) SZLACH. & MYTKI (see MYTKI-EJSMONT 2011: 356)

**Note** REICHENBACH (1881: 113[83]) further cited MANN no. 1338, collected in Jan 1862 at Mt. Cameroon.

*Polystachya ellenbeckiana* KRAENZL., Bot. Jahrb. Syst. 33: 63. 1902

Ethiopia, Harrar, H. ELLENBECK 1809, HBG501959: LECTO

ann. KRÄNZLIN: Typus

ann. CRIBB: = *Polystachya steudneri* RCHB. f. (see also MYTKI-EJSMONT 2011: 220)

*Polystachya epidendroides* SCHLTR. in MILDBRAED, Wiss. Ergebn. Deutsch. Zentr-Afr.-Exp. 1910–1911, 2: 160. 1922 nom. nud.

Equatorial Guinea, Insel Annobon, Nordkrater, Nebelwald, Sept 1911, J. MILDBRAED 6493, HBG501937: TYPUS?

= *Polystachya imbricata* ROLFE (see MILDBRAED 1937: 698)

*Polystachya eusepala* KRAENZL. in MILFDBRAED, Wiss. Ergebni. Deut. Zentr.-Afr.-Exped. 1907–1908, 2: 79. 1911

[Rwanda, Bugoier, J. MILFDBRAED 1495?], HBG501938: ISOLECTO?  
= *Polystachya bicarinata* ROLFE (see MYTNIK-EJSMONT 2011: 290)

*Polystachya farinosa* KRAENZL., Bot. Jahrb. Syst. 17: 51. 1893

Cameroon, Buea, 1891, P. PREUSS 1064, HBG501939: LECTO  
= *Polystachya bifida* LINDEL. (see MYTNIK-EJSMONT 2011: 177)

*Polystachya gracilenta* KRAENZL., Bot. Jahrb. Syst. 19: 251. 1895

Congo (Democr. Rep.), Ruwenzori, F. STUHLMANN [2334], HBG501940: HOLO  
ann. KRÄNZLIN: Original der Art vom Ruwenzori

**Note** MYTNIK-EJSMONT (2011: 307) cites the specimen in B as lectotype and duplicates in HBG and K as isolectotypes. However, following CHRISTENSON (1994) it can be concluded from KRÄNZLIN's annotation cited above that the actual type is the flower kept by KRÄNZLIN in his private herbarium now preserved at HBG.

*Polystachya graminoides* KRAENZL., Bull. Misc. Inform. Kew: 289. 1926

Uganda, Mukone, J.D. MAITLAND, HBG506826: TYPUS-fragment? (=ISO?)  
= *Polystachya stauroglossa* KRAENZL. (see MYTNIK-EJSMONT 2011: 180)

*Polystachya hildebrandtii* KRAENZL., Ann. Naturh. Mus. Wien 36: 6. 1923

[Madagascar, Süd-Betsileo, Ankafina, J.M. HILDEBRANDT] 4222, HBG517835: ISO-LECTO  
= *Polystachya rosea* RIDL. (see MYTNIK-EJSMONT 2011: 328)

*Polystachya hoehneana* KRAENZL., Repert. Spec. Nov. Regni Veg., Beih. 39: 73. 1926

Brazil, Minas-Geraes, M. Burnier, 27 Jan 1921, F.C. HOEHNE 5134, HBG501941: HOLO  
ann. KRÄNZLIN: Typus!

*Polystachya holochila* SCHLTR. in WARBURG, Kunene-Sambesi Exped.: 210. 1903

Angola, am Lazingua, 20 Apr 1900, H. BAUM 839, HBG501942: ISLECTO  
= *Dendrobiante dendrobiiflora* (RCHB. f.) MYTNIK (see MYTNIK-EJSMONT 2011: 66)

*Polystachya johnsonii* KRAENZL., Bull. Misc. Inform. Kew: 291. 1926

(Ghana), Gold Coast, W.H. JOHNSON 588, HBG506825: ISOLECTO ("TYPUS"-fragment)  
= *Polystachya golungensis* RCHB. f. (see MYTNIK-EJSMONT 2011: 196)

*Polystachya kraenzlinii* ROLFE, Fl. Trop. Afr. 7: 122. 1897

Tanzania, Mascheua, Jul 1893, C. HOLST 8748, HBG517834: ISOLECTO

≡ *Polystachya albescens* RIDL. ssp. *kraenzlinii* (ROLFE) SUMMERH. (see MYTNIK-EJSMONT 2011: 168)

*Polystachya lepidantha* KRAENZL., Bull. Misc. Inform. Kew: 290. 1926

Uganda, [J. D. SNOWDON 726], HBG506850: ISOLECTO (“HOLO”-fragment)

= *Polystachya concreta* (JACQ.) GARAY & H. R. SWEET (see MYTNIK-EJSMONT 2011: 86)

*Polystachya lettowiana* KRAENZL., Repert. Spec. Nov. Regni Veg., Beih. 39: 54. 1926

(Tanzania), A. STOLZ 1993, HBG501945: ISO

ann. KRÄNZLIN: Typus!

= *Polystachya concreta* (JACQ.) GARAY & H. R. SWEET (see MYTNIK-EJSMONT 2011: 86)

**Note** KRÄNZLIN designated STOLZ 1993 as (holo)type in B (“Specim. unicum in Museo Berolinensi”) which turns the HBG flower fragment into an isotype. However, MYTNIK-EJSMONT & BARANOW (2010: 62) designated “Baum s. n.” from Cameroon as lectotype in K (B lost).

*Polystachya leucorrhoda* KRAENZL., Bot. Jahrb. Syst. 43: 337. 1909

[Rwanda, Kiwu-Vulkane, südlich vom Karisimbi, westlich von Kalago-See], J. MILD-BRAED 1654, HBG501946: ISOLECTO

ann. KRÄNZLIN: Typus

≡ *Polystachya poikilantha* KRAENZL. var. *leucorrhoda* (KRAENZL.) P. J. CRIBB & Podz. (see MYTNIK-EJSMONT 2011: 312)

*Polystachya malilaensis* SCHLTR., Bot. Jahrb. Syst. 53: 566. 1915

(Tanzania), A. STOLZ 2304, HBG506867: ISOLECTO (“TYPUS”-fragment)

ann. KRÄNZLIN: = *Polystachya zambesiaca* ROLFE (but accepted by MYTNIK-EJSMONT 2011: 256)

**Note** The flower fragment is accompanied with a pencil sketch of the whole plant.

*Polystachya microbambusa* KRAENZL., Bull. Misc. Inform. Kew: 245. 1926

[Côte d’Ivoire, cercle de Baoule-Nord, envirour de Bouari, Mt. Lémélébon], F. FLEURY 22093, HBG501947: ISOLECTO (“TYPUS”-fragment) (see MYTNIK-EJSMONT 2011: 240)

*Polystachya mildbraedii* KRAENZL., Bot. Jahrb. Syst. 43: 334. 1909

[Congo (Democr. Rep.), Kiwu-Vulkane, Niragongo], J. MILDBRAED 1350, HBG501948: ISOLECTO ("TYPUS"-fragment) (see MYTNIK-EJSMONT 2011: 308)

*Polystachya oligophylla* SCHLTR., Bot. Jahrb. Syst. 53: 566. 1915

Tanzania, [auf Bäumen bei Bomalakitana], A. STOLZ 455, HBG502575: ISOLECTO ("TYPUS"-fragment)

= *Polystachya albescens* RIDL. ssp. *imbricata* (ROLFE) SUMMERH. (see MYTNIK-EJSMONT 2011: 169)

*Polystachya polychaete* KRAENZL., Bot. Jahrb. Syst. 17: 50. 1893

Cameroon, Buea, P. PREUSS 881, HBG500839: LECTO (see MYTNIK-EJSMONT 2011: 122)

*Polystachya praealta* KRAENZL., Bot. Jahrb. Syst. 36: 118. 1905

Liberia, Grand-Basso, M. DINKLAGE 2069, HBG501950: HOLO ann. KRÄNZLIN: Typus!

= *Polystachya concreta* (JACQ.) GARAY & H.R. SWEET

**Note** The flower packet in HBG marked by KRÄNZLIN "Typus!" and annotated later by CHRISTENSON as holotype is not cited in MYTNIK-EJSMONT (2011: 86).

*Polystachya preussii* KRAENZL., Bot. Jahrb. Syst. 17: 51. 1893

Cameroon, [Buea], P. PREUSS 934, HBG501951: ISOLECTO

= *Unguiculabia alpina* (LINDL.) SZLACH. & MYTNIK (see MYTNIK-EJSMONT 2011: 354)

**Note** This specimen has been earlier annotated by CHRISTENSON as holotype. However, there is no type annotation by KRÄNZLIN on the HBG sheet and it appears to be just a duplicate of the (holo)type at B which is lost.

*Polystachya purpureoalba* KRAENZL., Bot. Jahrb. Syst. 43: 337. 1909

Congo (Democr. Rep.), Ruwenzori, Butagu-Thal, J. MILDBRAED 2495, HBG501952: ISOLECTO

= *Polystachya gracilenta* KRAENZL.

**Note** This specimen has been earlier annotated by CHRISTENSON as holotype. However, there is no type annotation by KRÄNZLIN on the HBG sheet and it appears to be just a duplicate of the (holo)type at B which is cited as lectotype by MYTNIK-EJSMONT (2011: 307).

