

Newly discovered orchid types (Orchidaceae) in the Herbarium Gottingense with selected lectotypifications

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Introduction

Thorough investigation of old collections is an important service to taxonomy and history of science. In this process, many old collections that may have been forgotten can be made available again for science. Recently, online databases like *Tropicos* (www.tropicos.org), the *World checklist of selected plant families* (<http://apps.kew.org/wcsp/home.do>) and *The plant list* (www.theplantlist.org) have facilitated this work (Steudel *et al.* 2012). It has not yet been recognized that many old collections are rich in type material. These specimens are of particular value since some collections have been destroyed (e.g. Herbarium Berolinense in World War II), and it is important to compile lists of type material from the 18th and 19th century from as many herbaria as possible. An example is the discovery of type material of *Bipinnula polysyka* Kraenzl. (Kränzlin 1887; Orchidaceae) in Zurich (Z & ZT) by Steudel *et al.* (2012). This material has been designated as lectotype of the species as it represents the only known original material (Sanguinetti *et al.* 2015). Additionally, a complete revision of a group can clarify nomenclatural confusion (Steudel 2012).

Methods

We focused on non-European orchids because the collections at GOET are mainly from the 19th century, and thus we expected unrecognized type specimens in non-European groups. We checked all specimens collected before the original species description for their type status using the internet databases *Tropicos*, *The world checklist of selected plant families* and *The plant list* (Steudel *et al.* 2012). To confirm possible type status, protogues in the species descriptions were consulted. Additionally, we found one European type specimen (*Orchis spitzelii* Sauter in Koch 1837).

We selected lectotypes from GOET if GOET was named in the protologue among other herbaria, the herbarium in which the particular researcher worked was destroyed or a close collaboration between the researcher and GOET is known. For lectotypification, we compared the species description with the respective herbarium specimen. In all cases, we searched for prior lectotypification in floras, taxonomic revisions, and monographs in which the taxa in question were treated.

Results

In total, we discovered 121 important specimens of which 82 constitute type material and the remaining 39 are probably type material or of nomenclatorial interest (Table 1). Additionally, we designate seven specimens as lectotypes. Lectotypification was done for taxa described by Grisebach, who worked in Goettingen and whose herbarium is part of GOET, Kränzlin and Schlechter, who worked on material from Berlin (from their own herbaria and the herbarium of Zenker), which was destroyed during World War II, and Cogniaux, who worked in close collaboration with GOET and Grisebach. We found letters about a loan of specimens from GOET to Cogniaux in our archive. Hence, Cogniaux had material from GOET at hand for his species descriptions.

Discussion

This project increased the number of recognized orchid type specimens at GOET by about one third. The discovered specimens are available on loan, and they have been digitized and made available online via the *Global plants on Jstor* (<http://plants.jstor.org>). With this, the availability of type material from GOET has increased, and we hope that future research can be conducted with this material.

Taxonomy

***Bulbophyllum leucopogon* Kraenzl. (Kränzlin 1913:391)**

Lectotype (designated here): CAMEROON. Bipinde: Urwaldgebiet [rain forest], 1909, Zenker 3903, (GOET, GOET013909!).

Isolectotypes: CAMEROON. Bipinde: Urwaldgebiet [rain forest], 1909, Zenker 3903 (BM 000525039, BR 0000008809063, E 00193781, HBG 501377, K 000410051, L 0058276, P 00359099, S G-1041, US 00406488, Z 000016318).

The main collection used by Kränzlin was destroyed in Herbarium Berolinense during World War II, including the collections of Zenker. No material of this species is available at Berlin (personal visit by BS). The main herbarium of Zenker at B was destroyed. Thus, we selected the isotype at GOET as lectotype (GOET 013909).

Epidendrum marbicornutum* Eaton (Eaton 1860: 220) *nomen nudum

This specimen (GOET013966) belongs to *Caularathron bilamellatum* (Reichenbach 1862: 345–346) Schultes (1958: 92). This was previously stated by Schultes (1958), and he treated this collection number as reference for this species. As the citation of Eaton (1860: 220) is the only known reference to *Epidendrum marbicornutum*, we treat this name as a synonym of *Caularathron bilamellatum* (Rchb.f.) R.E.Schult.

