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ORCHIDACEAE SPIRITO-SANCTENSIS: A TAXONOMIC AND CONSERVATION SYNOPSIS OF ORCHID DIVERSITY IN THE STATE OF ESPÍRITO SANTO, BRAZIL

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Abstract. The diversity of Orchidaceae in the state of Espírito Santo, southeastern Brazil, was reassessed 40 years after the last comprehensive survey conducted for the region. The study was based on the examination of herbarium specimens, a critical review of the literature, and targeted field expeditions carried out in different phytophysiognomies. A total of 730 taxa (728 species, one subspecies, and one variety) were documented, representing an increase of 130 taxa compared to the 600 previously recorded by Augusto Ruschi. Of these, 39% are currently included in a threat category on the official Red List of Espírito Santo. Species richness is concentrated mainly in two geopolitical microregions, Central Serrana (446 taxa) and Southwest Serrana (414 taxa), which encompass important remnants of montane and submontane Atlantic Forest. The results confirm Espírito Santo as a major center of orchid diversity within the Atlantic Forest domain and emphasize the relevance of its remaining forest areas for biodiversity conservation. The substantial increase in documented species highlights the importance of continuous floristic inventories, taxonomic revisions, and updated conservation assessments to improve knowledge of regional plant diversity and to support long-term conservation planning initiatives.

Resumo. A diversidade de Orchidaceae no estado do Espírito Santo, sudeste do Brasil, foi reavaliada 40 anos após o último levantamento abrangente realizado para a região. O estudo baseou-se na análise de espécimes de herbário, na revisão crítica da literatura e em expedições de campo direcionadas, conduzidas em diferentes fitofisionomias. Foram documentados 730 táxons (728 espécies, uma subespécie e uma variedade), representando um acréscimo de 130 táxons em relação aos 600 anteriormente registrados por Augusto Ruschi. Desses, 39% encontram-se atualmente enquadrados em alguma categoria de ameaça na Lista Oficial da Flora Ameaçada de Extinção do Estado do Espírito Santo. A riqueza de espécies concentra-se principalmente em duas microrregiões geopolíticas, Central Serrana (446 táxons) e Sudoeste Serrana (414 táxons), que abrigam importantes remanescentes de Mata Atlântica montana e submontana. Os resultados confirmam o Espírito Santo como um importante centro de diversidade de orquídeas no domínio da Mata Atlântica e ressaltam a relevância de seus remanescentes florestais para a conservação da biodiversidade. O expressivo aumento no número de táxons documentados evidencia a importância da realização contínua de inventários florísticos, revisões taxonômicas e avaliações atualizadas do estado de conservação, visando ampliar o conhecimento sobre a diversidade vegetal regional e subsidiar iniciativas de planejamento para a conservação em longo prazo.

Keywords / Palavras-chave: Atlantic Forest, checklist, endangered species, endemism, endemismo, espécies ameaçadas, flora, lista de espécies, Mata Atlântica

Introduction. The Atlantic Forest, one of the largest Neotropical forests, is recognized for its exceptional species richness and high levels of endemism. Over time, however, it has undergone extensive fragmentation due to deforestation, with large portions of its original vegetation converted to agricultural lands and cattle pastures. This widespread habitat loss led to its recognition as one of the world's 34 biodi-

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versity hotspots (Mittermeier *et al.*, 2011; Myers *et al.*, 2000), and habitat degradation continues to the present day (Fundação SOS Mata Atlântica, 2023). Current estimates indicate that only 12.4% to 27.7% of the Atlantic Forest domain retains native vegetation (Fundação SOS Mata Atlântica & INPE, 2024; Rezende *et al.*, 2018), which is now largely restricted to small and isolated forest fragments (Ribeiro *et al.*, 2009). The state of Espírito Santo, entirely encompassed within the Atlantic Forest domain, preserves only 10.5% (approximately 4,820 km²) of its original forest cover (Fundação SOS Mata Atlântica & INPE, 2024), highlighting the urgent need for biodiversity assessment and conservation planning in the region.

The Brazilian Atlantic Forest harbors approximately 34,000 vascular plant species, of which about 9,500 (ca. 28%) are endemic to this phytogeographic domain (Flora e Funga do Brasil, 2026). Within this exceptionally diverse flora, Orchidaceae stands out as one of the richest plant families in the Atlantic Forest (Stehmann *et al.*, 2009), comprising nearly 1,400 species (BFG, 2022; Flora e Funga do Brasil, 2026). Of these, between 700 and 750 species are presumed to occur in the state of Espírito Santo, representing approximately 28% of the Brazilian orchid flora. Despite being one of the most intensively studied plant families, largely due to its ornamental value, significant knowledge gaps remain, particularly regarding less conspicuous yet ecologically important orchid groups (Pessoa *et al.*, 2025). These gaps represent a major constraint for effective biodiversity conservation (e.g., Almeida & Mamede, 2014; Giaretta *et al.*, 2015). Consequently, floristic surveys in environmentally heterogeneous and still underexplored areas are essential for informing conservation strategies and prioritizing protection efforts (Kessler, 2001).

For the state of Espírito Santo, several floristic and taxonomic studies on Orchidaceae have been published, covering both coastal *restinga* vegetation (e.g., Fraga & Peixoto, 2004; Rodrigues & Simonelli, 2007; Souza & Krahl, 2010) and inland areas (e.g., Fontana & Kollmann, 2005; Krahl *et al.*, 2014; Pereira & Ribeiro, 2004). A major milestone in the knowledge of Espírito Santo orchids is the book *Orquídeas do Estado do Espírito Santo* by Ruschi (1986), which compiled pioneering records and fundamental information on the occurrence of 600 species in the state. The most comprehensive contribution was provided by Chiron & Bolsanello (2013–2015), who focused primarily on the species occurring in the Serra do Castelo region while also compiling records of approximately 680 orchid species reported for Espírito Santo. More recently, the Flora e Funga do Brasil (2026) database lists 652 species for the state, reflecting subsequent taxonomic changes and updates to species circumscriptions and distributions. Despite these advances, several areas remain poorly documented in terms of orchid diversity, including important protected areas such as the Pacotuba National Forest, the Sooretama Biological Reserve, and the Pedra do Elefante Environmental Protection Area, for which no comprehensive assessments of Orchidaceae species richness are currently available.

Four decades after the last comprehensive survey dedicated to the orchids of Espírito Santo (Ruschi, 1986), the present study provides an updated and critically revised checklist of the Orchidaceae occurring in the state. This new inventory incorporates recent records and taxonomic advances, aiming to substantially improve current knowledge of the orchid flora of Espírito Santo and to support future conservation strategies. Specifically, the objectives of this study are: (1) to conduct a comprehensive inventory of Orchidaceae species in the state, with particular emphasis on those occurring in protected areas, thereby expanding knowledge of the regional flora; and (2) to prepare a floristic–taxonomic synopsis including a list of the genera and species recorded, accompanied by photographs of the taxa, information on geographic distribution, conservation status, and additional relevant notes.

Materials and Methods. *Study area.*— The state of Espírito Santo is in southeastern Brazil and covers 46,095.5 km², entirely within the Atlantic Forest domain (Fig. 1). Its maximum north–south extension is 374 km; it is bordered to the east by the Atlantic Ocean, and its width ranges from 130 to 150 km (IPEMA, 2005). Elevation ranges from sea level along the coast to 2,892 m in the Serra do Caparaó, in the southwestern portion of the state. Geopolitical-

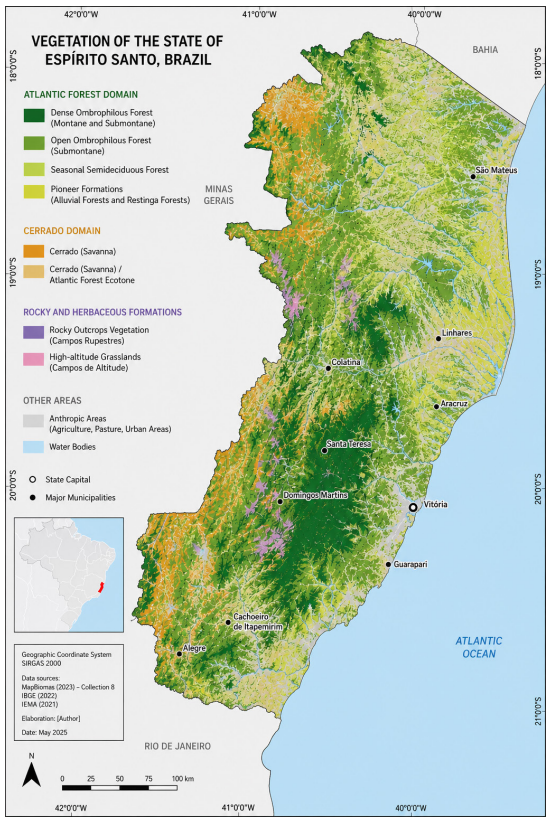

FIGURE 1. Vegetation map of the state of Espírito Santo, Brazil, showing the main phytophysiognomies within the Atlantic Forest domain, including dense and open ombrophilous forests, seasonal semideciduous forests, pioneer formations (*restinga* and alluvial forests), as well as areas of Cerrado influence, rocky outcrops, high-altitude grasslands, and anthropogenic land use. Map elaborated by the author (May 2025), using data from the Projeto MapBiomas (2023).

FIGURE 2. Geopolitical map of the state of Espírito Santo, Brazil, showing its ten microregions and 78 municipalities. Map created by Gilson/AGazeta, retrieved from Bridi (2012), which in turn was based on Espírito Santo (2011).

ly, Espírito Santo is divided into four macroregions (Metropolitan, North, Central, and South), which are further subdivided into ten microregions (Espírito Santo, 2011; Fig. 2).

Two main geological zones are recognized: the Barreiras Formation and the mountainous region (Amorim, 1984). The Barreiras Formation extends along a narrow coastal strip in the south, becoming broader toward the north, and was originally covered by lowland forests with canopy heights exceeding 30 m. The mountainous region occupies the interior and is characterized by dense tropical forests with an average canopy height of approximately 25 m (IPEMA, 2005).

The state encompasses a wide range of vegetation types, including high-altitude grasslands (*campos de altitude*), seasonal semideciduous forests, dense ombrophilous forests, lowland alluvial forests (locally known as *floresta de tabuleiro*), *restinga* (coastal tropical forest) vegetation, mangroves, and numerous granitic rock outcrops (inselbergs) (Fig. 1), which harbor islands of rupicolous vegetation embedded within the surrounding tropical forest matrix (IPEMA, 2005).