*Polystachya rigidula* RCHB. f., Flora 50: 117. 1867

[South Africa, P. Natal, W.T. GERRARD], HBG502574: ISOLECTO ("TYPUS"-fragment)  
 ann. KRÄNZLIN (pencil sketch): Nach R's [of Reichenbach] Typus  
 = *Polystachya modesta* RCHB. f. (see MYTKI-EJSMONT 2011: 192)

*Polystachya schinziana* KRAENZL., Vierteljahresschr. Naturf. Ges. Zürich 68: 421. 1923

[Uganda, Ruwenzori, Mabuka, TH. KASSNER 3127], HBG501954: ISOLECTO?  
 ann. KRÄNZLIN: Typus!  
 = *Polystachya doggettii* RENDLE & ROLFE (see MYTKI-EJSMONT 2011: 302)

*Polystachya shega* KRAENZL., Bot. Jahrb. Syst. 22: 22. 1897

Tanzania, Amboni, auf Steinen, Jun 1893, C. HOLST 2431, HBG501955: ISOLECTO;  
 HBG501956: HOLO-fragment (=ISO)  
 ann. KRÄNZLIN (HBG501956): Typus!  
 ≡ *Isochilostachya shega* (KRAENZL.) MYTKI & SZLACH. (see MYTKI-EJSMONT 2011: 78)

**Note** Sheet HBG501955 has been earlier annotated by CHRISTENSON as holotype. However, there is no type annotation by KRÄNZLIN on this HBG sheet and it appears to be just a duplicate of the (holo)type at B which is lost. In contrast, sheet HBG501956 has been marked by KRÄNZLIN as type (see above). Both HBG sheets are not cited by MYTKI-EJSMONT (2011: 78).

*Polystachya simoniana* KRAENZL., Repert. Spec. Nov. Regni Veg., Beih. 39: 61. 1926

Cameroon, Victoria, G. SIMON 14, HBG501957: HOLO  
 ann. KRÄNZLIN: Typus!  
 = *Polystachya dolichophylla* SCHLTR. (see MYTKI-EJSMONT 2011: 201)

**Note** MYTKI-EJSMONT (2011: 201) cites the specimen in B as lost and designated the drawing at K as lectotype. The HBG sheet is not cited. However, following CHRISTENSON (1994) it can be concluded from KRÄNZLIN's annotation cited above that the actual type is the plant kept by KRÄNZLIN in his private herbarium now preserved at HBG.

*Polystachya stauroglossa* KRAENZL. in ENGLER, Pflanzenw. Ost-Afrikas: 155. 1895 (19 July)

Congo (Democr. Rep.), westl. von Lendu, F. STUHLMANN 2670, HBG501958: HOLO  
 ann. KRÄNZLIN: Typus!

**Note on publication dates** A reprint of the original diagnosis has been published by KRÄNZLIN (1895: 22, 23) on 19 Nov 1895.

**Note on typification** MYTKIJK-EJSMONT (2011: 180) cites the type in B as lost, the lectotype in K and isolectotypes in BR and HBG. However, following CHRISTENSON (1994) it can be concluded from KRÄNZLIN's annotation cited above that the actual type is the flower kept by KRÄNZLIN in his private herbarium now preserved at HBG.

***Polystachya ugandae*** KRAENZL., Bull. Misc. Inform. Kew: 295. 1926.

Uganda, J. D. SNOWDON 737, HBG501967: ISOLECTO ("TYPUS"-fragment)  
= *Polystachya lindblomii* SCHLTR. (see MYTKIJK-EJSMONT 2011: 233)

***Polystachya vulcanica*** KRAENZL., Vierteljahresschr. Naturf. Ges. Zürich 68: 422. 1923

Congo (Democr. Rep.), Mt. Ruwenzori, Mabuka, Oct 1908, TH. KASSNER 3141[3241],  
HBG501962: ISOLECTO (see MYTKIJK-EJSMONT 2011: 314)

**Note** Due to an error in the numbering of the KASSNER collection in HBG it should read "3241" (not "3141" as printed on the label).

***Polystachya xerophila*** KRAENZL., Bot. Jahrb. Syst. 34: 60. 1904

Tanzania, West Usambara, A. ENGLER 1067A, HBG501964: LECTO  
ann. KRÄNZLIN: Typus!  
≡ *Isochilostachya xerophila* (KRAENZL.) MYTKIJK & SZLACH. (see MYTKIJK-EJSMONT 2011: 80)

***Ponera australis*** COGN. in MARTIUS, Fl. Bras. 3(5): 9. 1898

Brazil, Carmo (prov. Rio de Janeiro), 1889, A. F. DAS NEVES ARMOND 119, HBG501968: SYN

***Ponera mapiriensis*** KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 22. 1928

Bolivia, Región de Mapiri, Chimate, 2 Mar 1927, O. BUCHTIEN 559, HBG506874: HOLO  
ann. KRÄNZLIN: Typus!  
ann. CHRISTENSON: = *Scaphyglottis*

***Ponthieva mandonii*** RCHB. F., Xenia orchid. 3(1): 18. 1878

Bolivia, Sorata, G. MANDON 1164, HBG506873: ISO

***Ponthieva paranaensis*** KRAENZL., Kongl. Svenska Vet. Akad. Handl. 46(10): 43. 1911

Brazil, Paraná, Jaguariahyva, 5 Jul 1910, P. DUSÉN 10084, HBG501971: ISO  
ann. CHRISTENSON: = *Baskervilla*

***Prescottia crassicaulis*** F. LEHM. & KRAENZL. ex KRAENZL., Bot. Jahrb. Syst. 26: 501. 1899

Equador, F.C. LEHMANN 8146, HBG506648: SYN  
ann. ALVAREZ: = *Altensteinia virescens* LINDL.

*Prescottia truncicola* SCHLTR., Repert. Spec. Nov. Regni Veg. 16: 319. 1920

Brazil, Paraná, Serro do Mar, Monte Alegro, P. DUSÉN 10290, HBG506868: ISOSYN

*Pterostylis neocalaledonicum* SCHLTR., Bot. Jahrb. Syst. 39: 38. 1906

New Caledonia, auf den Bergen bei Oubatche, 17 Dec 1902, R. SCHLECHTER 15472, HBG501974: ISO

*Pterygodium biflorum* HOCHST. ex A. RICH., Tent. Fl. Abyss. 2: 303. 1850 *nom. illeg.*

(type as for *Disperis crassicaulis* RCHB. f.)

see *Disperis crassicaulis* RCHB. f.

*Quekettia australis* KRAENZL., Repert. Spec. Nov. Regni Veg. 2: 57. 1906

Brazil, Rio Grande do Sul, Neu-Württemberg, an Waldbäumen, 2 Sept 1904, A. BORN-MÜLLER 142, HBG501975: HOLO; HBG501976: ISO

Brazil, Rio Grande do Sul, Neu-Württemberg, an Baumstämmen, Sept 1905, A. BORN-MÜLLER 142b, HBG501977: TOPO

ann. KRÄNZLIN (HBG501975): Typus!

*Quekettia duseniana* KRAENZL., Ark. Bot. 16(8): 24. 1920(1921)

[Brazil, R. LANGE & P. DUSÉN 8529?], HBG501978: ISO?

ann. KRÄNZLIN: Typus!

ann. CHRISTENSON: ? isotype

*Restrepia cogniauxiana* SPEG. & KRAENZL., Orchis 2: 127. 1908

Argentina, Distr. Mesiones b. S. Pedro, C. L. SPEGAZZINI, HBG501979: HOLO

ann. KRÄNZLIN: Typus!

ann. LUER:  $\equiv$  *Brabosella cogniauxiana* (SPEG. & KRAENZL.) SCHLTR.

*Restrepia dusenii* A. SAMP., Arq. Mus. Nac. Rio de Janeiro 15: 5. 1909

Brazil, Paraná, Villa Velha, 27 Apr 1909, P. DUSÉN 8070, HBG506522: ISO

ann. LUER:  $\equiv$  *Barbosella dusenii* (A. Samp.) SCHLTR.

*Restrepia erythroxantha* RCHB. f., Linnaea 22: 817. 1849

Venezuela, Colon. Tovar, in truncis vetust. muscorum, fl. Juni Juli, K. MORITZ 858, HBG506818: TYPUS

= *Restrepia elegans* H. KARST.

*Rodriguezia corydaloides* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 24. 1928

Bolivia, Región de Mapiri, San Carlos, bei Sarampiuni, 22 Mar 1927, O. BUCHTIEN 528,  
HBG501980: HOLO

ann. KRÄNZLIN: Typus!

ann. CHRISTENSON:  $\equiv$  *Scolechilus corydaloides* (KRAENZL.) GARAY

*Rodriguezia inconspicua* KRAENZL., Bull. Herb. Boiss. 3(12): 630. 1895

(Costa Rica), Hort. BARBEY, HBG501981: ISO

ann. KRÄNZLIN: Typus

ann. CHRISTENSON:  $\equiv$  *Hybochilus inconspicuus* (KRAENZL.) SCHLTR.

*Roeperocharis alcicornis* KRAENZL., Xenia orchid. 3(6): 105, pl. 258. 1892

[Ethiopia, Berg Gunna, G.H.W. SCHIMPER 1364 (sub *Habenaria bracteosa*)],  
HBG501982: HOLO-fragment? (=ISO?)

ann. KRÄNZLIN: Typus!

ann. CHRISTENSON: holotype?

*Roeperocharis occidentalis* KRAENZL., Bot. Jahrb. Syst. 17: 67. 1893

(Cameroon), P. PREUSS 980, HBG500904: HOLO

*Sarcoglottis pubilabia* AMES, Sched. Orch. 2: 11. 1923

Mexico, Federal District, lava fields near Tlalpam, 29 May 1904, C.G. PRINGLE 8867,  
HBG501988: ISO

ann. SZLACHETKO: = *Pelezia schaffneri* (RCHB. F.) SCHLTR.