***Epidendrum ramosum* var. *lanceolatum* Grisebach (1864: 618)**

Lectotype (designated here): JAMAICA. S.d., *March 1251* (GOET 009088!).

Syntype: CUBA. 1860–1864, *Wright no. 3333* (GOET 013860!).

We selected *March 1251* (GOET 009088) as the lectotype since this specimen bears flowers. Additionally, Grisebach (1864: 618) cited all collections from Jamaica on trees and rocks as var. α (type variety) and var. β (var. *lanceolatum*), whereas he did not differentiate which variant was found in Dominica, Cuba, and Mexico to Brazil.

***Evelyna longibracteata* Lindley in Grisebach (1864: 623)**

Lectotype (designated here): JAMAICA. S.d., *March 1204* (GOET 013926!).

Isolectotype: JAMAICA. S.d., *March 1204* (K 000463735!).

Syntype (?): DOMINICA. S.d., *Muray (?)275* (K 000463736!).

We selected the specimen GOET 013926 as lectotype since Grisebach was based in Göttingen, and he cited this collection in the description (Grisebach 1864:623; ‘Hab. Jamaica!, Macf., March: ...’). The possible syntype (K 000463736) is mentioned here as Grisebach listed Dominica as additional habitat in the protologue (Grisebach 1864: 623). The specimen was included in the Herbarium Hookerianum in 1867 (see specimen K 000463736), and hence it was probably collected before Grisebach described the species.

***Liparis vexillifera* var. *latifolia* Cogniaux (1893: 290)**

Lectotype (designated here): ARGENTINA. Sierra de Tucuman: Cuesta del Garabatal, January 1874, *Lorentz & Hieronymus* 876 (BR 0000013702007!).

Isolectotypes: ARGENTINA. Sierra de Tucuman: Cuesta del Garabatal, January 1874, *Lorentz & Hieronymus* no. 876 (GOET 008576!, NY 00004197).

Syntype: ARGENTINA. Yacone: March 1873, *Lorentz & Hieronymus* 306 (302) (GOET 013960!).

We selected BR 0000013702007 as lectotype since it is from the main collection of Cogniaux. The collection *Lorentz & Hieronymus* 876 is better represented in herbaria (BR, GOET, NY) than 306 (only GOET) and hence is a suitable lectotype. Additionally, the specimen GOET 013960 contains only one plant with only a few flowers.

Spiranthes elata* var. *minutiflora Cogniaux (1893: 192)

Lectotype (designated here): TRINIDAD. S.d., *Crueger* 54 (GOET 013865!).

No duplicate of *Crueger* 54 exists in BR, Cogniaux's main herbarium (S. De Smedt, pers. comm.). We found a loan request from Cogniaux and a letter in the GOET archives that states that orchids were sent to him for the work on the *Flora Brasiliensis*. Hence, this specimen represents the only known type material available.

Spiranthes elata* var. *ovata Cogniaux (1893: 192)

Lectotype (designated here): ARGENTINA. Tartagal: s.d., *Lorentz & Hieronymus* 959 (GOET 013935!).

Syntype: ARGENTINA. S.d., *Lorentz & Hieronymus* 511 (GOET 013936!).

No type material for this name is present at BR (S. De Smedt, pers. comm.). As mentioned above, Cogniaux received orchid material from GOET for his work on *Flora Brasiliensis*. We selected specimen GOET 013935 as lectotype because it comprises a whole plant, whereas GOET 013936 consists of only fragments. Bolivia is listed as country of origin for *Lorentz & Hieronymus* 959 in the protologue instead of Argentina, since the city/area of Tartagal was then part of Bolivia.

Spiranthes hostmannii Reichenbach in Grisebach (1864: 640)

Holotype: TRINIDAD. S.d., *Crueger* s.n. (GOET 013864).

Material of interest: SURINAME. 1843, *Hostmann* 841 (G 00169118, GH 00104457, P 00340990, P 00340991). SURINAME. 1843, *Hostmann* 368 (P 00585474).

The specimen GOET 013864 is the holotype of this species since Grisebach (1864) cited only material collected by Crueger in Trinidad in his protologue. However, it is not clear whether Grisebach saw other material. Hence, we treat this species here in more detail. In the diagnosis of the species Grisebach (1864: 640) does not provide leaf characteristics, indicating that his specimen might be lacking leaves as is the case in GOET 013864. The name *Spiranthes hostmannii* was obviously used by Reichenbach, but we were not able to find a valid species description. Since Grisebach (1864) used the same species name, one might guess that he had seen the material collected by Hostmann.