Data collection and specimen documentation.— For this study, Orchidaceae specimens previously cited in published works for the state of Espírito Santo (e.g., Chiron & Bolsanello, 2013–2015; Ruschi, 1986) were reviewed. In addition, approximately 11,000 specimens collected within the geographic boundaries of the state and deposited in the following herbaria were examined: AMES, BHCB, BOTU, CAP, CEN, CEPEC, CESJ, CVRD, EAN, ESA, HB, HEID, HRCB, HUCS, HUEFS, HUEM, HUENF, HUFABC, HUFU, IAN, ICN, K, LA, M, MBM, MBML, MO, NY, R, RB, SAMES, SP, UB, UEC, UFMT, UFP, UPCB, US, VIC, and VIES (acronyms according to Thiers, 2025). Additionally, correctly identified photographic records obtained through research-grade observations and available on the iNaturalist platform (iNaturalist, 2026) from 2015 to 2025 were analyzed. These records supported the confirmation of species occurrences and contributed to the expansion of knowledge of their distribution within the state.

To complement the dataset, confirm taxonomic identifications, and document species in their natural habitats, field expeditions were conducted between October 2021 and July 2025 using the active search method (Filgueiras *et al.*, 1994). Specimens collected during these expeditions were prepared according to standard taxonomic procedures (Peixoto & Maia, 2013) and deposited in the MBML herbarium. Identifications were based on specialized literature on Orchidaceae, as well as comparisons with type material and with specimens previously identified by specialists and housed in herbaria.

Taxonomic classification and circumscription criteria.— The higher-level classification of Orchidaceae follows the system proposed by Chase *et al.* (2015); whereas the circumscription of genera and species is primarily based on Flora e Funga do Brasil (2026), with nomenclatural updates from more recent works incorporated where appropriate (Engels & Smidt, 2026; Imig *et al.*, 2024; Karremans, 2023; Meneguzzo & Chase, 2024a, b; Sambin & Hágsater, 2025; van der Meer, 2024) and corroborated by POWO (2026). Threat categories assigned to all species, regardless of their endemic status [Critically Endangered (CR), Endangered (EN), and Vulnerable (VU)] follow the Official List of Threatened Species of Brazil (Brasil, 2022) and the List of Threatened Flora of the State of Espírito Santo (Espírito Santo, 2022).

Results and Discussion. *Diversity.*— This inventory documented 730 taxa (728 species, one subspecies, and one variety) of Orchidaceae distributed in 119 genera (Table 1), representing a substantial increase over previous estimates of orchid diversity in Espírito Santo. Ruschi (1986) recorded 600 species for the state, whereas Chiron & Bolsanello (2013a, b, 2014, 2015) subsequently compiled records of approximately 680 species. More recently, Flora e Funga do Brasil (2026) recognized 652 species for Espírito Santo. Thus, the 728 species documented in the present study represent 128 additional species (21.3%) relative to Ruschi (1986), approximately 48 more than the compilation of Chiron & Bolsanello (2013a, b, 2014, 2015), and 76 additional species (11.7%) relative to Flora e Funga do Brasil (2026). These differences reflect not only newly documented occurrences but also the incorporation of historical herbarium records, subsequent floristic and taxonomic studies, field observations, and recent taxonomic and nomenclatural updates. Therefore, the increase in species richness documented here should not be interpreted exclusively as representing new records for Espírito Santo.

Additionally, previous works (e.g., Chiron & Bolsanello, 2013a, b, 2014, 2015; Pabst & Dungs, 1975, 1977) reported 31 species that were not included in the present checklist because no corresponding herbarium specimens or other verifiable records could be located to confirm their occurrence in the state (Table 2). The 730 orchid taxa documented in Espírito Santo represent a remarkably high diversity for a single Brazilian state. This richness equals or exceeds that reported in protected areas of comparable size (e.g., Toscano de Brito & Cribb, 2005) and compares favorably with recent statewide inventories from Paraná (Smidt, 2014), Mato Grosso do Sul (Barros *et al.*, 2018), Santa Catarina (Nascimento & Guimarães, 2019), Maranhão (Pessoa *et al.*, 2022), and Pará (Luz *et al.*, 2024). The high generic richness observed (119 genera) further supports the view that Espírito Santo harbors a highly diverse and heterogeneous orchid flora, a pattern commonly associated with ecotonal regions and areas of pronounced environmental heterogeneity (Kessler, 2001; Saiter *et al.*, 2015).

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Table 1. List of Orchidaceae recorded in the state of Espírito Santo, Brazil. Endemism: BR = taxon endemic to Brazil; ES = taxon endemic to the state of Espírito Santo. * = species not recorded for Espírito Santo in the Flora e Funga do Brasil (2026). ** = new records for Espírito Santo (species not previously documented for the state). Munic. = number of municipalities with confirmed records of the taxon. Conservation status: BZ = species threatened at the national level (Brazil); ES = species threatened in the state of Espírito Santo.

Taxon	Voucher	Munic.	Conserv. Stat.	
			BZ	ES
Acianthera Scheidw. (63)				
**A. aphthosa* (Lindl.) Pridgeon & M.W.Chase	*Toscano de Brito 3096* (UPCB)	1		
**A. atroglossa* (Loefgr.) F.Barros & L.R.S.Guim. BR	*Sanson ex Chiron 9842* (HUEFS (sub *van den Berg 1993*))	1		
A. auriculata (Lindl.) Pridgeon & M.W.Chase	*Valadares & Santos 3367* (VIES)	16		
A. bidentula (Barb.Rodr.) Pridgeon & M.W.Chase BR	*Velten ex Chiron 13321* (MBML)	7		
A. binotii (Regel) Pridgeon & M.W.Chase BR	*Marcusso 1164* (HRCB)	8		VU
**A. brachiloba* (Hoehne) Pridgeon & M.W.Chase BR	*Berger & Berger 87* (MBML)	1		
A. bragae (Ruschi) F.Barros BR	*Couto & Francisco 3214* (R)	4		VU
**A. capanemae* (Barb.Rodr.) Pridgeon & M.W.Chase BR	*Toscano de Brito & Kollmann 2873* (MBML)	2		
A. capillaris (Lindl.) Pridgeon & M.W.Chase	*Chiron 11248* (MBML)	6		
A. cristata (Barb.Rodr.) Luer BR	*Brade 19918* (RB)	1		
**A. cryptantha* (Barb.Rodr.) Pridgeon & M.W.Chase BR	*Sanson ex Chiron* 12116 (*in vivo* in Guy Chiron's collection)	1		
A. cryptophoranthoides (Loefgr.) F.Barros BR	*Kautsky s.n.* (HB 42823)	1		
A. exarticulata (Barb.Rodr.) Pridgeon & M.W.Chase BR	*Herzog ex Chiron 12089* (MBML)	4		
A. fenestrata (Barb.Rodr.) Pridgeon & M.W.Chase BR	*Marcusso 1480* (HRCB)	1		
A. fornograndensis L.Kollmann & A.P.Fontana BR, ES	*Chiron 8432 ex van den Berg 2133* (HUEFS)	1		VU
A. freyi (Luer) F.Barros & V.T.Rodrigues BR, ES	*Kollmann 11322* (MBML)	2		VU
A. glanduligera (Lindl.) Luer BR	*Marcusso 1769* (HRCB)	6		
A. glumacea (Lindl.) Pridgeon & M.W.Chase BR	*Chiron & Tesch 14024* (MBML)	6		VU
**A. gracilis* (Barb.Rodr.) F.Barros & L.R.S.Guim. BR	*Chiron 11214* (MBML)	1		
A. heliconiscapa (Hoehne) F.Barros BR	*Couto & Francisco 3281* (R)	1		
A. heringeri (Hoehne) F.Barros BR	*Faller et al. 50* (VIES)	3	CR	VU
A. hoffmannseggiana (Rchb.f.) F.Barros BR	*Barbosa da Silva ex Chiron 11080* (MBML)	1		
A. hygrophila (Barb.Rodr.) Pridgeon & M.W.Chase	*Alves-Araújo & Pena 1842* (VIES)	6		
A. imitator Toscano, Luer & L.Kollmann BR, ES	*Toscano de Brito 2866* (MBML, **holotype**)	1		
A. jordanensis (Brade) F.Barros BR	*Chiron 9085 ex van den Berg 2134* (HUEFS)	2		
A. kautskyi (Pabst) Toscano & E.C.Smidt BR	*Couto & Francisco 3267* (R)	3		VU
**A. klotzschiana* (Rchb.f.) Pridgeon & M.W.Chase	*Chiron 11053 ex van den Berg 2099* (HUEFS)	2		
A. leptotifolia (Barb.Rodr.) Pridgeon & M.W.Chase BR	*Couto 2096* (MBML)	3		
A. limae (Porto & Brade) Pridgeon & M.W.Chase BR	*Pena et al. 171* (VIES)	6		VU
A. luteola (Lindl.) Pridgeon & M.W.Chase BR	*Silva et al. 452* (VIES)	12		
A. macropoda (Barb.Rodr.) Pridgeon & M.W.Chase BR	*Chiron 11001 ex van den Berg 21239* (HUEFS)	2		
A. maculiglossa Chiron & N.Sanson BR, ES	*Marcusso 1398* (HRCB)	3		
A. marquesii Luer & Toscano BR, ES	*Toscano de Brito 3078* (MBML, **holotype**)	1		
A. melachila (Barb.Rodr.) Luer BR	*Kollmann & Fontana 8166* (MBML)	1		
**A. modestissima* (Rchb.f. & Warm.) Pridgeon & M.W.Chase BR	*Pellegrini et al. 388* (CESJ, RB)	1		
A. montana (Barb.Rodr.) F.Barros & L.R.S.Guim. BR	*Marcusso 1483* (HRCB)	3		
A. nemorosa (Barb.Rodr.) F.Barros BR	*Marcusso 892* (HRCB)	10		