*Sarcopodium stella-silvae* LOHER & KRAENZL., Repert. Spec. Nov. Regni Veg. 7: 40.  
1909 (as "stella silvae")

(Philippines, Manila, A. LOHER), Hort. Bot. Erlangen, HBG501991: HOLO

ann. KRÄNZLIN: Typus!

ann. CHRISTENSON:  $\equiv$  *Epigeneium stella-silvae* (LOHER & KRAENZL.) SUMMERH.

*Satyrium bracteatum* LINDL., Gen. Sp. Orchid. Pl.: 342. 1838 non Thunb.

South Africa, Worcester Div., Dutoits Kloof, J.F. DRÈGE 1251d, HBG502589: ISOLECTO  
(see HALL 1982)

= *Satyrium retusum* LINDL.

*Satyrium kassnerianum* KRAENZL., Bot. Jahrb. Syst. 51: 381. 1914

(Zambia), N.W. Rhodesia, Michinga Spr., Dec 1907, TH. KASSNER 2168, HBG501992: ISO

*Satyrium ketumbense* KRAENZL., Bot. Jahrb. Syst. 51: 380. 1914 as ("kitimboana")  
 (Zambia), N.W. Rhodesia, N. Yengeshi R., 28 Dec 1907, Th. KASSNER 2232,  
 HBG502113: ISOSYN  
 ann. PETTERSON: *Satyrium carsonii* ROLFE  
 Congo (Democr. Rep.), Kitimbo, forest, 2 Jan 1908, Th. KASSNER 2290a[2290],  
 HBG500625: ISOSYN  
 ann. GEERINCK: isotype *Satyrium kitimboana* KRAENZL.

**Note** HBG: Due to an error in the numbering of the KASSNER collection in HBG it should read "2290" (not "2290a" as printed on the label). KASSNER 2290a is type material of *Habenaria kitimboana* KRAENZL. collected at the same location. *Satyrium ketumbense* is sometimes treated under a corrected spelling of the epithet as "*S. kitimboana*" (see GEERINCK 1984: 201; LA CROIX & CRIBB 1995: 211).

*Satyrium leptopetalum* KRAENZL., Bot. Jahrb. Syst. 36: 119. 1905

Tanzania, Deutsch-Ostafrika, Umbukwe & Iraku, M. MERKER 239, HBG501993: HOLO  
 ann. KRÄNZLIN: Typus!

*Satyrium microcephalum* KRAENZL., Repert. Spec. Nov. Regni Veg. 17: 109. 1921

China, Yunnan, Ni shon (Petsao lin), 24 Sept 1919, S. TÉN 1387, HBG501994: ISO  
 ann. KRÄNZLIN: Typus!  
 ann. CHRISTENSON: HOLO-C

*Satyrium microcorys* SCHLTR., Bot. Jahrb. Syst. 53: 533. 1915

Tanzania, Nyassa Hochland, Station Kyimbila, 1912, A. STOLZ 1276, HBG500606: ISO-  
 SYN

*Satyrium muticum* LINDL., Gen. Sp. Orchid. Pl.: 344. 1838

South Africa, Driefontein, J.F. DRÈGE 4758b, HBG502591: ISOLECTO (see HALL 1982)

*Satyrium nutans* KRAENZL., Bot. Jahrb. Syst. 24: 507. 1898

South Africa, Transvaal, District Lydenburg, bei der Stadt Lydenburg, nasse Wiesen  
 an Sterkspruit, Feb 1895, F. WILMS 1357, HBG501995: HOLO

*Satyrium papillosum* LINDL., Gen. Sp. Orchid. Pl.: 341. 1838

South Africa, Kapland, J.F. DRÈGE 1249, HBG502587: SYN?  
 = *Satyrium erectum* Sw.

**Note** LINDLEY (1838: 341) refers to several specimens collected by DRÈGE. Different localities  
 for the same species are normally indicated by letters a, b, c etc. in the DRÈGE herbar-

ium, but for the HBG specimen of *Satyrium papillosum* LINDL. these letters are missing so that the actual locality remains uncertain.

***Satyrium parviflorum*** LINDL., Gen. Sp. Orchid. Pl.: 336. 1838 non Sw. 1800

South Africa, Kapland, J.F. DRÈGE 1260, HBG502595: SYN?

= *Satyrium stenopetalum* LINDL. ssp. *brevicalcaratum* (BOLUS) A.V. HALL

**Note** See preceding for uncertainty as to exact collecting locality.

***Satyrium princeae*** KRAENZL., Bot. Jahrb. Syst. 33: 56. 1902

Tanzania, Uhehe, Utschungwe-Berge, M. v. PRINCE, HBG501996: HOLO ann. KRÄNZLIN: Typus!

***Satyrium princeps*** BOLUS in HOOKER's Icon. Pl. 18: t. 1729. 1888

South Africa, in littore maris prope Port Elizabeth, Sept 1885, R. HALLACK, HBG506866: ISO

***Satyrium rhodanthum*** SCHLTR., Bot. Jahrb. Syst. 40: 92. 1907

South Africa, Natal-Colony, District Alexandra, Station Dumisa, Mayene, ... Abhänge, 10 Dec 1909, H. RUDATIS 751, HBG500608, HBG500609: TOPO?

**Note** Type is RUDATIS no. 128.

***Satyrium rhynchanthoides*** SCHLTR., Bot. Jahrb. Syst. 53: 529. 1915

Tanzania, Nyassa Hochland, Station Kyimbila, 11 Jan 1912, A. STOLZ 1074, HBG501997: ISOSYN

***Satyrium sphaeranthum*** SCHLTR., Bot. Jahrb. Syst. 53: 532. 1915

Tanzania, Nyassa Hochland, Station Kyimbila, 17 Jun 1911, A. STOLZ 776 [as "*Satyrium stolzii* SCHLTR. n. sp."], HBG501999: ISOSYN

Tanzania, Nyassa Hochland, Station Kyimbila, Bergwiesen, 6 May 1906, A. STOLZ 162 [as "*Satyrium zombense* Rolfe"], HBG506819: ISOSYN

***Satyrium stolzianum*** KRAENZL., Bot. Jahrb. Syst. 33: 57. 1902

Tanzania, Lungwe, A. STOLZ 5, HBG501998: HOLO

***Sauroglossum candidum*** KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 38. 1911

Brazil, Rio Grande do Sul, Porto Alegro, Parthenon, locis umbrosis dumetosum in Rumo et ad folia putrida, 15 Oct 1892, C.A.M. LINDMAN A.437, HBG502001: ISO ann. SZLACHETKO: ≡ *Hapalorchis candida* (KRAENZL.) SCHLTR.

*Sayeria paradoxa* KRAENZL., Oesterr. Bot. Z. 44: 298. 1894

Papua New Guinea, New Guinea, Mount Obree, W.A. SAYER 6, HBG502004: HOLO  
 ann. KRÄNZLIN: specimen typic. autoris  
 ann. CHRISTENSON: = *Dendrobium sayeri* SCHLTR.

**Note** According to SCHLECHTER (1912: 483) *Sayeria paradoxa* KRAENZL. is a species of *Dendrobium*. The transfer to that genus is blocked by *D. paradoxum* TEIJSM. & BINN. 1862 and in *Dendrobium* the next available name for *Sayeria paradoxa* KRAENZL. is *D. sayeri* SCHLTR. 1907.

*Scaphyglottis ruberrima* LINDL. var. *aurea* RCHB. F., Linnaea 22: 856. 1849

Venezuela, Colonia Tovar, Jun-Jul, K. MORITZ 861, HBG506815: ISO  
 ann. CHRISTENSON: *Scaphyglottis*  
 ≡ *Scaphyglottis aurea* (RCHB. F.) FOLDATS

*Schizochilus sulphureus* SCHLTR., Bot. Jahrb. Syst. 53: 486. 1915

Tanzania, Nyassa Hochland, Station Kyimbila, 11 Jan 1912, A. STOLZ 1075, HBG502007: ISO

*Schizodium arcuatum* LINDL., Gen. Sp. Orchid. Pl.: 359. 1838

South Africa, zwischen Paarl und Pont, auf Hügeln und am Fluss Bergvlier, J.F. DRÈGE 1231b, g, HBG502576: ISO?  
 = *Schizodium satyrioides* (L.) GARAY

*Schizodium obtusatum* LINDL., Gen. Sp. Orchid. Pl.: 359. 1838

South Africa, Dutoitskloof, J.F. DRÈGE 1231c, cc, HBG502581: ISO  
 = *Schizodium obliquum* LINDL. ssp. *clavigerum* (LINDL.) H.P. LINDER

*Schomburgkia campecheana* KRAENZL., Gard. Chron. 2, ser. 3, 34: 381. 1903

(Mexico, Campeche, Laguna de Terminos, DERKS), Hort. Bremen, HBG502005: HOLO  
 ann. KRÄNZLIN: Typus!

*Schomburgkia exaltata* KRAENZL., Mitt. Inst. Allg. Bot. Hamburg 6: 342. 1926 (Fig. 14)  
 (Guatemala, bei Livingstone, im Urwald am Rio dolce, 11 Apr 1925, A. ULMCKE), fl.  
 Hort. Bot. Hamburg 21 Sept 1926, HBG500620: HOLO; HBG500619: ISO  
 ≡ *Schomburgkia tibicinis* var. *exaltata* (KRAENZL.) H.G. JONES

**Note** JONES (1965: 45) wrote in his treatment of *Schomburgkia tibicines* and its varieties “Kränzlin seems to have prepared his diagnosis from the living specimen, for there is no Holotype” and continued “but an excellent Isotype specimen was received by the



**Fig. 14** Photograph of the “type plant” of *Schomburgkia exaltata* KRAENZL. kept together with the type material in HBG. Living material of this magnificent species was brought to Hamburg from Guatemala by Captain A. ULMCKE and was successfully cultivated in the greenhouses of the Hamburg Botanical Garden before 1945. This potentially very longlived plant apparently did not survive World War II turmoils.