Stelis bidentata Schlechter (1912: 358)

Lectotype (designated here): GUATEMALA. Alta Vera Paz: in sylvis pr. Tactic, 5000', June 1880, *Türckheim* 511 (AMES 00271966).

Isolectotypes: GUATEMALA. Alta Vera Paz: in sylvis pr. Tactic, 5000', June 1880, *Türckheim* 511 (AMES 00104611, GOET 013947!, US 00093539).

Syntype: GUATEMALA. Coban: 1350 m, December 1906, *Türckheim* 1842 (AMES 00104610).

The main herbarium of Schlechter was destroyed in World War II in Herbarium Berolinense. There is no material of this species available in Berlin (personal visit of BS). Hence, a lectotype needs to be selected. We selected the specimen AMES 00271966 as lectotype because it contains some flowers and is in better condition than GOET 013947 and US00093539. The syntype AMES 00104610 consists of a plant fragment lacking flowers. However, on the same sheet there is a photo of the destroyed Berlin specimen and drawings made under the supervision of Schlechter.

TABLE 1. Recently discovered specimens at GOET with current names and type status. Abbreviations: T = type; ? = not sure about the status; OM = original material; MOI = material of interest; s.n. = without collection number; s.d. = without collection date. In case the original and the current name are identical, the column 'current name' is left empty.

genus	species	Author	status	current name	collector	number	habitat	date	comments
<i>Acampe</i>	<i>renschiana</i>	Rchb.f.	IsoT	<i>Acampe pachyglossa</i> Rchb.f.	Hillebrandt	3392	Madagascar	Apr. 1880	
<i>Altensteinia</i>	<i>inaequalis</i>	Rchb.f.	T	<i>Myrosmodes inaequalis</i> (Rchb.f.) C.A.Vargas	Lechler	1950		s.d.	
<i>Appendicula</i>	<i>xyriophora</i>	Rchb.f.	T		Cuming	2149	Albay?	s.d.	
<i>Arundina</i>	<i>philippi</i>	Rchb.f.	SynT	<i>Arundina graminifolia</i> (D.Don) Hochr.	Fortune	73	China	s.d.	
<i>Bletia</i>	<i>ensifolia</i>	L.O.Williams	SynT		Pringle	4513	Mexico, Guadalajara	29.Aug.1893	
<i>Brassavola</i>	<i>perrinii</i>	Lindl.	T				Rio de Janeiro	s.d.	
<i>Bulbophyllum</i>	<i>elegans</i>	Gardner ex Thwaites	T		Thwaites	s.n.	Ceylon	s.d.	
<i>Bulbophyllum</i>	<i>leucopogon</i>	Kraenzl.	T	<i>Genyorchis pumila</i> (Sw.) Schltr.	Zenker	2350	Kamerun, Bipinde		
<i>Bulbophyllum</i>	<i>pachynachis</i>	(A.Rich.) Griseb.	MOI		Crueger	40	Trinidad	Jan. 1861	
<i>Burlingtonia</i>	<i>rigida</i>	Lindl.	T	<i>Rodrigezia rigida</i> (Lindl.) Rchb.f.	v.Wied	s.n.	Brasilia, Villa Nova de Almeida	Mar. 1816	
<i>Caladenia</i>	<i>pallida</i>	Lindl.	OM?		Gunn	s.n.	Tasmania	s.d.	
<i>Calanthe</i>	<i>aristulifera</i>	Rchb.f.	T		Rein	s.n.	Japan	s.d.	
<i>Catasetum</i>	<i>luridum</i>	Lindl.	T		Link		Pruess.Gart.Ver.1: 289, 16		
<i>Chlorea</i>	<i>fimbriata</i>	Phil.	T?	<i>Chloraea piquichen</i> (Lam.) Lindl.	Philippi	743	Chile	s.d.	
<i>Cirrhopetalum</i>	<i>wightii</i>	Thwaites	SynT						
<i>Cochlioda</i>	<i>sanguinea</i>	Benth. & Hook.f.	T	<i>Bulbophyllum elliae</i> Rchb.f. <i>Oncidium strictum</i> (Cogn.)	Thwaites	3160	Ceylon	s.d.	
<i>Coelogyne</i>	<i>longipes</i>	Lindl.	T?	M.W.Chase & N.H.Williams	Spruce	6004	Ecuador	1857-1859	
<i>Cypripedium</i>	<i>himaladicum</i>	Rolfe	T	J.D.Hooker & J.J.	s.n.	Khasia	s.d.		
				J.D.Hooker	s.n.	Sikkim	s.d.		