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TABLE 1. *Continues...*

Acianthera octophrys (Rchb.f.) Pridgeon & M.W.Chase BR	*Marcusso & Kamimura 1045* (CESJ, HRCB, RB)	1		
A. oligantha (Barb.Rodr.) F.Barros BR	*Marcusso 1391* (CESJ)	4		
**A. ophiantha* (Cogn.) Pridgeon & M.W.Chase BR	*Folli 5399* (CVRD)	1		
A. panduripetala (Barb.Rodr.) Pridgeon & M.W.Chase BR	*Orquidário Caliman ex Chiron 8143* (MBML)	2		
A. papillosa (Lindl.) Pridgeon & M.W.Chase BR	*Berger & Belz 97* (MBML)	1	VU	VU
A. parahybunensis (Barb.Rodr.) Luer BR	*Marcusso 1742* (HRCB)	3		
A. pectinata (Lindl.) Pridgeon & M.W.Chase BR	*Guimarães 318* (MBML)	10		VU
A. platystachys (Regel) Chiron & Van den Berg BR	*Faller 390* (VIES)	7		
A. prolifera (Herb. ex Lindl.) Pridgeon & M.W.Chase	*Faller 68* (VIES)	8		
A. pubescens (Lindl.) Pridgeon & M.W.Chase	*Orquidário Floralia ex Chiron 9422* (MBML)	4		
A. purpureoviolacea (Cogn.) F.Barros BR	*Guiard 9209* (MBML)	1		
A. ramosa (Barb.Rodr.) F.Barros BR	*Marcusso 1415* (HRCB)	3		
A. recurva (Lindl.) Pridgeon & M.W.Chase	*Marcusso 1535* (HRCB)	7		
**A. rodriguesii* (Cogn.) Pridgeon & M.W.Chase BR	*Sanson ex Chiron 11044* (*in vivo* in Guy Chiron's collection)	2		
A. rostellata (Barb.Rodr.) Luer BR	*Chiron 9889* (MBML)	2		
A. saundersiana (Rchb.f.) Pridgeon & M.W.Chase	*Gasparini et al. 30* (VIES)	12		
A. saurocephala (G.Lodd.) Pridgeon & M.W.Chase BR	*Guiard 9671* (MBML)	6		
A. scabripes (Lindl.) Karremans BR	*Fraga 749* (MBML)	1		
**A. serpentula* (Barb.Rodr.) F.Barros BR	*Couto et al. 2194* (CAP)	3		
A. sonderiana (Rchb.f.) Pridgeon & M.W.Chase	*Freitas 47* (VIES)	7		
A. spilantha (Barb.Rodr.) Luer BR	*Chiron 11229 ex van den Berg 2105* (HUEFS)	3		
A. strupifolia (Lindl.) Pridgeon & M.W.Chase BR	*Valadares 2938* (VIES)	5		VU
A. sulphurea (Barb.Rodr.) F.Barros & V.T.Rodrigues BR	*Milanezi et al. s.n.* (VIES 3193)	1		
A. teres (Lindl.) Borba BR	*Gonella et al. 1110* (MBML)	6		
A. translucida (Barb.Rodr.) Luer BR	*Toscano de Brito & Kollmann 2870* (UPCB)	2		VU
A. wawraeana (Barb.Rodr.) F.Barros & V.T.Rodrigues BR	*Chiron 9717* (*in vivo* in Guy Chiron's collection)	1		
Anathallis Barb.Rodr. (24)				
A. adenochila (Loefgr.) F.Barros BR	*Marcusso & Kamimura 1148* (CESJ, HRCB)	7		
A. aristulata (Lindl.) Luer BR	*Marcusso 1637* (HRCB)	3		VU
**A. brevipes* (H.Focke) Pridgeon & M.W.Chase	*Toscano de Brito 3080* (UPCB)	3		
A. carvalhoi (Luer & Toscano) Luer BR, ES	*Toscano de Brito 3299* (UPCB)	4		
A. colnagoi (Pabst) F.Barros & L.R.S.Guim. BR, ES	*Herzog ex Chiron 12092* (MBML)	2	CR	
**A. corticicola* (Schltr. ex Hoehne) Pridgeon & M.W.Chase BR	*Kollmann & Fontana 9164* (MBML)	1		
**A. gert-hatschbachii* (Hoehne) Pridgeon & M.W.Chase BR	*Vervloet et al. 1314* (MBML)	1		
A. graveolens (Pabst) F.Barros BR	*Fontana ex Toscano de Brito 3502* (UPCB)	2		VU
A. heterophylla Barb.Rodr. BR	*Chiron 8485 ex van den Berg 2031* (MBML)	3		VU
A. kautskyi (Pabst) Pridgeon & M.W.Chase BR, ES	*Barbosa da Silva ex Chiron 13034* (MBML)	2		VU
**A. laciniata* (Barb.Rodr.) Luer & Toscano BR	*Bolson et al. 566* (UPCB)	1		
A. linearifolia (Cogn.) Pridgeon & M.W.Chase	*Silva & Ulian 348* (VIES)	2		VU
A. lobiserrata (Barb.Rodr.) Luer & Toscano BR	*Guiard 9718* (HUEFS, MBML)	3		
A. malmeana (Dutra ex Pabst) Pridgeon & M.W.Chase BR	*Fontana & Simonelli 2268* (RB)	1		
A. microphyta (Barb.Rodr.) C.O.Azevedo & Van den Berg	*Faller 130* (VIES)	8		
A. obovata (Lindl.) Pridgeon & M.W.Chase	*Marcusso et al. 1163* (CESJ, HRCB, RB)	6		
A. petropolitana (Hoehne) Luer & Toscano BR	*Chiron 11087 ex van den Berg 2089* (HUEFS)	2		
A. piratiningana (Hoehne) F.Barros BR	*Frey ex Toscano de Brito 3386* (UPCB)	3		VU
**A. pubipetala* (Hoehne) Pridgeon & M.W.Chase BR	*Chiron 11212 ex van den Berg 2106* (HUEFS)	2	EN	
A. radialis (Porto & Brade) Pridgeon & M.W.Chase BR	*Marcusso 999* (HRCB)	6		VU

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TABLE 1. *Continues...*

Anathallis recurvipetala (Barb.Rodr.) Luer & Toscano BR	*Kollmann 8859* (MBML)	1		VU
A. sansoniana Chiron & Guiard BR, ES	*Sanson ex Chiron 13007* (MBML, **holotype**)	1		
A. tigridens (Loefgr.) Luer & Toscano BR	*Kollmann 6676* (MBML)	1	VU	VU
**A. welteri* (Pabst) F.Barros BR	*Meirelles et al. 546* (ESA)	1		VU
Aspasia Lindl. (1)				
A. lunata Lindl. BR	*Couto 1328* (CAP)	5		
Barbosella Schltr. (7)				
B. cogniauxiana (Speg. & Kraenzl.) Schltr.	*Toscano de Brito 3087* (UPCB)	1		
B. crassifolia (Edwall) Schltr. BR	*Bolson & Imig 631* (UPCB)	1		
B. dusenii (A.Samp.) Schltr. BR	*Toscano de Brito 3895* (UPCB)	4		VU
B. gardneri (Lindl.) Schltr. BR	*Marcusso 1453* (HRCB)	4		
***B. macaheensis* (Cogn.) Luer BR	*Bolson et al. 582* (UPCB)	1	VU	VU
B. miersii (Lindl.) Schltr. BR	*Silva & Lieven 87* (VIES)	3		
B. spiritu-sanctensis (Pabst) F.Barros & Toscano BR	*Royer & Cardoso 174* (UPCB)	4		VU
Baskervilla Lindl. (1)				
**B. paranaensis* (Kraenzl.) Schltr. BR	*Vervloet et al. 666* (MBML)	1		VU
Bifrenaria Lindl. (17)				
B. aureofulva (Hook.) Lindl. BR	*Kollmann & Indriunas 11841* (MBML)	8		EN
B. calcarata Barb.Rodr. BR	*Ferreira & Coelho 90* (MBML)	1		VU
B. charlesworthii Rolfe BR	*Silva et al. 128* (VIES)	4		VU
B. clavigera Rchb.f. BR	*Marcusso 1280* (HRCB)	2		VU
B. hadwenii Paxton & Lindl. BR	*Araújo et al. 244* (CAP)	3		VU
B. harrisoniae (Hook.) Rchb.f. BR	*Mota 30* (MBML)	3		
B. inodora Lindl. BR	*Emmerich s.n.* (MBML 388)	1		
B. kautskyi (Pabst) Meneguzzo & M.W.Chase BR	*Kautsky 349* (HB, **holotype**)	2	CR	CR
B. leucorrhoda Rchb.f. BR	*Kollmann et al. 7610* (MBML)	1		VU
B. mellicolor Rchb.f. BR, ES	*Calazans et al. 1028* (VIES)	5		CR
B. novaesiae (F.Barros & Cath.) Meneguzzo & M.W.Chase BR, ES	*Kautsky s.n.* (SP 167848, **holotype**)	1		EN
B. racemosa (Hook.) Lindl. BR	*Sanson ex Chiron 13012* (MBML)	2		EN
**B. stefanae* V.P.Castro BR	*Felitto et al. 1350* (CVRD)	2		
**B. tetragona* (Lindl.) Schltr. BR	*Couto 3* (MBML)	2		VU
**B. tyrianthina* (Lodd. ex Loudon) Rchb.f. BR	*Couto & Covre 7629* (MBML)	2		EN
B. vitellina (Lindl.) Lindl. BR	*Campacci s.n.* (SP 295745)	1		
B. wittigii (Rchb.f.) Hoehne BR	*Kautsky 216* (HB)	1	EN	EN
Brassavola R.Br. (2)				
B. flagellaris Barb.Rodr. BR	*Assis & Zambom 452* (VIES)	3		
B. tuberculata Hook.	*Molina & Pujals 364* (MBM)	11		
Brassia R.Br. (1)				
B. arachnoidea Barb.Rodr. BR	*Engels & Felitto 9375* (CVRD, MBM)	3	VU	VU
Bulbophyllum Thouars (18)				
B. arianeae Fraga & E.C.Smidt BR	*Fraga & Gomes 563* (MBML, **holotype**)	1	CR	CR
B. atropurpureum Barb.Rodr. BR	*Frey ex Chiron 13329* (MBML)	3		VU
B. boudetianum Fraga BR, ES	*Vervloet et al. 3349* (MBML)	4	EN	EN
B. calimanianum V.P.Castro & G.F.Carr BR, ES	*Caliman ex Castro Neto 95* (SP, **holotype**)	1		
B. campos-portoi Brade BR	*Fraga et al. 2375* (MBML, RB)	3		EN
B. cantagallense (Barb.Rodr.) Cogn. BR	*Silva & Lieven 189* (VIES)	3		EN
B. epiphytum Barb.Rodr.	*Demuner et al. 3447* (BOTU, MBML)	1		VU
B. exaltatum Lindl.	*Tesch ex Chiron 13032* (MBML)	4		
**B. freyi* V.P.Castro & Speckm. BR, ES	*Frey ex Castro Neto 138* (SP, **holotype**)	1		

continues...