Herbarium Hamburgense on September 21, 1926”. A photograph of the “isotype” has been reproduced in plate 3 of that paper. This material apparently has been taken from the “type plant” either simultaneously or shortly after KRÄNZLIN prepared his diagnosis. The date JONES referred to is found on a label used by the Hamburg Botani-

cal Garden. KRÄNZLIN's paper with the description of *S. exaltata* has been published only three months later on 24 Dec 1926 (KRÄNZLIN 1926b). The two sheets kept at HBG (one is a duplicate not seen by JONES) carry no annotations in the handwriting of KRÄNZLIN (unlike almost all types of orchids kept by KRÄNZLIN in his private herbarium now housed at HBG). This leads to the assumption that KRÄNZLIN never incorporated a dried specimen of *S. exaltata* in his private herbarium. However, it seems strange why the sheets have been declared isotypes – apparently even before they were seen by JONES. The sheets carry typewritten labels most likely prepared by PAULA WIEMANN, a member of staff at HBG who was perhaps anticipating that the holotype is present in the KRÄNZLIN herbarium. However, like large portions of the HBG plant collection the KRÄNZLIN herbarium had been evacuated in 1943 with uncertain fate after the end of World War II. In the 1960ies there were only rumours saying that the evacuated material had been transported to Leningrad (St. Petersburg) and later East Berlin (POPPIEDIECK 2001). However, no such holotype of *S. exaltata* was found after repatriation and reincorporation of the evacuated material in the HBG general collection during the early 1990ies. This leads to the assumption that the two HBG sheets constitute the only herbarium material that can be linked directly to the protologue. Therefore, a lectotype should be chosen from the two sheets since in all probability this is material from the plant studied by KRÄNZLIN. The lectotype would be the sheet carrying the original Hamburg Botanical Garden label and the duplicate would become an isolectotype.

*Schomburgkia weberbaueriana* KRAENZL., Bot. Jahrb. Syst. 37: 527. 1906

Peru, Dpt. Cuzco, bei Idma, A. WEBERBAUER 5026, HBG502008: ISO

*Serapias gregaria* GODFERY, J. Bot. 59: 241. 1921

France, Var, Hyères, 6 Apr 1926, J.M. GODFERY [living material given to J. RUPPERT], HBG506813: TOPO?

France, Hyères, hinter dem alten Schloß, J.M. GODFERY [living material given to J. RUPPERT on 20 Apr 1927], HBG500036: TOPO?

*Serapias pseudocordigera* RCHB. f. var. *mauritanica* E.G. CAMUS in E.G. CAMUS, P. BERGON & A. CAMUS, Monogr. Orchid.: 51. 1908

Morocco, env. de Casablanca, Mar 1896, A. MELLERIO, HBG506812: ISO

Orig. sub *Serapias longipetala* var. *mauritanica* E.G. CAMUS, an unpublished herbarium name

**Note** "E.G. Camus" is given as the author of this variety in the index to names in CAMUS et al. (1908).

*Serapias strictiflora* WELW. ex VEIGA, Mem. Acad. Ci. Lisboa, Cl. Sci. 6: 18 (pl. VI.11) [Orquideas Portugal]. 1887

Portugal, Prov. Estremadura, 1848, F.M.J. WELWITSCH 263, HBG506811: TYPUS?

*Skeptrostachys correana* SZLACH., Fragm. Florist. Geobot. 41: 857. 1996

Argentina, Prov. Corrientes, in pratis uliginosis prope "Itá-tý", Nov 1895, C.L. SPEGAZZINI 109612, HBG502009: HOLO

*Sobralia sancti-josephi* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 22. 1928 (as "Sancti Josephi")

Bolivia, Región de Mapiri, San Carlos, bei San José, 23 Jan 1927, O. BUCHTIEN 514, HBG502010, HBG502011: ISO

*Sobralia weberbaueriana* KRAENZL., Repert. Spec. Nov. Regni Veg. 1: 188. 1905

Peru, Prov. Tarma, bei Huacapistana, A. WEBERBAUER 2076, HBG502012: HOLO ann. KRÄNZLIN: Typus!

*Spathoglottis breviscapa* SCHLTR., Bot. Jahrb. Syst. 39: 65. 1906

New Caledonia, auf den Bergen bei Oubatche, 18 Dec 1902, R. SCHLECHTER 15486, HBG502038: ISO

*Spathoglottis parviflora* KRAENZL., Bot. Jahrb. Syst. 16: 18. 1893

Papua New Guinea, Finisterre Berge, [F.C. HELLWIG 328?], HBG502039: TYPUS? ann. KRÄNZLIN: Typus

*Spiranthes abyssinica* HOCHST. ex A. RICH., Tent. Fl. Abyss. 2: 289. 1850

Ethiopia, in pratis siccioribus prope Enschedcap, 16 May 1838, G.H.W. SCHIMPER, It. Abyss. II, 982, HBG506848: ISO  
= *Holothrix squamata* (A. RICH.) RCHB. F.

*Spiranthes alexandrae* KRAENZL., Kongl. Svenska Vet. Akad. Handl. 46(10): 32. 1911

Brazil, Paraná, Alexandra, 21 Aug 1910, P. DUSÉN 10292, HBG501488: HOLO ann. KRÄNZLIN: Typus!

*Spiranthes alpestris* BARB. RODR. var. *densiflora* COGN., Bull. Soc. Roy. Bot. Belgique 43: 294. 1907

Peru, Departamento Loreto, Tarapoto, auf Felsen, Oct 1902, E. ULE 6313, HBG500820:  
SYN

ann. SZLACHETKO: = *Cyclopogon* sp.

**Note** The drawings prepared by SZLACHETKO accompanying the sheet are marked as “*Cyclopogon* sp. nov.”

*Spiranthes amblysepala* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 32.  
1911

Brazil, Lapa, P. DUSÉN 6841, HBG502013: ISOSYN

Brazil, Paraná, Banhados, R. LANGE [P. DUSÉN] 7047, HBG500817: ISOSYN

ann. SZLACHETKO (HBG500817): = *Warscea diversifolia* (COGN.) SZLACH.

**Note** HBG500817 was annotated by KRÄNZLIN as *Spiranthes schizosepala* KRAENZL., apparently an earlier “working name” of *Spiranthes amblysepala* KRAENZL. Furthermore, KRÄNZLIN cited Dusén no. 7047 as type in his diagnosis, whereas on the label he wrote LANGE no. 7047 as collector. LANGE was co-working with DUSÉN in Paraná (KRÄNZLIN 1920: 1).

*Spiranthes arechavaletae* KRAENZL., Bot. Jahrb. Syst. 36, Beibl. 80: 9. 1905

Uruguay, Tacuarembo, Nov 1898, J. ARECHAVALETA 6, HBG501351: HOLO

ann. KRÄNZLIN: Typus!

Uruguay, Tacuarembo, J. ARECHAVALETA, HBG501408: ISO?

ann. KRÄNZLIN: unicum!

ann. SZLACHETKO: ≡ *Brachystele arechavaletae* (KRAENZL.) SCHLTR.

**Note** KRÄNZLIN’s “casual and inconsistent” type marking (CHRISTENSON 1994: 344) is often causing difficulties in determining the correct type status of the material involved. HBG holds two sheets of *Spiranthes arechavaletae* both carrying labels in KRÄNZLIN’s handwriting. Sheet HBG501351 was marked by KRÄNZLIN as “Typus!” and has been listed by Christensen (1994: 352) as the holotype. The second sheet HBG501408 was marked by KRÄNZLIN as “unicum!” and has not been listed by CHRISTENSON. However, the label information of latter sheet matches the type information given by KRÄNZLIN in his diagnosis: “Uruguay: Tacuarembo (Arechavaleta!). – Unicum!”. Apparently, sheet HBG501408 forms part of the original collection and is therefore listed here as “isotypus?”.

*Spiranthes atramentaria* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10):  
35. 1911

Brazil, Paraná, Piraquara, 7 Jan 1909, P. DusÉN 7499, HBG502015: ISO  
ann. KRÄNZLIN: Typus!

*Spiranthes aurantiaca* (LA LLAVE & LEX.) HEMSL. var. *acuminata* B. L. ROB. & SEATON,  
Proc. Amer. Acad. Arts 28: 115. 1893

Mexico, State of Mexico, swells of low meadows, valley of Toluca, 13 Sept 1892, C.G.  
PRINGLE 4280, HBG502014: ISO  
ann. CHRISTENSON, SZLACHETKO:  $\equiv$  *Stenorrhynchos aurantiacus* (LA LLAVE & LEX.) LINDEL.

*Spiranthes bracteolaris* KRAENZL., Arkiv. Bot. 14(10): 7. 1915

Mexico, Michoacan, environs de Morelia, Cuincho, Oct 1910, G. ARSÈNE 5705,  
HBG502017: ISO  
ann. KRÄNZLIN: Typus!

*Spiranthes cyclochila* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 36.  
1911

Brazil, Paraná, Capao Grande, P. DusÉN 7295, HBG502018: ISO  
ann. KRÄNZLIN: Typus!