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TABLE 1. (Continued)

genus	species	Author	status	current name	collector	number	habitat	date	comments
<i>Cypripedium</i>	<i>himalaicum</i>	Rolfe	T		J.D.Hooker	s.n.	Sikkim	s.d.	
<i>Cyrtopodium</i>	<i>andersonii</i> var. <i>andersonii</i>	(Lamb. Ex Andrews) R.Br.	MOI		Wullschlägel	1124		s.d.	
<i>Cyrtopodium</i>	<i>andersonii</i> var. <i>andersonii</i>	(Lamb. Ex Andrews) R.Br.	MOI		Kegel	1089		s.d.	
<i>Cyrtopodium</i>	<i>andersonii</i> var. <i>andersonii</i>	(Lamb. Ex Andrews) R.Br.	MOI		Kegel	1089		s.d.	
<i>Cyrtopodium</i>	<i>grisebachii</i>	Rolfe ex Patt.	SynT	<i>Otosyphylis lepida</i> (Linden & Rehb.f.) Schltr.	Crueger	s.n.	Trinidad	s.d.	
<i>Cyrtostylis</i>	<i>huegelli</i>	Endl.	IsoT	<i>Cyrtostylis reniformis</i> var. <i>huegelli</i> (Endl.) Benth.	Preiß	2204	Nov.Hollandia	s.d.	
<i>Dendrobium</i>	<i>lunatum</i>	Lindl.	T		Cuming	2136		s.d.	
<i>Dendrobium</i>	<i>panduratum</i>	Lindl.	T		Thwaites	2359	Ceylon	s.d.	
<i>Dendrobium</i>	<i>porphyrochilum</i>	Lindl.	T?		Hook.f. & Thomson	s.n.	Khasia	s.d.	
<i>Dendrobium</i>	<i>gracilicaule</i>	Maiden	T?		s.c.	s.n.	Howes Island	s.d.	
<i>Dendrobium</i>	<i>moorei</i>	F.Muell.	T?		s.c.	s.n.	Howes Island	s.d.	
<i>Dendrochilum</i>	<i>uncatum</i>	Rchb.f.	T		Cumming	2073		s.d.	
<i>Dendrochilum</i>	<i>uncatum</i>	Rchb.f.	T		Cumming	2103		s.d.	
<i>Epidendrum</i>	<i>bipapulare</i>	Rchb.f.	T	<i>Encyclia bipapularis</i> (Rchb.f.) Acuna	Wright	3328	Cuba	1860-64	
<i>Epidendrum</i>	<i>hagsateri</i>	Christenson	T		Pringle	4728	Mexico	14.Jun.1894	
<i>Epidendrum</i>	<i>marbicornutum</i>	Eaton	T?	<i>Epidendrum bilamellatum</i> Rchb.f.	Fendler	2436	Cuba	1856-57	
<i>Epidendrum</i>	<i>ramosum</i> var. <i>lanceolatum</i>	Griseb.	ParaT	<i>Epidendrum antillanum</i> Ackermann & Hägsater	Wright	3333	Cuba	1860-64	

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TABLE 1. (Continued)