TABLE 1. *Continues...*

Bulbophyllum gladiatum Lindl.	*Fontana et al. 100* (MBML)	1		VU
B. glutinosum (Barb.Rodr.) Cogn. BR	*Chiron & Sanson 11050* (MBML)	3		VU
B. kautskyi Toscano BR	*Tesch ex Chiron 12011* (MBML)	5	VU	
B. meridense Rchb.f.	*Fontana 1436* (MBML)	3		VU
B. micropetaliforme Leite BR	*Couto & Araújo-Neto 2276* (CAP)	5		VU
B. napellii Lindl.	*Zorzanelli et al. 1638* (CAP)	4		
B. plumosum (Barb.Rodr.) Cogn. BR	*Fontana et al. 107* (MBML)	1		VU
B. uhl-gabrielianum Chiron & V.P.Castro BR, ES	*Caliman ex Chiron 9378* (SP, **holotype**)	1		
B. weddellii (Lindl.) Rchb.f.	*Fontana et al. 3640* (MBML)	2		VU
Campylocentrum Benth. (12)				
C. brachycarpum Cogn. BR	*Couto & Francisco 3057* (R)	5		
C. calostachyum (Barb.Rodr.) E.M.Pessoa & M.Alves BR	*Kautsky 380* (HB)	1		
C. crassirhizum Hoehne BR	*Faller 94* (VIES)	11		
C. labiakii E.M.Pessoa & M.Alves BR, ES	*Meirelles et al. 545* (ESA)	3		CR
C. ornithorrhynchum (Lindl.) Rolfe BR	*Couto 5360* (HUENF)	12		
C. parahybunense (Barb.Rodr.) Rolfe BR	*Couto et al. 2295* (CAP, VIES)	4		VU
C. pauloense Hoehne & Schltr.	*Silva & Lieven 284* (VIES)	5		EN
C. robustum Cogn. BR	*Sagrillo & Dalmonech 15B* (MBML)	6		
C. sellowii (Rchb.f.) Rolfe BR	*Pena et al. 674* (VIES)	6		EN
C. spannagelii Hoehne BR	*Fontana et al. 1429* (MBML)	4		
C. ulaei Cogn.	*Brade 20386* (RB)	1		
C. wawrae (Rchb.f. ex Beck) Rolfe BR	*Chiron 11003* (MBML)	3		
Capanemia Barb.Rodr. (4)				
C. carinata Barb.Rodr. BR	*Silva et al. 455* (VIES)	3		VU
C. micromera Barb.Rodr.	*Santos s.n.* (MBML 36251)	3		EN
C. superflua (Rchb.f.) Garay	*Kollmann et al. 7241* (MBML)	1		VU
C. therasiae Barb.Rodr. BR	*Sanson ex Chiron 10149* (MBML)	4		EN
Catasetum Rich. ex Kunth (9)				
C. cernuum (Lindl.) Rchb.f.	*Faller & Magno 2* (VIES)	6		
C. discolor (Lindl.) Lindl.	*Firmino et al. 2354* (VIES)	4		
C. gardneri Schltr. BR	*Pereira et al. 10820* (VIES)	10		
C. hookeri Lindl. BR	*Siqueira 1816* (CVRD)	6		VU
C. labiatum Barb.Rodr. BR	*Mazzini s.n.* (SP 38088)	1		
C. luridum (Link) Lindl. BR	*Valadares & Silva 2287* (VIES)	8		
C. macrocarpum Rich. ex Kunth	*Horst et al. 71* (VIES)	5		VU
C. mattosianum Bicalho BR	*Araújo et al. 338* (RB)	7	EN	EN
C. purum Nees & Sinning BR	*Fraga et al. 630* (MBML)	2		EN
Cattleya Lindl. (28)				
C. bicolor Lindl. [subsp. *minasgeraensis* Fowlie] BR	*Menezes 2685* (SAMES)	2		CR
**C. blumenscheinii* (Pabst) Van den Berg BR	*Ghillány s.n.* (HB 60991, **holotype**)	1		
C. cernua (Lindl.) Van den Berg	*Couto et al. 6362* (MBML)	8		VU
C. coccinea Lindl. BR	*Dias & Silva 766* (VIES)	7		CR
C. dichroma Van den Berg BR, ES	*Zorzanelli & Lage 150* (CAP, VIES)	2		VU
C. gloedeniana (Hoehne) Van den Berg BR, ES	*Manhães & Couto 989* (MBML)	2	CR	VU
**C. grandis* (Lindl.) A.A.Chadwick BR	*Folli 4638* (CVRD)	3	VU	CR
C. granulosa Lindl. BR	*Fontana 1107* (MBML)	1	VU	CR
C. guttata Lindl. BR	*Valadares et al. 3120* (VIES)	13	VU	EN
C. harpophylla (Rchb.f.) Van den Berg BR	*Faller et al. 191* (VIES)	7	VU	CR
C. harrisoniana Bateman ex Lindl. BR	*Guarnier et al. 472* (VIES)	3	VU	CR

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Table 1. *Continues...*

Cattleya hoehnei Van den Berg [BR]	*Kollmann et al. 12577* (MBML)	6	EN	VU
C. jongheana (Rchb.f.) Van den Berg [BR]	*Fontana & Brahim 3789* (RB)	1	EN	CR
C. kautskyana (V.P.Castro & Chiron) Van den Berg [BR, ES]	*Kollmann et al. 13168* (MBML)	9	CR	VU
C. loddigesii Lindl. [BR]	*Fontana et al. 2401* (RB)	1		
C. macrobulbosa (Pabst) Van den Berg [BR, ES]	*Brotto & Cordeiro 3323* (MBM)	2		VU
C. neokautskyi Van den Berg [BR, ES]	*Felix & Dornelas 768* (EAN)	4	CR	VU
C. perrinii Lindl. [BR]	*Fontana & Bernabe 2072* (RB)	2	VU	CR
C. praestans (Rchb.f.) Van den Berg [BR, ES]	*Monteiro et al. 330* (RB)	2		CR
C. pumila Hook. [BR]	*Caram et al. 152* (VIES)	5	VU	CR
C. pygmaea (Pabst) Van den Berg [BR]	*Zorzanelli & Silva 1448b* (CAP)	7	EN	EN
C. schilleriana Rchb.f. [BR]	*Fontana et al. 2454* (RB)	4	EN	CR
C. tenebrosa (Gower) A.A.Chadwick [BR]	*Fraga 2379* (RB)	4	EN	CR
C. velutina Rchb.f. [BR]	*Couto 237* (MBML)	4	VU	CR
C. virens (Lindl.) Van den Berg [BR]	*Fontana et al. 2270* (RB)	5		EN
C. warneri T.Moore ex R.Warner [BR]	*Fontana 2476* (MBML)	8	VU	CR
C. wittigiana (Barb.Rodr.) van den Berg [BR]	*Rodrigues 929* (ESA)	4	EN	CR
C. xanthina (Lindl.) Van den Berg [BR, ES]	*Marcusso et al. 1749* (CESJ, HRCB)	8	EN	EN
Chaubardia Rchb.f. (2)				
C. gehrtiana (Hoehne) Garay [BR]	*Vervloet et al. 1806* (MBML)	3		CR
C. surinamensis Rchb.f.	*Ruschi s.n.* (R 40714)	1		
Chytroglossa Rchb.f. (1)				
C. marileoniae Rchb.f. [BR]	*Toscano de Brito 676* (K)	1		
Cirrhaea Lindl. (4)				
C. dependens (G.Lodd.) G.Don [BR]	*Zorzanelli 1222* (VIES)	7		
C. longiracemosa Hoehne [BR]	*Fontana & Berger 362* (MBML)	2	VU	VU
C. nasuta Brade [BR, ES]	*Ferreira & Coelho 249* (MBML)	7		EN
C. seidelii Pabst [BR]	*Kollmann & Fontana 7626* (MBML)	2		EN
Cleistes Rich. ex Lindl. (3)				
C. libonii (Rchb.f.) Schltr. [BR]	*Couto et al. 6010* (MBML)	9		
C. moritzii (Rchb.f.) Garay & Dunst.	*Brade 19922* (RB)	1		
C. rodriguesii (Cogn.) Campacci [BR]	*Fontana et al. 2146* (RB)	2		
Comparettia Poepp. & Endl. (1)				
C. coccinea Lindl.	*Rossini & Bausen 339* (MBML)	2		EN
Constantia Barb.Rodr. (1)				
C. rupestris Barb.Rodr. [BR]	*Sanson ex Chiron 12115* (MBML)	2		EN
Coryanthes Hook. (1)				
C. speciosa Hook. [BR]	*Fraga 571* (MBML)	3		EN
Corymborkis Thouars (1)				
***C. flava* (Sw.) Kuntze	*Carrijo & Luber 1825* (VIES)	2		CR
Cotylolabium Garay (1)				
C. lutzii (Pabst) Garay [BR]	*Batista et al. 3385* (BHCB, CEN)	2		VU
Cranichis Sw. (1)				
C. candida (Barb.Rodr.) Cogn. [BR]	*Zorzanelli 1662* (CAP)	4		
Cyclopogon C.Presl (11)				
C. apricus (Lindl.) Schltr.	*Adachi & Almeida 199* (BOTU, HUFABC)	1		
C. argyrifolius (Barb.Rodr.) Barb.Rodr. [BR]	*Couto et al. 4017* (CAP)	12		
C. bicolor (Ker Gawl.) Schltr.	*Berger & Berger 86* (MBML)	2		
C. chloroleucus Barb.Rodr.	*Marcusso et al. 1239* (CESJ, HRCB)	5		VU