*Spiranthes delicatula* KRAENZL., Bot. Jahrb. Syst. 36, Beibl. 80: 9. 1905

Paraguay, in uliginosis Tacurupucu, Dec 1885, C.L. SPEGAZZINI 47327, HBG501352:  
HOLO  
ann. KRÄNZLIN: Typus!  
ann. SZLACHETKO:  $\equiv$  *Brachystele delicatula* (KRAENZL.) SCHLTR.

*Spiranthes disoides* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 33.  
1911

Brazil, Paraná, prope Capao Grande, in campo, 24 Feb 1910, P. DusÉN 9480,  
HBG502019: ISO  
ann. KRÄNZLIN: Typus!

*Spiranthes diversifolia* COGN. in MARTIUS, Fl. Bras. 3(6): 543. 1906

Brazil, Est. St. Catharina, auf dem Camp der Serra do Oratorio, Jan 1890, E. ULE 1629,  
HBG500823, HBG502020: ISO  
ann. COGNIAUX: *Spiranthes diversifolia* Cogn. sp. nov.  
ann. SZLACHETKO:  $\equiv$  *Warscea diversifolia* (COGN.) SZLACH.

*Spiranthes eriophora* B.L. ROB. & GREENM., Amer. J. Sci. 50(296): 165. 1895

Mexico, Oaxaca, pine woods, Sierra de San Felipe, 31 May 1894, C.G. PRINGLE 4682, HBG502021: ISO

*Spiranthes euglossa* KRAENZL., Ark. Bot. 14(10): 5. 1915

Brazil, São Paulo, S. Bernardino, A.C. BRADE 5082, HBG500809: ISO

ann. SZLACHETKO:  $\equiv$  *Lyroglossa grisebachii* (COGN.) SCHLTR. var. *euglossa* (KRAENZL.) SZLACH.

*Spiranthes excelsa* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 33. 1911

Brazil, Paraná, in silvula, loco non indicato, 4 Sept 1910, P. DUSÉN 10286, HBG502003: HOLO

ann. KRÄNZLIN: Typus!

ann. SZLACHETKO: *Sauroglossum* sp.

*Spiranthes goodyeroides* SCHLTR., Repert. Spec. Nov. Regni Veg. 10: 448. 1911

Bolivia, ö. Tarija, 22 May 1904, K. FIEBRIG 2994, HBG502059, HBG502060: ISO

*Spiranthes lindmaniana* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 35. 1911

Brazil, Paraná, Serra da Prata (in terr. litorali) ad tr. arb., 2 Mar 1910, P. DUSÉN 9856, HBG500810: ISO

ann. KRÄNZLIN: Typus!

*Spiranthes oaxacana* B.L. ROB. & GREENM., Proc. Amer. Acad. Arts 32(1): 34. 1896

Mexico, Oaxaca, hills above San Felipe, 31 Dec 1894, C.G. PRINGLE 6101, HBG502024: ISO

*Spiranthes pachychila* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 37. 1911

Brazil, Paraná, Serra do Mar, Monte Alegre, in terra silvosa, 23 Nov 1909, P. DUSÉN 9035, HBG502026: ISO

ann. KRÄNZLIN: Typus!

*Spiranthes pringlei* S. WATSON var. *minor* GREENM., Proc. Amer. Acad. Arts. 35(16): 307. 1900

Mexico, Vera Cruz, grassy fields near Jalapa, 17, 21 May 1899, C.G. PRINGLE 8197, HBG506863: ISO

*Spiranthes sincorensis* SCHLTR., Notizbl. Bot. Gart. Berlin-Dahlem 6: 122. 1914

Brazil, Estado de Bahía, Campo Serra Sincora, Nov 1906, E. ULE 7102, HBG500831: ISO

*Spiranthes subfiliformis* COGN. in MARTIUS, Fl. Bras. 3(6): 544. 1906

Brazil, Est. St. Catharina, auf Bergen des Campo de Capivare, Serra Geral, Jan 1891, E. ULE 1906, HBG500824, HBG500825: SYN

ann. Cogniaux: "Spiranthes pedicella Cogn. var. au sp. nov."

ann. SZLACHETKO: *Brachystele pedicellata* (COGN.) GARAY

*Spiranthes tenuiflora* GREENM., Proc. Amer. Acad. Arts 35(16): 308. 1899

Mexico, Morelos, lava fields near Cuernavaca, 16 Feb 1899, C.G. PRINGLE 6995, HBG502028: ISO

*Spiranthes ulaei* COGN. in MARTIUS, Fl. Bras. 3.4: 207, pl. 47, fig. 1. 1895

Brazil, Est. de Sta. Catharina, auf dem Campo de Copivare, Serra Gerral, Mar 1891, E. ULE 1908, HBG500818, HBG500826: ISO

ann. SZLACHETKO:  $\equiv$  *Brachystele ulaei* (COGN.) SCHLTR.

*Stelis mandoniana* SCHLTR., Repert. Spec. Nov. Regni Veg. 27: 42. 1929

Bolivia, Unduavi, felsige Abhänge, Nov 1910, O. BUCHTIEN 2614, HBG502040: PARA

*Stelis phaeomelana* SCHLTR., Repert. Spec. Nov. Regni Veg. 27: 45. 1929

Bolivia, Tipuani-Valley, Hacienda Simaco, Feb 1920, O. BUCHTIEN 5059, HBG502041: ISO

*Stelis repens* COGN. in URBAN, Symb. Antill. 6: 692. 1910

Dominican Rep., prope Constanza in sylvis, epiphytica, Jan 1910, H. v. TÜRKHEIM 3329, HBG502042: ISO

*Stelis ruprechtiana* RCHB. F. var. *major* COGN. in MARTIUS, Fl. Bras. 3(4): 348. 1896

Brazil, Theresopolis (prov. Rio de Janeiro), 26 Jun 1887, J. DE MOURA 29, HBG502043: SYN

*Stelis triangularis* BARB. ROD. var. *longipedunculata* COGN. in MARTIUS, Fl. Bras. 3(4). 363. 1896

Brazil, Theresopolis (prov. Rio de Janeiro), Dec 1887, J. DE MOURA 84, HBG502045: TYPUS

*Stenoptera guentheriana* KRAENZL., Repert. Spec. Nov. Regni Veg. 25: 19. 1928

Bolivia, Región de Mapiri, San Miguel, auf Kaffeebäumen, 4 May 1927, O. BUCHTIEN 483, HBG500832: HOLO; HBG500833: ISO

ann. KRÄNZLIN: Typus!

ann. SZLACHETKO:  $\equiv$  *Eurystyles guentheriana* (KRAENZL.) GARAY

*Stenorhynchos apetalus* KRAENZL., Repert. Spec. Nov. Regni Veg. 6: 23. 1908

Bolivia, Erdpflanze im Wald bei Yotau (Misionar de Guarayas), Sept 1907, Th. HERZOG 372, HBG502046: HOLO

ann. KRÄNZLIN: Blüten vom spec. typ. aut.

ann. SZLACHETKO: = *Sacoila lanceolata* (AUBL.) GARAY

*Stenorhynchos berroanus* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 26. 1911

Uruguay, Cerro Verdun, 4 Dec 1899, M.B. BERRO 1408, HBG502047: ISO

ann. SZLACHETKO:  $\equiv$  *Skeptrostachys berroanus* (KRAENZL.) GARAY

*Stenorhynchos cogniauxii* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 25. 1911

Brazil, Minas Geraes, Las Caldas, in ripeamnis Rio Verde in arboribus, 18 Sept 1855, A.F. REGNELL III. 1204, HBG502049: ISO

ann KRÄNZLIN: Typus!

ann. SZLACHETKO:  $\equiv$  *Pseudoeurytystyles cogniauxii* (KRAENZL.) HOEHNE

*Stenorhynchos dusenianus* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 28. 1911

Brazil, Paraná, Tamanduá, in campo, 1 Feb 1909, P. DUSÉN 7648, HBG500798, HBG500799: ISOSYN

ann. SZLACHETKO:  $\equiv$  *Sacoila duseniana* (KRAENZL.) GARAY

*Stenorhynchos lindmanianus* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 23. 1911

Brazil, Paraná, Serrinha, in paludosis, 8 Dec 1909, P. DUSÉN 7320, HBG502051: ISO

ann. KRÄNZLIN: Typus!

ann. SZLACHETKO: = *Pelexia lindmaniana* (KRAENZL.) SCHLTR.

*Stenorrhynchos orobanchoides* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 24. 1911

Brazil, Paraná, Villa Velha, P. DUSÉN 7220, HBG501615: ISO

ann. KRÄNZLIN: Typus!

ann. SZLACHETKO: = *Pelezia orobanchoides* (KRAENZL.) SCHLTR.

*Stenorrhynchos oestrifer* (RCHB. F. & WARM.) COGN. var. *minor* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46: 23. 1911

Argentina, Posadas, locis siccis graminosis prope "La Granja" pradium, 30 Nov 1907, E. L. EKMAN 426, HBG500813: ISO

*Stenorrhynchos pachystachyus* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 30. 1911

Brazil, Paraná, Villa Velha, in campo, 4 Feb 1909, P. DUSÉN 7661, HBG502052: ISO

*Stenorrhynchos sancti-antonii* KRAENZL., Bot. Jahrb. Syst. 36, Beibl. 80: 8. 1905 (as "Sancti Antonii")

Argentina, rarissima temel tantum inventa in Cuesta de Sant Antonio, Prov. Salta, Jan 1897, C. L. SPEGAZZINI 102718, HBG502053: HOLO

ann. KRÄNZLIN: Typus!

ann. SZLACHETKO: = *Sacoila lanceolata* (AUBL.) GARAY

*Stenorrhynchos tamanduensis* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 24. 1911

Brazil, Tamandua, in campo, P. DUSÉN 7650, HBG502054: ISO

ann. KRÄNZLIN: Typus!

ann. CHRISTENSON, SZLACHETKO: = *Pelezia tamanduensis* (KRAENZL.) SCHLTR.