genus	species	Author	status	current name	collector	number	habitat	date	comments
<i>Epidendrum</i>	<i>repens</i>	Cogn.	T?		Harris	s.n.	Jamaica	4. Aug. 1908	
<i>Epidendrum</i>	<i>scaphelligerum</i>	Rchb.f.	T		Wright	3339	Cuba	1860-64	
<i>Epidendrum</i>	<i>strobliferum</i>	Rchb.f.	T		Crueger	s.n.	Trinidad	s.d.	
<i>Epidendrum</i>	<i>strobliferum</i> var. <i>swartzii</i>	Rchb.f.	T	<i>Epidendrum swartzii</i> (Rchb.f. ex Griseb.) Hágsater	Wullschiägel	565.566	Jamaica	s.d.	
<i>Epidendrum</i>	<i>triangulifерum</i>	Rchb.f.	OM?	<i>Encyclia triangulifera</i> (Rchb.f.) Acuna	Wright	s.n.	Cuba	1863	
<i>Epidendrum</i>	<i>vincinatum</i>	Lindl.	T		Guilding	s.n.	St. Vincent	s.d.	
<i>Eria</i>	<i>dalzellii</i>	Lindl.	T?	<i>Conchidium filiforme</i> (Wight)	Stocks	s.n.	Málabar, Concan	s.d.	
<i>Eria</i>	<i>dalzellii</i>	Lindl.	T?	<i>Conchidium filiforme</i> (Wight)	Stocks	s.n.	Málabar, Concan	s.d.	
<i>Eria</i>	<i>dalzellii</i>	Lindl.	T?	<i>Conchidium filiforme</i> (Wight)	Stocks	s.n.	Málabar, Concan	s.d.	
<i>Eria</i>	<i>mysorensis</i>	Lindl.	T	<i>Pinalia mysorensis</i> (Lindl.) Kuntze	Stocks	s.n.	Málabar, Concan	s.d.	
<i>Eria</i>	<i>uniflora</i>	Dalz.	T?	<i>Conchidium braccatum</i> (Lindl.)	Hook.f. & Thomson	s.n.	Málabar, Concan	s.d.	
<i>Eria</i>	<i>uniflora</i>	Dalz.	T?	<i>Conchidium braccatum</i> (Lindl.)	Hook.f. & Thomson	s.n.	Málabar, Concan	s.d.	
<i>Eulophia</i>	<i>venosa</i>	(F.Muell.) Rchb.f. ex Benth.	T?		s.n.	s.n.	Rockingham Bay		
<i>Evelynia</i>	<i>longibracteata</i>	Lindl. ex Griseb.	T	<i>Elleanthus longibracteatus</i> (Lindl. Ex Griseb.) Fawc.	Macfayden	s.n.	Jamaica	s.d.	
<i>Fractiunguis</i>	<i>brasiliensis</i>	Schltr.	Isolecto T	<i>Scaphyglottis brasiliensis</i> (Sehltr.) Dressler	Brade	7792	Brasilia,Sao Paolo	1918	

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TABLE 1. (Continued)

genus	species	Author	status	current name	collector	number	habitat	date	comments
<i>Govenia</i>	<i>limbata</i>	Griseb.	HoloT		Shepherd	s.n.	Trinidad	s.d.	
	<i>Grammatophyllum multiflorum</i>	Lindl.	T?		Cumming	2085		s.d.	
<i>Habe</i>	<i>candolleana</i>	Cogn.	T		Gardner	391	Brazil	s.d.	
<i>naria</i>									
<i>Habenaria</i>	<i>cephaloletes</i>	Lindl.	T	<i>Habenaria trifida</i> Kunth	Wight	3003	Indiae orientalis	s.d.	in protologue
<i>Habenaria</i>	<i>flexa</i>	Rchb.f.	T		Gardner	3455	Brazil	s.d.	without number
<i>Habenaria</i>	<i>flexa</i>	Rchb.f.	T	<i>Habenaria trifida</i> Kunth	Gardner	393	Brazil	s.d.	in protologue
									without number
<i>Herpyisma</i>	<i>longicaulis</i>	Lindl.	T		Wallich	s.n.	Nepal	s.d.	
<i>Lepanthes</i>	<i>divaricata</i>	Fawc. & Rendle	SynT		Harris	7832	Jamaica near Woodcutters gap	66	in protologue
<i>Lepanthes</i>	<i>divaricata</i>	Fawc. & Rendle	SynT		Harris	7833	Jamaica near Woodcutters gap	67	without number
<i>Liparis</i>	<i>elata var. latifolia</i>	Ridl.	T	<i>Liparis nervosa</i> (Thunb.) Lindl.	Wright	1495	Cuba	s.d.	
<i>Liparis</i>	<i>fendleri</i>	Schltr.	T	<i>Liparis brachystylis</i> Rchb.f.	Fendler	1422	Venezuela	s.d.	
<i>Liparis</i>	<i>gregaria</i>	Lindl.	SynT	<i>Stichorkis disticha</i> (Thouars)	Sieber	168	Maurice	s.d.	
<i>Liparis</i>	<i>pusilla</i>	Ridl.	SynT	<i>Liparis cespitosa</i> (Lam.) Lindl.	Pfitzer				
<i>Liparis</i>	<i>vexillifera var. latifolia</i>	Cogn.	SynT	<i>Liparis vexillifera</i> (Lex.) Cogn.	J.D.Hooker & J.J.	s.n.	Khasia	s.d.	
<i>Maxillaria</i>	<i>atrata</i>	Rchb.f.	T	<i>Camaridium cucullatum</i> (Lindl.)	Lorentz & Hieronymus	302	Yacone	s.d.	
<i>Maxillaria</i>	<i>atrata</i>	Rchb.f.	T		Wendland	s.n.	Guatemala, Las Nubes	9.Jan.1857	
<i>Meiracyllium</i>	<i>trimasutum</i>	Rchb.f.	T		M.A.Blanco		Guatemala, Las Nubes	9.Jan.1857	
					<i>Camaridium cucullatum</i> (Lindl.)	Wendland	s.n.	Guatemala	s.d.