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Table 1. *Continues...*

Cyclopogon congestus (Vell.) Hoehne	*Sagrillo 137* (MBML)	9		
C. elatus (Sw.) Schltr.	*Mattedi et al. 105* (MBML)	3		
C. elegans Hoehne	*Kollmann et al. 5321* (MBML)	2		
C. graciliscapus Schltr. BR	*Couto & Dutra 1480* (VIES)	2		
**C. longibracteatus* (Barb.Rodr.) Schltr.	*Assis et al. 2596* (VIES)	3		
C. variegatus Barb.Rodr.	*Marcusso 1241* (HRCB)	5		
**C. warmingii* (Rchb.f.) Schltr. BR	*Berger & Belz 125* (MBML)	1		
Cycnoches Lindl. (1)				
C. pentadactylon Lindl.	*Kollmann 6600* (MBML)	1	EN	CR
Cyrtopodium R.Br. (4)				
C. flavum Link & Otto ex Rchb.f. BR	*Guarnier 338* (VIES)	10		
C. gigas (Vell.) Hoehne BR	*Lorenzoni et al. 25* (VIES)	7		EN
C. glutiniferum Raddi BR	*Völtz & Brotto 2400* (MBM)	23		
C. holstii L.C.Menezes BR	*Calazans et al. 726* (VIES)	9		VU
Dichaea Lindl. (7)				
**D. brevicaulis* Cogn. BR	*Vervloet & Pizziolo 2354* (MBML)	2		
D. bryophila Rchb.f. BR	*Chiron 13316* (MBML)	3		
D. cogniauxiana Schltr. BR	*Marcusso et al. 1301* (CESJ)	13		VU
D. elianae Xim.Bols. BR, ES	*Bolsanello s.n.* (MBML 49237)	3		
D. mosenii Rchb.f. BR	*Chiron 9601* (MBML)	3	VU	
D. pendula (Aubl.) Cogn.	*Assis & Freitas 3880* (MBML, RB)	6		
D. trulla Rchb.f.	*Folli 6530* (CVRD)	1		
Dimerandra Schltr. (1)				
D. emarginata (G.Mey.) Hoehne	*Marcarini et al. 8* (SAMES)	3		
Dryadella Luer (6)				
D. auriculigera (Rchb.f.) Luer BR, ES	*Machado ex Toscano de Brito 828* (MO)	1	CR	
D. aviceps (Rchb.f.) Luer	*Folli 4552* (CVRD)	5		VU
D. crenulata (Pabst) Luer BR	*Kautsky s.n.* (HB 68940, **holotype**)	1		
D. kautskyi (Pabst) Luer BR, ES	*Orquidário Caliman 8831* (MBML)	3		CR
D. susanae (Pabst) Luer BR, ES	*Silva 11240* (MBML)	3	CR	CR
D. vitorinoi Luer & Toscano BR, ES	*Toscano de Brito 889* (MO, **paratype**)	1		
Elleanthus C.Presl (3)				
E. brasiliensis (Lindl.) Rchb.f.	*Couto & Freitas 5867* (MBML)	10		
E. crinipes Rchb.f.	*Fontana et al. 2045* (MBML)	2		
E. linifolius C.Presl	*Couto & Freitas 5877* (MBML)	6		
Eltroplectris Raf. (7)				
E. assumpcaoana Campacci & Kautsky BR, ES	*Assumpção s.n.* (SP 334524, **holotype**)	1		CR
E. calcarata (Sw.) Garay & H.R.Sweet	*Pereira et al. 10079* (VIES)	14		VU
E. cogniauxiana (Schltr.) Pabst BR	*Martins 197* (VIES)	1		
E. janeirensis (Porto & Brade) Pabst BR	*Krahl 25* (VIES)	2		
E. kuhlmanniana (Hoehne) Szlach. & Rutk. BR, ES	*Kuhlmann 368* (RB, **holotype**)	1		
E. schlechteriana (Porto & Brade) Pabst	*Fontana & Britto 119* (BOTU, MBML)	1		
E. triloba (Lindl.) Pabst	*Buzatto 870* (ICN, MBML)	11		VU
Encyclia Hook. (12)				
E. advena (Rchb.f.) Porto & Brade BR	*Kollmann et al. 12251* (MBML)	3		VU
E. andrichii L.C.Menezes BR	*Kollmann et al. 9344* (MBML)	2		EN
E. argentinensis (Speg.) Hoehne	*Burle-Marx s.n.* (HB 69138)	2		EN
E. bracteata Schltr. ex Hoehne BR	*Bolson et al. 570* (UPCB)	8		VU
E. bragancae Ruschi BR	*Kollmann et al. 2793* (MBML)	2	EN	VU

continues...

Table 1. *Continues...*

Encyclia gallopavina (Rchb.f.) Porto & Brade [BR]	*Couto et al. 954* (MBML)	2		
E. ionosma (Lindl.) Schltr. [BR]	*s. coll.* (MBML 22878)	3		
E. oncidioides (Lindl.) Schltr.	*Assis & Flores 2602* (MBML)	5		
E. osmantha (Barb.Rodr.) Schltr.	*van den Berg 1414* (HUEFS)	1		
E. patens Hook. [var. *patens*] [BR]	*Forzza et al. 7705* (RB)	16		
E. patens Hook. var. *serroniana* (Barb.Rodr.) Romanini & F.Barros [BR]	*Vervloet et al. 787* (MBML)	2		
E. spiritusanctensis L.C.Menezes [BR, ES]	*Arantes et al. 296* (RB, VIES)	4		CR
Epidendrum L. (42)				
E. anceps Jacq.	*Chiron & Silva 11076* (MBML)	6		
E. armeniacum Lindl.	*Calazans et al. 987* (VIES)	17		
E. avicula Lindl.	*Silva et al. 450* (VIES)	8		
E. bahiense Rchb.f.	*Fraga 704* (RB)	1		
E. caldense Barb.Rodr. [BR]	*Lagasa 187* (MBML)	1		CR
E. calimanianum V.P.Castro [BR, ES]	*Castro Neto 92* (SP, **holotype**)	1		
E. carpophorum Barb.Rodr.	*Couto 782* (MBML)	8		
E. carvalhoi Toscano [BR, ES]	*Kautsky 1031* (RB, **holotype**)	2		
E. cauliflorum Lindl. [BR]	*Folli 2629* (CVRD, ESA)	1		
E. chlorinum Barb.Rodr. [BR]	*Manhães & Ramos 927* (MBML)	4		EN
E. compressum Griseb.	*Folli 2100* (CVRD)	2		VU
E. cooperianum Bateman [BR]	*Zorzanelli & Silva 270* (CAP)	2		VU
E. coronatum Ruiz & Pav.	*Siqueira 1105* (CVRD)	3		EN
E. cristatum Ruiz & Pav.	*Kollmann et al. 10985* (MBML)	4		EN
E. dendrobioides Thunb.	*Kollmann & Kollmann 6876* (MBML)	1		VU
E. densiflorum Hook.	*Silva et al. 518* (VIES)	18		
E. denticulatum Barb.Rodr. [BR]	*Pereira et al. 10279* (VIES)	14		
E. filicaule Lindl. [BR]	*Manhães et al. 919* (MBML)	4		
E. flexuosum G.Mey.	*Fraga & Labiak 2207* (RB)	3		VU
E. forcipatoides Hágsater [BR]	*Fontana et al. 778* (MBML)	4		EN
E. geniculatum Barb.Rodr. [BR]	*Marcusso et al. 1445* (CESJ)	8		VU
E. kautskyi Pabst [BR, ES]	*Kautsky 114* (HB, **holotype**)	2		
E. latilabrum Lindl. [BR]	*Caram et al. 9* (VIES)	10		
E. mantiqueranum Porto & Brade [BR]	*Fontana et al. 2229* (RB)	1		
E. martianum Lindl. [BR]	*Vervloet et al. 3458* (MBML)	3		EN
E. paranaense Barb.Rodr.	*Zorzanelli 1224* (CAP, RB)	5		EN
E. patentifolium Fraga, A.P.Fontana & L.Kollmann [BR]	*Kollmann & Bausen 6938* (MBML)	2		EN
***E. presbyteri-ludgeronis* Gomes Ferreira [BR]	*Demuner et al. 3468* (MBML)	4		
E. proligerum Barb.Rodr. [BR]	*Marcusso et al. 847* (CESJ, HRCB)	12		
E. pseudodifforme Hoehne & Schltr. [BR]	*Couto 2123* (CAP)	11		
E. ramosum Jacq.	*Zorzanelli & Silva 302* (CAP, VIES)	9		
E. rigidum Jacq.	*Felitto 1369* (CVRD)	10		
E. robustum Cogn. [BR]	*Demuner et al. 3981* (MBML)	5	VU	VU
E. rodriguesii Cogn.	*Kollmann et al. 5561* (MBML)	1		
E. saxatile Lindl.	*Silva & Lieven 272* (VIES)	6		
E. secundum Jacq.	*Manhães & Couto 1044* (MBML)	31		
E. strobiliferum Rchb.f.	*Folli 2977* (CVRD, RB)	1		
E. tridactylum Lindl.	*Couto & Willrich 1140* (MBML)	3		VU
E. veltenianum Campacci [BR, ES]	*Velten sub MAC-1857* (SP, **holotype**)	1		
E. vesicatum Lindl. [BR]	*Vervloet et al. 2219* (MBML)	3		VU

continues...

TABLE 1. *Continues...*

Epidendrum waiandtii V.P.Castro [BR, ES]	*Waiandt s.n.* (SP, **holotype**)	1		
E. zappii Pabst [BR]	*Adachi 200* (BOTU)	3	EN	
Epistephium Kunth (1)				
E. williamsii Hook.f.	*Fraga et al. 3530* (MBML, RB)	14		
Eulophia R.Br. (2)				
E. alta (L.) Fawc. & Rendle	*Chiron 12021* (MBML)	7		
E. maculata (Lindl.) Rchb.f.	*Bezerra et al. 131* (VIES)	34		
Eurystyles Wawra (4)				
E. actinosophila (Barb.Rodr.) Schltr.	*Cardoso et al. 531* (MBML)	12		
E. cotyledon Wawra	*Fontana et al. 3196* (MBML)	3		EN
**E. gardneri* (Lindl.) Garay	*Guiard 9773* (MBML)	1		
**E. lorenzii* (Cogn.) Schltr. [BR]	*Brade s.n.* (RB 72864)	1		
Galeandra Lindl. (3)				
G. beyrichii Rchb.f.	*Zorzanelli & Graciliano 612* (VIES)	6		VU
***G. schunkii* V.P.Castro & Chiron [BR, ES]	*Schunk ex Castro Neto 109* (SP, **holotype**)	3		
G. stangeana Rchb.f.	*Silva & Lieven 301* (VIES)	7		
Galeottia A.Rich. (1)				
G. ciliata (C.Morel) Dressler & Christenson	*Fraga 690* (MBML, RB)	2		CR
Gomesa R.Br. (34)				
G. barbaceniae (Lindl.) M.W.Chase & N.H.Williams [BR]	*Silva & Lieven 229* (VIES)	2		
G. bicornuta (Hook.) Meneguzzo [BR]	*Marcusso 1486* (HRCB)	2		
G. calimaniana (Guiard) M.W.Chase & N.H.Williams [BR]	*Caliman s.n.* (SP 386510, **holotype**)	1		
G. ciliata (Lindl.) M.W.Chase & N.H.Williams	*Flores et al. 1177* (ESA)	14		
G. colorata (Königer & J.G.Weinm.bis) M.W.Chase & N.H.Williams [BR, ES]	*Königer WK-30* (M, **holotype**)	1		
G. cornigera (Lindl.) M.W.Chase & N.H.Williams	*Ghillány 5* (HB)	1		
G. flexuosa (Lodd.) M.W.Chase & N.H.Williams	*Silva & Ulian 331* (VIES)	9		
G. forbesii (Hook.) M.W.Chase & N.H.Williams [BR]	*Zorzanelli 2093* (CAP)	4		
**G. gardneri* (Lindl.) M.W.Chase & N.H.Williams [BR]	*Dias et al. 820* (VIES)	4		VU
G. glaziovii Cogn. [BR]	*Kollmann & Ferreira 12566* (MBML)	3		VU
G. gomezoides (Barb.Rodr.) Pabst [BR]	*Marcusso 1406* (HRCB)	4		VU
G. imperatoris-maximiliani (Rchb.f.) M.W.Chase & N.H.Williams [BR]	*Marcusso et al. 1914* (HRCB, RB)	7		EN
G. jucunda (Rchb.f.) M.W.Chase & N.H.Williams [BR]	*Brotto & Völtz 5220* (MBM)	5		
G. kautskyi (Pabst) M.W.Chase & N.H.Williams [BR]	*Couto & Kollmann 1833* (VIES)	4	EN	CR
G. laxiflora (Lindl.) Klotzsch ex Rchb.f. [BR]	*Venda et al. 7* (RB)	4		
G. majevskyae (Toscano & V.P.Castro) M.W.Chase & N.H.Williams [BR]	*Kollmann et al. 12672* (MBML)	4	EN	EN
G. microphyta (Barb.Rodr.) M.W.Chase & N.H.Williams [BR]	*Fontana et al. 2055* (MBML)	1		
G. nitida (Barb.Rodr.) M.W.Chase & N.H.Williams [BR]	*Sagrillo & Dalmonech 40* (MBML)	5		
G. novaesiae (Ruschi) Fraga & A.P.Fontana [BR, ES]	*Kollmann & Kollmann 7762* (MBML)	4		CR
G. pabstii (Campacci & C.Espejo) M.W.Chase & N.H.Williams [BR]	*Chiron 9406* (MBML)	1		
G. polyodonta (Kraenzl.) Meneguzzo [BR, ES]	*Chiron 12054* (MBML)	9		VU
G. praetexta (Rchb.f.) M.W.Chase & N.H.Williams [BR]	*Marcusso 1479* (HRCB)	7		EN
G. radicans (Rchb.f.) M.W.Chase & N.H.Williams	*Couto et al. 5991* (MBML)	3		
G. ramosa (Lindl.) M.W.Chase & N.H.Williams	*Marcusso 1478* (HRCB)	11		VU
G. ranifera (Lindl.) M.W.Chase & N.H.Williams [BR]	*Calazans et al. 1023* (VIES)	10		
G. recurva R.Br.	*Silva et al. 486* (VIES)	17		
**G. sarcodes* (Lindl.) M.W.Chase & N.H.Williams [BR]	*Couto 287* (MBML)	1		EN