= *Pachygenium tamanduense* (KRAENZL.) SZLACH., R. GONZÁLEZ & RUTK.

*Stigmatosema draculoides* SZLACH., Fragm. Florist. Geobot. 41(2): 861. 1996

Brazil, Jaguariahyva, in silvula, 20 Aug 1910, P. DUSÉN 10205, HBG500790: HOLO

*Stigmatosema odileana* SZLACH., Lindleyana 10: 16. 1995 (Fig. 15)

Brazil, Pr. St. Catharina, in einem Wäldchen am oberen Laranjeiras, Orleans, Sept 1889, E. ULE 1327, HBG502057: HOLO



**Fig. 15** Holotype of *Stigmatosema odileana* SZLACH., a recently described species collected by E. ULE in Brazil in 1889. This ULE sheet had been originally identified as a variety of *Spiranthes elata* (Sw.) RICH. by A. COGNIAUX who wrote the orchid treatment for the monumental "Flora Brasiliensis" established by C.F.P. v. MARTIUS.

*Stolzia angustifolia* MANSF., Notizbl. Bot. Gart. Berlin-Dahlem 11: 1063. 1934

Tanzania, Tanganjika Terr., Bezirk Morogoro, Uluguru-Gebirge, Nordwestseite, Nebelwald, 5 Dec 1932, H. J. SCHLIEBEN 3055, HBG502058: PARA

*Stolzia atrorubra* MANSF., Notizbl. Bot. Gart. Berlin-Dahlem 11: 1063. 1934

Tanzania, Tanganjika Terr., Bezirk Morogoro, Uluguru-Gebirge, Nordwestseite, Nebelwald, Paratapaß, 18 Oct 1932, H. J. SCHLIEBEN 2830, HBG500635: ISO

**Note** Originally labelled “*Stolzia atrorubens* Mansf. n. spec.”.

*Telipogon kalbreyerianus* KRAENZL., Ann. Naturhist. Hofmus. Wien 33: 36. 1919

Colombia, Frontino, W. KALBREYER 1721e, HBG502069: ISO  
ann. KRÄNZLIN: Typus!

*Trachelosiphon paranaensis* SCHLTR., Repert. Spec. Nov. Regni Veg. 16: 327. 1920

Brazil, Paraná, Jaguariahyva, in silvula ad trunco paludos, 19100418, P. DUSÉN 9788,  
HBG502071: TYPUS?  
ann. SZLACHETKO: ≡ *Eurytyle paranaensis* (SCHLTR.) SCHLTR.

**Note** Originally labelled as “*Stenoptera ananassocomos* Rchb. f.”.

*Trichoceros muscifera* KRAENZL., Bot. Jahrb. Syst. 37: 387. 1906

Peru, A. WEBERBAUER 4061, HBG502072: SYN  
ann. KRÄNZLIN: Typus!

*Trichopilia hennisiana* KRAENZL., Orchis 2: 99, 121. 1908 (Fig. 16)

(Colombia), Hort. W. HENNIS, Hildesheim, HBG502073: HOLO  
ann. KRÄNZLIN: Typus!

*Trichotosia annulata* BLUME, Bijdr. Fl. Ned. Ind.: 343. 1825

Indonesia, Java, C. L. BLUME, HBG506856: TYPUS-fragment (=ISO)

*Trichotosia ferox* BLUME, Bijdr. Fl. Ned. Ind.: 342. 1825

Indonesia, Java, C. L. BLUME, HBG506855: TYPUS-fragment (=ISO)

*Trichotosia odoardi* KRAENZL. Bot. Jahrb. Syst. 44, Beibl. 101: 21. 1910

(Malaysia, Borneo, Sarawak), O. BECCARI 1873, HBG501672: HOLO



**Fig. 16** *Trichopilia hennisiana* KRAENZL. was named after W. HENNIS, owner of a famous orchid nursery in Hildesheim where the plant was flowering in 1908. The wild material originated from Colombia, and nurseries like that of HENNIS have a long tradition of being visited by orchid specialists searching for undescribed species.

*Trichotosia pleistophylla* KRAENZL. in ENGLER, Pflanzenr. 50(2): 160. 1911

Indonesia, Celebes, Tomohon, K. F. & P. B. SARASIN 660, HBG502076: HOLO  
ann. KRÄNZLIN: Typus!

*Trichotosia wallaceana* KRAENZL., Bot. Jahrb. Syst. 44, Beibl. 101: 21. 1910

Indonesia, Molukken, Ternate, O. BECCARI, HBG502078: HOLO  
ann. KRÄNZLIN: Typus!

*Tropidia reichenbachiana* KRAENZL., Bot. Jahrb. Syst. 7: 442. 1886

Indonesia, Lukepara-Insel, Banda-See, F. C. NAUMANN, HBG502079: HOLO  
ann. KRÄNZLIN: Typus

*Tropidia saprophytica* J. J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 27. 1927

Indonesia, West-Borneo, am Sungai Raun, 10 Feb 1925, H. WINKLER 1546,  
HBG502080: HOLO

*Tryphia major* SOND., Linnaea 19: 82. 1847

South Africa, Clanwilliam, Olifantsrivier and Villa Brakfontein (locality code 76), C. F. ECKLON & C. L. P. ZEYHER, HBG501331: ISO  
= *Holothrix secunda* (THUNB.) RCHB. F.

*Tryphia secunda* LINDL., Gen. Spec. Orchid. Pl.: 258. 1835 (non *Orchis secunda* Thunb.)

South Africa, Koratra, im Wald, J. F. DRÈGE, HBG501327: TYPUS  
= *Holothrix parviflora* (LINDL.) RCHB. F. (see IMMELMANN 1981: 456)

**Note** The name *Tryphia secunda* LINDL. was published by LINDLEY (1835) on page 333 not on page 258 as sometimes seen with the latter page referring to the generic key, not the diagnosis.

*Vrydagzynea angustisepala* J. J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 20. 1927

Indonesia, West-Borneo, auf dem Bidang Menabei, Urwald, 26 Dec 1924, H. WINKLER 1095, HBG502081: HOLO

*Vrydagzynea pauciflora* J. J. SM., Mitt. Inst. Allg. Bot. Hamburg 7: 19. 1927

Indonesia, West-Borneo, auf dem Bidang Menabei, Urwald, 13 Dec 1924, H. WINKLER 822, HBG502082: HOLO

*Vrydagzynea pauciflora* J. J. Sm. var. *unistriata* J. J. Sm., Mitt. Inst. Allg. Bot. Hamburg 7: 20. 1927

Indonesia, West-Borneo, auf dem Bukit Obat, Urwald, 29 Jan 1925, H. WINKLER 1325, HBG502083: HOLO

*Vrydagzynea tilungensis* J. J. Sm., Mitt. Inst. Allg. Bot. Hamburg 7: 21. 1927

Indonesia, West-Borneo, auf dem Bukit Tilung, Urwald, 8 Feb 1925, H. WINKLER 1462, HBG502084: HOLO

*Wullschlaegelia paranaensis* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 42. 1911

Brazil, Paraná, São João, in paludosis (fl. alta), 21 Mar 1910, P. DusÉN 9347, HBG502086: HOLO

ann. KRÄNZLIN: Unicum!, Typus!

ann. CHRISTENSON: ≡ *Erythrodes paranaensis* (KRAENZL.) PABST ex ANGELY

*Wullschlaegelia ulaei* COGN. in MARTIUS, Fl. Bras. 3(4): 244. 1895

Brazil, Pr. St. Catharina, Saprophyt auf dem Bergrücken des Garciawaldes, Blumenau, Nov 1888, E. ULE 1000, HBG500649, HBG500650: ISO

≡ *Uleiorchis ulaei* (COGN.) HANDRO

*Xerorchis amazonica* SCHLTR., Repert. Spec. Nov. Regni Veg. 11: 45. 1912

Brazil, auf Sandboden, Manáos, Rio Negro, Feb 1901, E. ULE 5425, HBG502087: ISO

*Xylobium brachystachyum* KRAENZL., Gard. Chron. 2, ser. 3, 40: 302. 1906

(Brazil, St. Catarina), Hort. W. HENNIS, Hildesheim, fl. Oct 1906, HBG50208 HOLO

ann. KRÄNZLIN: specim. Typicum!

(Brazil), Hort. W. HENNIS, Hildesheim, fl. Nov 1907, HBG502089: CLONO?

ann. KRÄNZLIN: Typus!

**Note** Apparently, the holotype was collected from a plant flowering in the famous nursery of W. HENNIS in Hildesheim in October 1906 (sheet HBG502088), whereas the material preserved on sheet HBG502089 was later (Nov 1907) in the same place and most probably from the “type plant”. Even though this latter sheet was marked by KRÄNZLIN as “Typus!” it cannot be considered a proper type since postdates the protologue – an example of KRÄNZLIN’s “casual and inconsistent” marking of types as quoted by CHRISTENSON (1994: 344). Nonetheless, sheet HBG502089 is listed here as a so-called “clono-type”, a “type rank” used especially in horticulturally relevant plant groups.

*Xylobium buchtienianum* KRAENZL., Orchis 2: 129. 1908

Bolivia, Süd-Yungas, Sirapaya bei Yanacachi, in Wälder auf Bäumen wachsend, 19 Dec 1906, O. BUCHTIEN 383, HBG502090: HOLO  
ann. KRÄNZLIN: Typus!