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TABLE 1. (Continued)

genus	species	Author	status	current name	collector	number	habitat	date	comments
<i>Microstylis</i>	<i>mandonii</i>	Rchb.f.	T	unresolved	G.Mandon	1135	Bolivia	s.d.	
<i>Notylia</i>	<i>fragrans</i>	H.Focke	T?		Wullschlägel	533	Surinam	s.d.	
<i>Oberonia</i>	<i>iridifolia</i>	F.Muell.	OM?	<i>Oberonia complanata</i> (A.Cunn.)	F.Mueller	s.n.	New Rockhampton	s.d.	
<i>Oberonia</i>	<i>myriantha</i>	Lindl.	SynT	<i>Oberonia acaulis</i> Griff.	J.D.Hooker & J.J	s.n.	Khasia	s.d.	
<i>Oberonia</i>	<i>myriantha</i>	Lindl.	SynT	<i>Oberonia acaulis</i> Griff.	J.D.Hooker & J.J	s.n.	Khasia	s.d.	
<i>Oberonia</i>	<i>verticillata</i>	Wight	T?		Wight	2940		s.d.	
<i>Ocarrhena</i>	<i>parvula</i>	Thwaites	T		Thwaites	3072	Ceylon	s.d.	
<i>Odontoglossum</i>	<i>schlieperianum</i>	Rchb.f.	T	<i>Rossioglossum schlieperianum</i> (Rchb.f.) Garay & G.C.Kenn.	Wendland	1138	Costa Rica, Naranjo	3.Jul.1857	
<i>Odontoglossum</i>	<i>schlieperianum</i>	Rchb.f.	T	<i>Rossioglossum schlieperianum</i> (Rchb.f.) Garay & G.C.Kenn.	Wendland	1138	Costa Rica, über Cartago	3.Jul.1857	
<i>Oncidium</i>	<i>pastasae</i>	Rchb.f.	T	<i>Cyrtochilum pastasae</i> (Rchb.f.) Kraenzl.	Spruce	5078	Ecuador	1857-1859	
<i>Orchis</i>	<i>spitzelii</i>	Sauter in Koch	IsolectoT		Spitzel	s.n.	Austria	s.d.	
<i>Ornithocephalus</i>	<i>avicula</i>	Rchb.f. & Wullschl.	T	<i>Ornithocephalus ciliatus</i> Lindl.	Wullschlägel	939/1592?	Surinam	s.d.	
<i>Ornithocephalus</i>	<i>gladiatus</i>	Hook.	T?		Crueger	s.n.	Trinidad	s.d.	
<i>Pelezia</i>	<i>setacea</i>	Lindl.	T?	<i>Eltropeltis calcarata</i> (Sw.)			Brasilia, Villa Nova - Rio Doce	Mar.-Apr. 1816	
<i>Piliumma</i>	<i>laxa</i>	Lindl.	OM?	<i>Trichopilia laxa</i> (Lindl.) Rchb.f.			Popaya[n]	s.d.	
<i>Pleurothallis</i>	<i>albida</i>	Lindl.	IsoT	<i>Anathallis aborata</i> (Lindl.)	Wright	655	Cuba	s.d.	
<i>Pleurothallis</i>	<i>articulata</i>	Lindl.	T	Pridgeon & M.W.Chase	M.Wied	s.n.	Brasilia	s.d.	
				<i>Anathallis articulata</i> (Lindl.) Luer & Toscano					