continues...

TABLE 1. *Continues...*

Gomesa uhlii (Chiron & V.P.Castro) M.W.Chase & N.H.Williams BR, ES	*Marcusso & Kamimura 1030* (CESJ, HRCB)	2		
G. uniflora (Booth ex Lindl.) M.W.Chase & N.H.Williams	*Couto & Dutra 1478* (CAP, VIES)	9		
**G. varicosa* (Lindl.) M.W.Chase & N.H.Williams	*Fraga 4041* (RB)	1		
G. velteniana (V.P.Castro & Chiron) M.W.Chase & N.H.Williams BR, ES	*Chiron & Sanson 11033* (MBML)	2		
G. venusta (Drapiez) M.W.Chase & N.H.Williams BR	*s. coll.* (RB 14625)	1		
G. warmingii (Rchb.f.) M.W.Chase & N.H.Williams	*Kollmann et al. 10464* (MBML)	2		CR
G. welteri (Pabst) M.W.Chase & N.H.Williams BR	*Kollmann et al. 7231* (MBML)	2		VU
Gongora Ruiz & Pav. (2)				
G. bufonia Lindl. BR	*Bolsanello 2606-2016* (MBML)	4		VU
G. quinquenervis Ruiz & Pav.	*Fraga 679* (MBML)	2		EN
Govenia Lindl. (1)				
G. gardneri Hook.	*Silva et al. 429* (VIES)	4		VU
Grobya Lindl. (1)				
G. amherstiae Lindl. BR	*Marcusso et al. 1488* (CESJ, HRCB)	9		
Habenaria Willd. (16)				
***H. achnantha* Rchb.f. BR	*Demuner et al. 1145* (CEN, MBML)	1		
H. araneiflora Barb.Rodr.	*Chiron 13001* (MBML)	4		VU
**H. cultellifolia* Barb.Rodr. BR	*Kautsky 88* (HB)	1		
**H. edwallii* Cogn. BR	*Ruschi 17* (SP)	1		
H. fluminensis Hoehne BR	*Fraga et al. 1841a* (CEPEC, MBML, RB)	3		
***H. gustavo-edwallii* Hoehne BR	*Martins da Costa et al. 348* (BHCB)	1		
H. josephensis Barb.Rodr.	*Siqueira 1465* (CVRD)	4		
H. leptoceras Hook. BR	*Silva et al. 318* (VIES)	2		
H. macronectar (Vell.) Hoehne	*Fraga et al. 1811* (CEPEC, MBM, MBML, RB, UPCB)	3		EN
***H. melanopoda* Hoehne & Schltr. BR	*Martins da Costa et al. 349* (BHCB)	1		VU
H. melvillei Ridl.	*Romão et al. 1324* (CVRD, ESA, RB)	3		EN
H. parviflora Lindl.	*Silva & Lieven 201* (VIES)	15		
H. petalodes Lindl.	*Silva et al. 460* (VIES)	12		
H. repens Nutt.	*Zorzanelli 1433* (CAP)	7		
H. rodeiensis Barb.Rodr.	*Caram et al. 154* (VIES)	9		
H. warmingii Rchb.f. & Warm. BR	*Kollmann et al. 7699* (MBML)	6		VU
Hapalorchis Schltr. (3)				
**H. lindleyana* Garay BR	*Brade 19238* (RB)	1		
H. lineata (Lindl.) Schltr.	*Ferreira 326* (MBML)	1		
**H. micrantha* (Barb.Rodr.) Hoehne	*Valpassos 15* (BOTU, MBML)	1		
Houlletia Brongn. (1)				
H. brocklehurstiana Lindl. BR	*Rossini & Rossini 633* (MBML)	3	EN	EN
Huntleya Bateman ex Lindl. (1)				
H. meleagris Lindl.	*Zorzanelli et al. 2489* (MBML)	7		VU
Ida A.Ryan & Oakeley (1)				
I. rossyi (Hoehne) Campacci & Baptista BR	*Chiron 12019* (MBML)	3		VU
Ionopsis Kunth (1)				
I. utricularioides (Sw.) Lindl.	*Couto 269* (MBML)	2		
Isabelia Barb.Rodr. (2)				
I. violacea (Lindl.) Van den Berg & M.W.Chase BR	*Fontana et al. 2234* (RB)	6		EN

continues...

Table 1. *Continues...*

***Isabelia virginalis* Barb.Rodr.	*Marcusso 1092* (HRCB)	1	VU	
Isochilus R.Br. (1)				
I.linearis (Jacq.) R.Br.	*Calazans et al. 1053* (VIES)	14		
Jacquiniella Schltr. (2)				
J. globosa (Jacq.) Schltr.	*Kollmann et al. 11393* (MBML, RB)	4		VU
J. teretifolia (Sw.) Britton & P.Wilson	*Kollmann et al. 7867* (MBML)	2		VU
Karma Karremans (1)				
K. montana (Barb.Rodr.) Karremans BR	*Sanson ex Chiron 9850* (MBML)	4		VU
Koellensteinia Rchb.f. (1)				
K. florida (Rchb.f.) Garay BR	*Arantes et al. 350* (RB)	12		
Laelia Lindl. (1)				
L. gloriosa (Rchb.f.) L.O.Williams	*Couto et al. 6359* (MBML)	11		
Lankesterella Ames (3)				
L. caespitosa (Lindl.) Hoehne	*Chiron 13060* (*in vivo* in Guy Chiron's collection)	1		
L. ceracifolia (Barb.Rodr.) Mansf. ex Markgr.	*Marcusso et al. 1482* (CESJ, HRCB)	3		VU
L. longicollis (Cogn.) Hoehne BR	*Couto et al. 2175* (VIES)	3		VU
Lankesteriana Karremans (2)				
**L. barbulata* (Lindl.) Karremans	*Bolsanello 90511 ex Chiron 9381* (MBML)	3		
L. caudatipetala (C.Schweinf.) Karremans	*Chiron 11279* (MBML)	3	VU	EN
Lepanthopsis (Cogn.) Ames (2)				
L. densiflora (Barb.Rodr.) Ames BR	*Vervloet & Bausen 151* (MBML)	1		
L. floripecten (Rchb.f.) Ames	*Fontana et al. 1485* (MBML)	4		
Leptotes Lindl. (3)				
L. bicolor Lindl.	*Couto 813* (MBML)	1		EN
L. pauloensis Hoehne BR	*Calazans et al. 1030* (VIES)	4		
L. tenuis Rchb.f. BR	*Vervloet & Pizziolo 2523* (MBML)	3		VU
Liparis Rich. (1)				
L. nervosa (Thunb.) Lindl.	*Couto et al. 1403* (CAP)	8		
Lockhartia Hook. (1)				
L. lunifera (Lindl.) Rchb.f. BR	*Chiron 9396* (MBML)	6		
Macradenia R.Br. (1)				
***M. grandiflora* A.K.Koch, Ilk.-Borg. & F.Barros BR	*Folli 2891* (CVRD, RB)	1		
Macroclinium Barb.Rodr. (1)				
M. roseum Barb.Rodr. BR	*Folli 5160* (CVRD)	1		
Madisonia Luer (2)				
M. bradei (Schltr.) Toscano & E.C.Smidt BR	*Bolson et al. 571* (UPCB)	3		VU
M. carrisii (Brade) Toscano & E.C.Smidt BR	*Bolson et al. 572* (UPCB)	2		
Malaxis Sol. ex Sw. (2)				
M. excavata (Lindl.) Kuntze	*Marcusso 1143* (HRCB)	4		
M. histionantha (Link) Garay & Dunst.	*Ferreira & Coelho 261* (MBML)	5		
Masdevallia Ruiz & Pav. (3)				
M. curtipes Barb.Rodr. BR	*Frey 281* (MO)	2		
M. discoidea Luer & Würstle BR, ES	*Royer & Cardoso 151* (UPCB)	2	CR	CR
M. infracta Lindl.	*Calazans et al. 1029* (VIES)	17		
Maxillaria Ruiz & Pav. (44)				
M. bradei Schltr. ex Hoehne	*Zorzanelli 1213* (CAP, RB)	1		
M. brasiliensis Brieger & Illg BR	*Couto et al. 5828* (MBML)	15		
M. calimaniana V.P.Castro BR, ES	*Castro Neto 101* (SP, **holotype**)	1		VU

continues...