*Xylobium crassifolium* KRAENZL., Repert. Spec. Nov. Regni Veg. 17: 389. 1921

(Central, South America), Hort. Bot. Hamburg, HBG502091: HOLO  
ann. KRÄNZLIN: Typus!

*Xylobium dusenii* KRAENZL., Kongl. Svenska Vetenskapsakad. Handl. 46(10): 65. 1911

Brazil, Paraná, in regione litorali ad tr. arb., Mar 1909, R. LANGE [P. DUSÉN] 8022, HBG502092: ISO  
ann. KRÄNZLIN: Typus!

**Note** KRÄNZLIN cited DUSÉN no. 8022 as type in his diagnosis, but on the label he indicated LANGE no. 8022 as collector. LANGE was co-working with DUSÉN in Paraná (KRÄNZLIN 1920: 1).

*Xylobium latifolium* SCHLTR., Repert. Spec. Nov. Regni Veg. 27: 66. 1929

Bolivia, Hacienda Casana sobre el camino a Tipuani, 27 Jan 1923, O. BUCHTIEN 7224, HBG502094: ISO

*Zeuxine cochlearis* SCHLTR., Bot. Jahrb. Syst. 20, Beibl. 50: 11. 1895

South Africa, Umgeni River mouth, Aug 1893, R. SCHLECHTER 2002[3001], HBG502096: ISO?

**Note** HBG keeps a small flower packet of *Zeuxine cochlearis* received with the herbarium of P. MAGNUS (Berlin) and purchased by the Herbarium Hamburgense in 1918. There is no proper label but the place and date of collection are handwritten on the packet and match the protologue information with the exception of the collection number. This number is – most likely – erroneously given as 2002 and not 3001 as in the printed paper. SCHLECHTER (1895: 12) noted that he found this new species growing abundantly but only at a single, small locality. From this observation and itinerary details provided by SCHLECHTER on page 24 of the same publication it is concluded here that the HBG specimen is part of the original collection and that the collection number on the packet should read 3001.

*Zeuxine gilgiana* KRAENZL. & SCHLTR., Bot. Jahrb. Syst. 38: 150. 1906

Cameroon, Bipinde, Urwaldgebiet, 1898, G. ZENKER 1625, HBG500902: ISO  
ann. SZLACHETKO, KRAS-LAPINSKA & KOWALKOWSKA: isotype

## Appendix of unpublished names

The following appendix lists 63 plant sheets that were marked as “Typus” or “n. sp.” by KRÄNZLIN and other authors, but the corresponding 59 names appear to be putatively new species or unpublished, provisional names as they are not listed in comprehensive databases such as IPNI, TROPICOS and The Plant List. During the present inventory some type-marked specimens carrying such provisional names could be linked to validly published names through literature studies. For example, H. BAUM no. 496 collected 1899 in Angola has been originally labelled “*Eulophia baumii* Schlr. n. sp.”, apparently a provisional herbarium name coined by SCHLECHTER. Eventually, SCHLECHTER published his new species as *E. warburgii* SCHLTR. (WARBURG 1903: 214) in order to avoid conflicts with *E. baumiana* KRAENZL. based on H. BAUM no. 505, likewise collected in Angola and published in WARBURG (1903: 213). Another example is a specimen collected by P. DUSÉN as no. 10786 in Brazil in 1910. The plant was originally determined by KRÄNZLIN as “*Pleurothallis vallinhoriana* KRAENZL.” and marked as “Typus!”. Apparently, no such name exists, but KRÄNZLIN described *Pl. convallium* KRAENZL. based on DUSÉN no. 10786 as type (KRÄNZLIN 1920: 12).

Probably at least some of the specimens listed below are types of species described later under different names as exemplified above. However, most of the names seem to be “unpublished herbarium names” and cannot be considered types. On the other hand, monographers may find these collections useful for their studies. In the case that there is no information found on the label about collector and origin of the material, or that the geographic origin of cultivated material proves impossible to be deduced, the material is unlikely to be of any use for taxonomic purposes (CHRISTENSEN 1994: 344) and is therefore omitted here.

*Acianthus stenopetalus* KRAENZL. ined.

[West Pacific?, coll.?], 1897, HBG500861

ann. CLEMENTS: = *Corybas*

*Aporum muelleri* KRAENZL. ined.

[Australia?, coll.?], HBG500908

*Aporum muellerianum* KRAENZL. ined.

[Australia?, coll.?], HBG501569

ann. KRÄNZLIN: specim. typ!

*Arachnites uniflora* PHIL. ined.

Chile, Valdivia, [coll. R. A. PHILIPPI?], HBG506523

*Bifrenaria pardalix* KRAENZL. ined.

[South America?, coll.?], Hort. [FUERSTENBERG-]HUGENPOET, HBG501983  
ann. GOMERO: = *Rudolfiella bicornaria* (RCHB. F.) HOEHNE

*Bletia goebeliana* KRAENZL. ined.

(Brazil), Hort. München, HBG501345

*Chloraea ambigua* KRAENZL. ined.

Chile, Valparaiso, [coll. ?], HBG501448  
ann. KRÄNZLIN: spec. typ.

*Chloraea capitata* KRAENZL. ined.

Chile, Concepcion, F. W. NEGER, HBG501452  
ann. KRÄNZLIN: spec. typ.

*Chloraea guentheri* KRAENZL. ined.

Chile, Valparaíso, Nov 1928, E. GÜNTHER & O. BUCHTIEN 10, HBG501459

*Chloraea inversa* KRAENZL. ined.

[South America?, coll.?], HBG501462  
ann. KRÄNZLIN: spec. typ.

*Chloraea odontosepala* KRAENZL. ined.

Chile, Curico, [coll.?], HBG501464  
ann. KRÄNZLIN: spec. typ.

*Chloraea patagonorum* SPEG. & KRAENZL. ined.

Argentina, Teka-ohoiquea, C. L. SPEGAZZINI 55, HBG506521

*Chloraea ramoniana* KRAENZL. ined.

[South America?, coll.?], HBG501466  
ann. KRÄNZLIN: spec. typ.

*Cirrhopetalum marsupiale* KRAENZL. ined.

(Thailand), Siam, C. C. HOSSEUS, HBG501472  
ann. KRÄNZLIN: Typus!

*Cyclopogon* sp. nov. ?

Brazil, Rio de Janeiro, Aug 1887, E. ULE, HBG501491, HBG502557, HBG502558

*Dichaea* spec. nov.?  
Costa Rica, 26 Jan. 1953, LIESKE, HBG501609  
ann.: ex aff. *D. bradeorum* SCHLTR.

*Dichaea* spec. nov.?  
Bolivia, Región subtropical, Hacienda Simaco sobre el camino a Tipuani, Feb 1920, O.  
BUCHTIEN 5026, HBG500355

**Note** Apparently, there is no new *Dichaea* species typified with BUCHTIEN 5026 in SCHLECHTER's treatment of the BUCHTIEN orchids (SCHLECHTER 1929).

*Dendrobium buddhae* KRAENZL. ined.  
[(Thailand) Siam, 1906, C.C. HOSSEUS], Hort. FUERSTENBERG-HUGENPOET, HBG501505  
ann. KRÄNZLIN: Typus!

*Dendrobium erosulum* KRAENZL. ined.  
Samoa, Upolu, Apia, 2 Sept 1880, E. BETCHE, HBG501524  
ann. KRÄNZLIN: Typus!  
ann. v. MUELLER: *Dendrobium nemorosum*

*Dendrobium euplophoides* F. MUELL. & KRAENZL. ined.  
Samoa, Apia, 11 Dec 1879, E. BETCHE 61, HBG500769  
ann. KRÄNZLIN: spec. typ. autor.

*Dendrobium ewartii* KRAENZL. ined.  
Australia, Bellenden Ker Range, KARSTEN, HBG501525  
ann. KRÄNZLIN: Typus!

*Dendrobium muellerianum* KRAENZL. ined. non SCHLTR. 1907  
Papua New Guinea, Brit. New Guinea, 1895, W. FITZGERALD 50, HBG501568  
ann. KRÄNZLIN: Typus!

**Note** Type of *Dendrobium muellerianum* SCHLTR. 1907 is from Queensland, Australia.

*Dendrobium nubigenum* KRAENZL. ined.  
Papua New Guinea, Cloudy Mountains, Nov 1994, W. MICHOLITZ, HBG501572,  
HBG501573  
ann. KRÄNZLIN: Typus!

**Note** Both sheets have been annotated by KRÄNZLIN as type for *Dendrobium nubigenum* KRAENZL. non *Dendrobium nubigena* SCHLTR. 1912.

*Dendrobium papilio* KRAENZL. ined. non Loher 1897

See *Dendrobium psyche* KRAENZL. in main list.

*Dendrobium parkinsonii* KRAENZL. ined.

Papua New Guinea, New Britain, 1888, R. PARKINSON, HBG506656

*Dendrobium platychilum* KRAENZL. ined.

Papua New Guinea, Eastern New Guinea, Bartle Bay, 1894, Cop. KING, HBG501578  
ann. KRÄNZLIN: *Dendrob. platychilum* KRAENZL. n. sp.?

*Dendrobium robertsonianum* KRAENZL. ined.

New Caledonia, 1886, J. ROBERTS, HBG501585, HBG501586: TYPUS?

ann. KRÄNZLIN: Typus!

ann. CLEMENTS: *Dendrobium fractiflexum* Finet

**Note** The sheet HBG501586 was annotated by CHRISTENSON as “? *Dendrobium robertsii* F. Muell. ex Rupp, Queensl. Nat. 9: 52. 1934”. However, *D. robertsii* is based on a HARTMANN specimen from Queensland and belongs to *Dockrillia mortii* (F. MUELL.) RAUSCHERT (CLEMENTS & JONES 2008).