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TABLE 1. (Continued)

genus	species	Author	status	current name	collector	number	habitat	date	comments
<i>Pleurothallis</i>	<i>brevipes</i>	Focke	IsoT	<i>Anathallis brevipes</i> (H.Focke) Pridgeon & M.W.Chase	Wullschaegel	1589	Surinam	s.d.	
<i>Pleurothallis</i>	<i>delicatula</i>	Lindl.	IsoT	<i>Specklinia delicatula</i> (Lindl.) Luer	Purdie	s.n.	Jamaica	s.d.	
<i>Pleurothallis</i>	<i>floribunda</i>	Lindl.	T?	<i>Aciyanthera capillaris</i> (Lindl.) Pridgeon & M.W.Chase	Sieber	206	Martinique	1841	in the protologue only Martinique is stated without collector or number
<i>Pleurothallis</i>	<i>floripicta</i>	Lindl.	T	<i>Leptanthes melanantha</i> (Rchb.f.) Ames	Wright	1509	Cuba	1859	nomen nudum
<i>Pleurothallis</i>	<i>longilabris</i>	Lindl.	SynT	<i>Specklinia longilabris</i> (Lindl.) Luer	Wright	651	Cuba	s.d.	
<i>Pleurothallis</i>	<i>longilabris</i>	Lindl.	SynT	<i>Specklinia longilabris</i> (Lindl.) Luer	Wright	1502	Cuba	s.d.	
<i>Pleurothallis</i>	<i>longirostris</i>	H.Focke	T	<i>Stelis ephemera</i> (Lindl.) Pridgeon & M.W.Chase	Wullschaegel	1112	Surinam	s.d.	
<i>Pleurothallis</i>	<i>longissima</i>	Lindl.	OM?	<i>Stelis quadridifida</i> (Lex.) Solano & Soto Arenas			Jamaica	s.d.	
<i>Pleurothallis</i>	<i>marginata</i>	Lindl.	OM?	<i>Specklinia picta</i> (Lindl.) Pridgeon & M.W.Chase	Skinner	258?	cult. Guatemala	s.d.	
<i>Pleurothallis</i>	<i>pringlei</i>	Schltr.	IsoT	<i>Trichosalpinx pringlei</i> (Schltr.) Luer	Pringle	4709	Mexico	s.d.	
<i>Pleurothallis</i>	<i>prostrata</i>	Lindl.	SynT?		Wright	1500	Cuba	s.d.	
<i>Pleurothallis</i>	<i>rhomboGLOSSA</i>	Rchb.f.	IsoT	<i>Pleurothallis chloroleuca</i> Lindl.	Wright	1506	Cuba	Jan.-Jul. 1859	
<i>Pleurothallis</i>	<i>sertularioides</i>	(Sw.) Spreng.	MOI	<i>Anathallis sertularioides</i> (Sw.) Pridgeon & M.W.Chase	Wullschaegel	s.n.	Jamaica	s.d.	
<i>Pleurothallis</i>	<i>testifolia</i>	Lindl.	MOI		Wright	1496	Cuba	s.d.	
<i>Pleurothallis</i>	<i>trichophora</i>	Lindl.	IsoT		Wright	659	Cuba	s.d.	