Table 1. *Continues...*

Maxillaria candida G.Lodd. ex Lindl.	*Souza et al. 23752* (RB)	3		
****M. caparaoensis* Brade [BR]	*Zorzanelli et al. 546* (CAP, SAMES, VIES)	1		VU
M. chrysantha Barb.Rodr.	*Lírio & Alferes 1269* (MBML, RB)	10		
M. cleistogama Brieger & Illg	*Silva ex Chiron 13301* (MBML)	4		
M. crocea Lindl. [BR]	*Zorzanelli & Silva 298* (CAP)	5		
M. desvauxiana Rchb.f.	*Chiron 12016* (MBML)	5		
**M. discolor* (G.Lodd. ex Lindl.) Rchb.f.	*Silva & Lieven 71* (VIES)	4		
**M. echinophyta* Barb.Rodr. [BR]	*Sanson ex Chiron 10148* (MBML)	3		
M. elluziae Molinari [BR]	*Siqueira 570* (CVRD)	1		
M. ferdinandiana Barb.Rodr. [BR]	*Chiron & Sanson 11222* (MBML)	6		VU
M. humilis (Link & Otto) Schuit. & M.W.Chase [BR]	*Couto et al. 5833* (MBML)	11		
M. imbricata Barb.Rodr.	*Kollmann et al. 10459* (MBML)	4		
M. johannis Pabst [BR]	*Völtz & Brotto 2734* (MBM)	8		
M. kautskyi Pabst [BR, ES]	*Marcusso & Borgiani 1619* (CESJ)	3		VU
**M. leucaimata* Barb.Rodr. [BR]	*Sanson 56* (MBML)	4		VU
M. luteograndiflora Dombrain	*Fraga 785* (MBML)	4		EN
M. lutescens Scheidw.	*Brade 19970* (RB)	1		
M. marginata (Lindl.) Fenzl [BR]	*Marcusso 870* (HRCB)	12		VU
M. milenae V.P.Castro & Chiron [BR, ES]	*Chiron & Sanson 11051* (MBML)	3		
M. monantha Barb.Rodr. [BR, ES]	*Kollmann et al. 12173* (MBML)	6		
M. nasuta Rchb.f.	*Silva & Lieven 708* (MBML)	2		EN
M. neowiedii Rchb.f. [BR]	*Sanson ex Chiron 12031* (MBML)	3		
M. notylioglossa Rchb.f.	*Marcusso et al. 1737* (CESJ, HRCB, RB)	10		
**M. obtusa* (Lindl.) Molinari	*Naimeke ex Chiron 13085* (*in vivo* in Guy Chiron's collection)	1		
M. ochroleuca Lodd. ex Lindl.	*Zorzanelli 1481b* (CAP)	8		
M. pachyphylla Schltr. ex Hoehne [BR]	*Couto 1555* (CAP)	1		
M. paranaensis Barb.Rodr.	*Zorzanelli & Barreto 1112* (VIES)	6		VU
**M. parviflora* (Poepp. & Endl.) Garay	*Sanson ex Chiron 13002* (MBML)	4		
M. pendula (Poepp. & Endl.) C.Schweinf.	*Sanson ex Chiron 13008* (MBML)	5		
M. phoenicanthera Barb.Rodr. [BR]	*Couto & Guerra-Junior 2034* (CAP)	3		VU
M. picta Hook.	*Horst et al. 220* (VIES)	13		VU
M. piresiana Hoehne [BR]	*Boudet Fernandes 2391* (MBML)	2		
M. pumila Hook.	*Couto & Covre 3658* (CAP)	11		
M. rigida Barb.Rodr. [BR]	*Silva & Lieven 67* (VIES)	8		
M. rufescens Lindl.	*Couto & Freitas 5869* (MBML)	13		
M. schunkeana Campacci & Kautsky [BR, ES]	*Bolsanello s.n.* (MBML 50175)	6	EN	VU
M. spiritu-sanctensis Pabst [BR]	*Pellegrini et al. 253* (RB)	3		EN
M. subrepens (Rolfe) Schuit. & M.W.Chase	*Couto 615* (MBML)	2		VU
M. subulata Lindl. [BR]	*Marcusso et al. 1734* (CESJ)	17		
M. ubatubana Hoehne [BR]	*Zorzanelli et al. 684* (CAP, VIES)	10		
M. valenzuelana (A.Rich.) Nash.	*Kollmann 6530* (MBML)	2		VU
Mesadenella Pabst & Garay (1)				
M. pumila (Vell.) Campacci	*Zorzanelli et al. 17* (CAP, VIES)	14		
Microchilus C.Presl (15)				
M. argenteus (Vell.) E.C.Smidt & M.W.Chase	*Krahl 128* (VIES)	2		VU
M. arietinus (Rchb.f. & Warm.) Ormerod	*Brade 19402* (RB)	1		
**M. austrobrasiliensis* (Porsch) Ormerod [BR]	*Caram et al. 153* (VIES)	2		
****M. bidentiferus* (Schltr.) E.C.Smidt & M.W.Chase	*Marcusso et al. 1238* (CESJ)	2		VU

continues...

TABLE 1. *Continues...*

Microchilus commelinoides (Barb.Rodr.) E.C.Smidt & M.W.Chase BR	*Siqueira 1457* (CVRD)	5		VU
M. debilis (Lindl.) D.Dietr.	*Sucre 5584* (RB)	1		
M. fimbrillaris (Lindl.) E.C.Smidt & M.W.Chase BR	*Kollmann et al. 8819* (MBML)	2		VU
M. foliosus (Poepp. & Endl.) D.Dietr.	*Couto et al. 5814* (MBML)	4		VU
M. hylibates (Rchb.f.) E.C.Smidt & M.W.Chase BR	*Silva et al. 362* (VIES)	6		
**M. juruenensis* (Hoehne) E.C.Smidt & M.W.Chase	*Boone 389* (MBML)	1		VU
**M. jussariensis* (Ormerod) E.C.Smidt & M.W.Chase BR	*Engels 9691* (MBM)	1		
M. lamprophyllus (Linden & Rchb.f.) Ormerod BR	*Kollmann 12139* (MBML)	2		
M. longicornu (Cogn.) E.C.Smidt & M.W.Chase	*Folli 7198* (CVRD, UPCB)	2		
M. mendoncae (Brade & Pabst) E.C.Smidt & M.W.Chase BR	*Krahl 189* (VIES)	2		CR
**M. roseus* (Lindl.) D.Dietr.	*Fontana et al. 129* (MBML)	1		
Miltonia Lindl. (8)				
M. candida Lindl. BR	*Fontana et al. 3161* (RB)	5		EN
M. clowesii (Lindl.) Lindl. BR	*Marcusso et al. 1509* (CESJ)	7		
M. cuneata Lindl. BR	*Fraga 2150* (RB)	4		CR
M. flavescens (Lindl.) Lindl.	*Milanezi & Vargas s.n.* (VIES 3230)	3		
M. moreliana A.Rich. BR	*Freitas 49* (MBML)	6		VU
M. phymatochila (Lindl.) N.H.Williams & M.W.Chase BR	*Hoehne s.n.* (SP 29924)	1		
M. russelliana (Lindl.) Lindl. BR	*Couto 150* (MBML)	4		VU
M. spectabilis Lindl. BR	*Marcusso & Kamimura 1741* (CESJ, HRCB, RB)	9		VU
Muscarella Luer (1)				
M. cryptophyta (Barb.Rodr.) Bogarín & Karremans	*Folli 5330* (CVRD)	2		
Myoxanthus Poepp. & Endl. (5)				
M. conceicionensis M.Frey & N.Sanson BR, ES	*Sanson ex Frey 531* (MBML, **holotype**)	1	CR	VU
**M. lonchophyllus* (Barb.Rodr.) Luer BR	*Chiron 9789* (MBML)	1		
M. parahybunensis (Barb.Rodr.) Luer	*Meirelles et al. 529* (ESA)	5		
M. punctatus (Barb.Rodr.) Luer BR	*Calazans et al. 1039* (VIES)	11		
M. ruschii Fraga & L.Kollmann BR, ES	*Marcusso & Lombardi 1662* (CESJ)	3	CR	EN
Nemaconia Knowles & Westc. (1)				
N. australis (Cogn.) Van den Berg, Salazar & Soto Arenas BR	*Alves-Araújo et al. 1783* (VIES)	5		
Neogardneria Schltr. ex Garay (1)				
N. murrayana (Gardner ex Hook.) Schltr. ex Garay	*Kautsky 6* (HB)	2		
Notylia Lindl. (4)				
N. hemitricha Barb.Rodr. BR	*Marcusso 1719* (HRCB)	9		
N. lyrata S.Moore	*Assis & Freitas 1749* (MBML)	2		
N. microchila Cogn.	*Siqueira 1246* (CVRD)	1	EN	EN
N. pubescens Lindl. BR	*Silva et al. 706* (VIES)	9		
Octomeria R.Br. (31)				
O. alexandri Schltr. BR	*Ferreira 377* (MBML)	1	EN	
O. aloifolia Barb.Rodr. BR	*Vieira & Passos s.n.* (MBML 32664)	3		VU
O. anceps Porto & Brade BR	*Zappi 63* (HB)	1		
O. chamaeleptotes Rchb.f.	*Chiron 12097* (MBML)	7	VU	VU
O. concolor Barb.Rodr.	*Chiron 8821* (MBML)	8		
O. crassifolia Lindl.	*Marcusso et al. 1727* (CESJ)	18		
O. decumbens Cogn. BR	*Frey 503* (ESA)	1		
O. diaphana Lindl. BR	*Couto et al. 5824* (MBML)	12		
O. estrellensis Hoehne BR	*Kautsky 455* (HB)	1		