*Dendrobium sclerophyllum* KRAENZL. ined. non LINDL. 1844

Papua New Guinea, New Guinea, Cape Frere, 1895, Cop. KING, HBG501590

ann. KRÄNZLIN: Typus!

*Drymoda mooreana* KRAENZL. ined.

[Asia, coll.?], HBG501623

ann. KRÄNZLIN: spec. typ. aut.!

*Epidendrum dusenianum* KRAENZL. ined.

Brazil, Paraná, Serra do Mar, Caiguava, in silv. prim., ad trunco arb., 19 Nov 1909, P.

DusÉN 9043, HBG501632

ann. KRÄNZLIN: Typus!

*Epidendrum glaziovianum* KRAENZL. ined.

[South America?, coll.?], HBG501634

ann. KRÄNZLIN: Typus

*Eria farinosa* H. WENDL. & KRAENZL. ined. non Ames & C. Schweinf. 1920

(Burma, coll.?), fl. Hort. Herrenhausen, Hannover, Nov 1899, HBG501656

ann. KRÄNZLIN: spec. typ. aut.

*Eria inconspicua* KRAENZL. ined.

[Malaysia, Indonesia?], O. BECCARI 90, HBG501658

ann. KRÄNZLIN: Typus!

*Eria pseudo-pannea* KRAENZL. ined.

(Philippines, Manila, 1914, A. LOHER), Hort. München-Nymphenburg, Dec 1919, HBG501676

ann. KRÄNZLIN: Typus!

*Eulophia baumii* SCHLTR. ined. non *E. baumiana* KRAENZL. 1904

See *Eulophia warburgii* SCHLTR. in main list.

*Eulophia vestita* SCHLTR. ined.

Tanzania, Nyassa Hochland, Station Kyimbila, 10 Mar 1911, A. STOLZ 625, HBG501716

**Note** filed as *Eulophia shupangae* (RCHB. f.) KRAENZL. in a list of STOLZ' orchids kept at HBG.

*Habenaria amplexicaulis* KRAENZL. ined.

Namibia, S.W. Afrika (Deutsche Gebiet), Ondonga-Mekonda, M. RAUTANEN, HBG500990

ann. KRÄNZLIN: aus dem Züricher Herbar, Typus!

*Habenaria borbonica* KRAENZL. ined.

[Réunion?, coll.?], HBG501012

ann. KRÄNZLIN: Typus!

*Habenaria gymnochla* KRAENZL. ined.

see *H. macrodactyla* KRAENZL. in main list

*Habenaria liberiae* KRAENZL. ined.

[Liberia?, coll.?], HBG500885

*Habenaria teniana* KRAENZL. ined.

China, Yun nan, Pe yen tsin, 4 Sept 1919, S. TÉN 1352, HBG501274

**Note** Probably referable to *Habenaria tenii* SCHLTR. which is based on a collection of S. TÉN from the same locality made at a slightly earlier date (19 Aug 1919) and lacking a collection number.

*Hetaeria kurtziana* KRAENZL. ined.  
 [probably from SE Asia], O. WARBURG, HBG501745  
 ann. KRÄNZLIN: spec. typ. aut.

*Holothrix gueinzii* KRAENZL. ined.  
 South Africa, W. GUEINZIUS 64, HBG501326

*Lissochilus cyclopetalus* SCHLTR. ined.  
 See *Lissochilus amblyoseptalus* SCHLTR. in main list.

*Maxillaria bicolor* KRAENZL. ined. non Ruiz. & Pav. 1798  
 (South America?), Hort. FUERSTENBERG-HUGENPOET, HBG501781  
 ann. KRÄNZLIN: Typus!

*Maxillaria kirchhoffiana* KRAENZL. ined.  
 (South America?), HBG506709  
 ann. KRÄNZLIN: "Eine neue *Maxillaria* ..."

**Note** The sheet is accompanied by an extensive description, flower drawing and sketches.

*Maxillaria paulensis* KRAENZL. ined.  
 Brazil, S. Paulo, im Basalteil der Cerra do Mar, Sept 1912, P. DUSÉN, HBG501792  
 ann. KRÄNZLIN?: *Maxillaria paulensis* KRAENZL. n.sp.

*Maxillaria wrightiana* KRAENZL. ined.  
 See *Pleurothallis valenzuelana* A. RICH. in main list.

*Microstylis ulei* COGN. ined.  
 See *Microstylis gracilis* COGN. in main list.

*Octomeria paulensis* KRAENZL. ined. non Barb. Rod. 1937 (?)  
 Brazil, S. Paulo, Jaraguá, Urwald, A.C. BRADE 6240, HBG501814  
 ann. KRÄNZLIN: Typus!

*Oncidium arechavaletae* KRAENZL. ined.  
 Argentina, in truncis arborum loco dicto El Churqui prope La Viña Prov. Salta, Jan 1897, C.L. SPEGAZZINI 105007, HBG501820  
 ann. KRÄNZLIN: (Heterantha), Typus!

*Ornithidium deflexum* KRAENZL. ined.

See *Ornithidium mapiriense* KRAENZL. in main list.

*Ornithidium parvum* KRAENZL. ined.

Guyana, Brit. Guyana, OSMERS, HBG501838

ann. KRÄNZLIN?: *Ornithidium parvum* n. sp.

*Pelezia* spec. nov.

Mexico, Chiapas, Lagos de Montebello, 1980, EGgers & WOEST 667–80, HBG501850

ann. SZLACHETKO: *Pelezia* spec. nov.

*Pelezia* spec. nov.

Brazil, Minas Gerais, Mun. Santana do Riacho, road from Belo Horizonte to Conceicao do Mato Dentro near Chapeu do Sol, 2 May 1986, J.G. ROHWER 80, HBG501849

ann. SZLACHETKO: *Pelezia* spec. nov.

*Pleurothallis aterrima* KRAENZL. ined.

(Brazil?), Hort. O. BEYRODT, Berlin-Marienfelde, HBG501877

ann. KRÄNZLIN: Typus!

*Pleurothallis bipunctata* KRAENZL. ined.

(Brazil?), Hort. Nymphenburg, München, HBG501878

ann. KRÄNZLIN: Typus!

*Pleurothallis compressiflora* KRAENZL. ined. non Barb. Rod. 1882

Brazil, Rio de Janeiro, Corcovado in silva primaeva ad tr. arb., 20 Oct 1912, P. DUSÉN 14266, HBG501883

ann. KRÄNZLIN: Typus!, Unicum!

**Note** There is another specimen, Brazil, Rio Corcovado, 15 Feb 1902, P. DUSÉN 1934, HBG501884 identified as *Pleurothallis compressiflora* but lacking any author citation.

*Pleurothallis hypophylla* KRAENZL. ined.

(Brazil, BÉNOT), Hort. Bot. München. SEEGER & TROPP, fl. 1888, HBG501889

ann. KRÄNZLIN?: *Pleurothallis hypophylla* sp. n.

*Pleurothallis rocae-novae* KRAENZL. ined.

Brazil, Paraná, Roca Nova, in truncis arb., 25 May 1909, P. DUSÉN 8486, HBG501908

ann. KRÄNZLIN: Typus!

*Pleurothallis vallinhoriana* KRAENZL. ined.

See *Pleurothallis convallium* KRAENZL. in main list.

*Pleurothallis* nov. spec. SCHLTR.

Bolivia, Simaco im Tipuani-Tale, epiphytisch, Feb 1920, O. BUCHTIEN 5039, HBG501918

*Polystachya semperflorens* KRAENZL. ined.

(Africa?), Hort. FUERSTENBERG-HUGENPOET, HBG500846  
ann. KRÄNZLIN: Typus!

**Note** There is a pencil annotation “caloglossa?”.

*Prasophyllum despectum* E. PRITZ. ined.

Australia, District N. West Plantagenet, in fruticetis collium Stirling Range, Sept 1901,  
E.G. PRITZEL 709, HBG501972  
sub *Prasophyllum despectum* E. Pritz. n. sp.

*Satyrium stolzii* SCHLTR. ined. non *S. stolzianum* KRAENZL. 1902(1904)

See *Satyrium sphaeranthum* SCHLTR. in main list.

*Spiranthes berroana* KRAENZL. ined.

Uruguay, Hab. Cuarein, 18 Sept 1902, M. B. BERRO 2859, HBG502016  
ann. KRÄNZLIN: Typus!

*Spiranthes mexicana* SCHAFFN. ined.

Mexico, Valle de Mexico, in paludosis, Jul 1875, J.G. SCHAFFNER, HBG506852  
Orig. sub “Schaffner in litt.”

*Spiranthes schizosepala* KRAENZL. ined.

See *Spiranthes amblysepala* KRAENZL. in main list.

*Telipogon heteropogon* KRAENZL. ined.

Colombia, W. KALBREYER, HBG502070  
ann. KRÄNZLIN: Typus!

*Tropidia bipectinata* RCHB. F. ined.

Fiji, Viti-Levu, E. GRAEFFE 1279, HBG506851

**Note** The specimen has been determined by KRÄNZLIN. Perhaps he took up an unpublished working name used by REICHENBACH who was studying GRAEFFE's orchids for his con-

tribution to the “Flora Vitiensis”. There is another *Tropidia*, *Tr. effusa* RCHB. F., with a GRAEFFE specimen from the same locality being part of the original material (see SEEMANN 1868: 295).

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