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TABLE 1. (Continued)

genus	species	Author	status	current name	collector	number	habitat	date	comments
<i>Podochilus</i>	<i>microphyllus</i>	Lindl.	T?	<i>Ornithidium adenodrobium</i> (Rchb.f.) M.A.Blanco & Ojeda	Wallich	s.n.	Malacea	s.d.	
<i>Ponera</i>	<i>adenodrobium</i>	Rchb.f.	IsoT	<i>Ornithidium adenodrobium</i> (Rchb.f.) M.A.Blanco & Ojeda	Wright	1697	Cuba	1859-60	
<i>Ponera</i>	<i>adenodrobium</i>	Rchb.f.	IsoT	<i>Ornithidium adenodrobium</i> (Rchb.f.) M.A.Blanco & Ojeda	Wright	1698	Cuba	1859-61	
<i>Ponthieva</i>	<i>triloba</i>	Schltr.	IsolectoT						
<i>Prescottia</i>	<i>plantaginifolia</i>	Lindl.	T?	<i>Prescottia plantaginea</i> Lindl.	Türckheim	s.n.	Guatemala	Dec. 1877	
<i>Rhamphidia</i>	<i>japonica</i>	Rchb.f.	T	<i>Myrmecis japonica</i> (Rchb.f.) Rolfe	Gardner	121	Rio de Janeiro	s.d.	
					Rein	s.n.	Japan	s.d.	Although Reichenbach does not cite Rein as collector of this specimen it is very likely that the specimen used for the diagnosis was collected by Rein since all other specimens of the article were collected by Rein.
<i>Satyrium</i>	<i>nepalense</i>	D.Don	OM?		Wallich	s.n.	Nepal	s.d.	
<i>Satyrium</i>	<i>nepalense</i>	D.Don	OM?		Wallich	s.n.	Nepal	s.d.	
<i>Spathoglottis</i>	<i>tomentosa</i>	Lindl.	T		Cumming	s.n.	Ins. Phillip.	s.d.	
									...Continued on next page

TABLE 1. (Continued)

genus	species	Author	status	current name	collector	number	habitat	date	comments
<i>Spiranthes</i>	<i>elata</i> var. <i>minutiflora</i>	Cogn.	T	<i>Cyclopogon elatus</i> (Sw.) Schltr.	Crueger	54	Trinidad	s.d.	
<i>Spiranthes</i>	<i>elata</i> var. <i>ovata</i>	Cogn.	SynT	<i>Cyclopogon elatus</i> (Sw.) Schltr.	Lorentz & Hieronymus	511	Tartagal	s.d.	
<i>Spiranthes</i>	<i>elata</i> var. <i>ovata</i>	Cogn.	SynT	<i>Cyclopogon elatus</i> (Sw.) Schltr.	Lorentz & Hieronymus	959	Tartagal	Jun. 1873	
<i>Spiranthes</i>	<i>hostmannii</i>	Rchb.f. ex Griseb.	T	<i>Brachystele guayanensis</i> (Lindl.) Schltr.	Crueger	s.n.	Trinidad	s.d.	
<i>Spiranthes</i>	<i>uliginosa</i> var. <i>robusta</i>	Cogn.	T	<i>Sarcoglottis uliginosa</i> Barb.Rodr.	Balansa	645	Paraguay	s.d.	
<i>Stelis</i>	<i>bidentata</i>	Schltr.	SynT	<i>Stelis parvula</i> Lindl.	Türkheim	511	Guatemala	s.d.	
<i>Sturmia</i>	<i>habenaria</i>	F.Muell.	T	<i>Liparis habenaria</i> (F.Muell.) F.Muell.	F.Muell.	s.n.	Rockingham Bay	s.d.	
<i>Tetramicra</i>	<i>parviflora</i>	Lindl. ex Griseb.	T		Macfadyen	s.n.	Jamaica	s.d.	
<i>Tripleura</i>	<i>pallida</i>	Lindl.	OM?	<i>Zeuxine membranacea</i> Lindl.	Wallich	s.n.	Silhet	s.d.	
<i>Tripleura</i>	<i>pallida</i>	Lindl.	OM?	<i>Zeuxine membranacea</i> Lindl.	Wallich	s.n.	Silhet	s.d.	
<i>Vanda</i>	<i>cathcartii</i>	Lindl.	T?	<i>Esmarelda cathcartii</i> (Lindl.) Rchb.f.	Hook.f. & Thomson		Sirkim	s.d.	
<i>Vanilla</i>	<i>palmatum</i> var. <i>grandifolia</i>	Cogn.	HoloT	<i>Vanilla palmatum</i> (Salzm. ex Lindl.) Lindl.	Wright	274	Cuba	1865	
<i>Zeuxine</i>	<i>cochlearis</i>	Schltr.	T	<i>Zeuxine africana</i> Rchb.f.	Schlechter	s.n.		21.Jul.1893	

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