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Table 1. *Continues...*

Octomeria exigua C.Schweinf.	*Kautsky & Santo s.n.* (HB 57357)	1		
O. geraensis (Barb.Rodr.) Barb.Rodr. BR	*Fontana & Britto 400* (MBML)	1	VU	VU
O. gracilis Lodd. ex Lindl. BR	*Marcusso 1588* (HRCB)	3		VU
O. grandiflora Lindl.	*Manhães et al. 899* (MBML)	13		
O. hexalobata Chiron & N.Sanson BR, ES	*Sanson 62* (MBML, **holotype**)	1		
O. juncifolia Barb.Rodr. BR	*Marcusso & Kamimura 1157* (CESJ)	8		
**O. lichenicola* Barb.Rodr. BR	*Kollmann et al. 2867* (MBML)	1	EN	VU
O. linearifolia Barb.Rodr. BR	*Lombardi et al. 9730* (UPCB)	5		
O. lithophila (Barb.Rodr.) Barb.Rodr. BR	*Ruschi 24* (SP)	1		VU
**O. micrantha* Barb.Rodr.	*Guiard 10296* (MBML)	1		
O. montana Barb.Rodr. BR	*Kautsky 276* (HB)	1		
O. palmyrabellae Barb.Rodr. BR	*Marcusso et al. 1555* (CESJ, HRCB)	3		VU
O. praestans Barb.Rodr. BR	*Sanson 100* (MBML)	6		
**O. pusilla* Lindl.	*Sanson ex Chiron 9845* (MBML)	1		VU
O. rotundiglossa Hoehne BR	*Vervloet & Bausen 2091* (MBML)	4		VU
O. sagittata (Rchb.f.) Garay	*Siqueira 705* (CVRD)	3		
O. sansoniana Chiron & Guiard BR, ES	*Toscano de Brito 3483* (UPCB)	2		
O. spannagelii Hoehne BR	*Kautsky 213* (HB)	1		
**O. stellaris* Barb.Rodr. BR	*Guiard 9394* (MBML)	4		
O. sulfurea Chiron & N.Sanson BR, ES	*Sanson ex Chiron 9444* (MBML, **holotype**)	1		
O. tricolor Rchb.f. BR	*Calazans et al. 1031* (VIES)	18		
O. warmingii Rchb.f.	*Sanson 102* (MBML)	6		VU
Oncidium Sw. (1)				
O. baueri Lindl.	*Pena et al. 515* (RB, VIES)	7		
Ornithocephalus Hook. (1)				
O. myrticola Lindl.	*Royer & Cardoso 165* (UPCB)	5		
Pabstia Garay (3)				
P. jugosa (Lindl.) Garay BR	*Marcusso 1344* (HRCB)	3	EN	VU
P. schunkiana V.P.Castro BR, ES	*Hall et al. 727* (SP)	3	CR	EN
P. viridis (Lindl.) Garay BR	*Marcusso et al. 927* (CESJ)	3		EN
Pabstiella Brieger & Senghas (70)				
P. acrogenia Luer & Toscano BR	*Brade s.n.* (RB 72864)	1		
**P. alligatorifera* (Rchb.f.) Luer BR	*Frey 9286* (MBML)	3		
P. arcuata (Lindl.) Luer	*Toscano de Brito 3066* (UPCB)	3		
**P. assisii* N.Gut., E.C.Smidt & Toscano BR, ES	*Assis ex Gutiérrez 258* (UPCB, **holotype**)	1		
P. atrata (Chiron & Xim.Bols.) Karremans BR, ES	*Bolson et al. 585* (UPCB)	2		
**P. aurantiaca* (Barb.Rodr.) Chiron BR	*Guiard 9765* (MBML)	3		
P. biriricensis Chiron & Xim.Bols. BR, ES	*Marcusso et al. 1192* (CESJ)	2		
P. bofiae Chiron & Tesch BR, ES	*Tesch ex Chiron 16004* (MBML, **holotype**)	1		
P. bowmanni (Rchb.f.) Luer	*Royer & Cardoso 140* (UPCB)	5		VU
P. brachystele Chiron & N.Sanson BR, ES	*Sanson ex Chiron 9855* (MBML, **holotype**)	1		
P. bradei (Schltr.) Luer BR	*Kollmann 3237* (MBML)	2		
**P. campestris* (Barb.Rodr.) Luer BR	*Sanson ex Chiron 10045* (*in vivo* in Guy Chiron's collection)	1		
P. capijumensis Luer & Toscano BR, ES	*Frey s.n.* (HUEFS 187117, **holotype**)	1		
**P. carinifera* (Barb.Rodr.) Luer BR	*Florabela ex Chiron 9753* (*in vivo* in Guy Chiron's collection)	1	VU	
P. castellensis (Brade) Luer BR, ES	*Chiron 11277* (MBML)	3	CR	
**P. catafestae* Chiron & Xim.Bols. BR, ES	*Catafesta ex Chiron 12088* (MBML, **holotype**)	1		
P. conceicionensis Chiron & N.Sanson BR	*Sanson ex Chiron 9446* (MBML, **holotype**)	1		

continues...

Table 1. *Continues...*

***Pabstiella conspersa* (Hoehne) Luer BR	*Couto & Dutra 1550* (MBML)	1	EN	
P. cordilabia (Pabst) Luer BR, ES	*Toscano de Brito 3484* (UPCB)	6		
***P. crassicaulis* (Barb.Rodr.) Luer BR	*Couto 1048* (CAP)	1		
P. crenata (Lindl.) Luer BR	*Silva 302* (RB, VIES)	2		
**P. curti-bradei* (Pabst) Luer BR	*Silva & Ulian 349* (VIES)	4	VU	VU
**P. dasilvae* Chiron & Xim.Bols. BR	*Catafesta ex Chiron 12087* (MBML)	1		
P. decurva Luer & Toscano BR, ES	*Toscano de Brito 3788* (UPCB)	2		
P. discors Luer & Toscano BR, ES	*Frey ex Toscano de Brito 2695* (HUEFS, **holotype**)	1		
P. ephemera (Lindl.) Luer	*Toscano de Brito 2658* (UPCB)	2		VU
**P. fasciata* (Seehawer) Luer BR	*Toscano de Brito 3389* (UPCB)	4		
**P. fluminensis* (Pabst) Luer BR	*Brade 19919* (RB)	1		
P. fragae (L.Kollmann & A.P.Fontana) L.Kollmann BR, ES	*Giacomin et al. 1201* (BHCB)	1		VU
P. freyi Luer & Toscano BR, ES	*Frey s.n.* (HUEFS 187114, **holotype**)	1		
P. fusca (Lindl.) Chiron & Xim.Bols.	*Zorzanelli 2133* (CAP)	16		
P. garayi (Pabst) Luer BR, ES	*Kautsky 405* (HB, **holotype**)	1	CR	VU
P. granulosa (Barb.Rodr.) Chiron & Xim.Bols. BR	*Frey 8473* (MBML)	1		
**P. isabelae* Chiron & Xim.Bols. BR, ES	*Tesch ex Chiron 12009* (MBML, **holotype**)	1		
P. leucopyramis (Rchb.f.) Luer BR	*Calazans et al. 986* (VIES)	6		VU
P. lingua (Lindl.) Luer	*Calazans et al. 1046* (VIES)	2	EN	VU
P. lobiglossa Chiron & N.Sanson BR, ES	*Chiron 9443* (MBML, **holotype**)	1		
P. lueriana Fraga & L.Kollmann BR	*Marcusso et al. 1800* (HRCB, RB)	3		VU
**P. matinhensis* (Hoehne) Luer BR	*Toscano de Brito et al. 3507* (UPCB)	2		
P. melior Luer & Toscano BR, ES	*Toscano de Brito 1453* (HUEFS, **holotype**)	1		
P. muricatifolia Fraga & L.Kollmann BR, ES	*Chiron 12104* (MBML)	3		EN
**P. naimekei* Chiron & Xim.Bols. BR, ES	*Naimeke ex Chiron 12083* (MBML, **holotype**)	1		VU
P. nymphalis Luer & Toscano BR, ES	*Marques ex Toscano de Brito 3791* (UPCB)	5		EN
P. pellifeloidis (Barb.Rodr.) Luer BR	*Guiard 9724* (MBML)	5		
**P. pomerana* Chiron & Xim.Bols. BR	*Tesch ex Chiron 12027* (MBML, **holotype**)	1		
***P. pristeoglossa* (Rchb.f. & Warm.) Luer BR	*Toscano de Brito 2863* (UPCB)	1		
**P. pseudotrifida* L.Kollmann & D.R.Couto BR, ES	*Marques ex Toscano de Brito 3916* (UPCB)	4		EN
P. punctatifolia (Barb.Rodr.) Luer BR	*Silva et al. 505* (VIES)	7		
P. quadridentata (Barb.Rodr.) Luer BR	*Brade s.n.* (RB 70290)	1		
P. ramphastorhyncha (Barb.Rodr.) L.Kollmann BR	*Fontana et al. 749* (MBML)	4		
P. rhombilabia Chiron & N.Sanson BR, ES	*Sanson ex Chiron 10145* (MBML, **holotype**)	1		
P. ribeironensis Chiron & Xim.Bols. BR	*Chiron 13095A* (MBML, **holotype**)	1		
P. robertoi (Luer & Toscano) Luer BR	*Toscano de Brito & Kautsky 1017* (HUEFS, **holotype**)	1		
P. rubrolineata (Hoehne) Luer BR	*Orquidário Caliman 9048* (MBML)	1		
P. rupicola L.Kollmann BR, ES	*Kollmann & Kollmann 11933* (MBML, **holotype**)	1		VU
P. ruschii (Hoehne) Luer BR, ES	*Royer & Cardoso 143* (UPCB)	2	CR	EN
P. sansonii Luer & Toscano BR, ES	*Sanson s.n.* (HUEFS 187228, **holotype**)	1		
P. savioi Luer & Toscano BR	*Caliman ex Frey 614* (HUEFS, **holotype**)	1		
P. seriata (Lindl.) Luer & Toscano	*Marcusso et al. 1700* (CESJ)	6		
P. setibensis Chiron & Xim.Bols. BR, ES	*Chiron 13309* (MBML, **holotype**)	1		
**P. silvanae* Chiron & Xim.Bols. BR, ES	*Silva et al. 619* (VIES)	2		
P. tenera (Barb.Rodr.) Luer BR	*Orquidário Caliman 9050* (MBML)	1		

continues...

Table 1. *Continues...*

**Pabstiella tortuosa* N.Gut., E.C.Smidt & Toscano BR, ES	*Assis ex Gutiérrez 304* (UPCB, **holotype**)	1		
P. tricolor (Barb.Rodr.) Luer BR	*Chiron & Bolsanello 11283* (MBML)	2		
P. trifida (Lindl.) Luer BR	*Calazans et al. 1045* (VIES)	12		
P. tripterantha (Rchb.f.) F.Barros	*Sanson ex Chiron 10140* (MBML)	2		
P. truncatilabia Chiron & Tesch BR, ES	*Tesch ex Chiron 16002* (MBML, **holotype**)	1		
**P. uniflora* (Lindl.) Luer	*Chiron 11060* (MBML)	3		VU
P. villosisepala L.Kollmann & Fraga BR, ES	*Toscano de Brito 3378* (UPCB)	4		VU
P. wawraeana (Barb.Rodr.) Chiron & Xim.Bols. BR	*Chiron & Tesch 11204* (MBML)	6		
Paradisanthus Rchb.f. (1)				
P. bahiensis subsp. *micranthus* (Barb.Rodr.) Meneguzzo BR	*Pereira et al. 9965* (VIES)	12		VU
Pelexia Poit. ex Lindl. (5)				
**P. itatiayae* Schltr. BR	*Brade 19787* (RB)	1		
P. macropoda (Barb.Rodr.) Schltr. BR	*Caram et al. 150* (VIES)	3		
P. novofriburgensis (Rchb.f.) Garay	*Kollmann & Bausen 5830* (MBML)	2		VU
**P. oestrifera* (Rchb.f. & Warm.) Schltr. BR	*Chiron 13147* (MBML)	3		VU
**P. orthosepala* (Rchb.f. & Warm.) Schltr. BR	*Esgario & Fontana 144* (MBML)	1		
Phloeophila Hoehne & Schltr. (1)				
***Phloeophila nummularia* (Rchb.f.) Garay	*Marcusso 1638* (HRCB)	1		
Phymatidium Lindl. (5)				
P. aquinoi Schltr. BR	*Zorzanelli 1764* (CAP)	4		VU
P. delicatulum Lindl.	*Royer & Cardoso 161* (UPCB)	4		
P. falcifolium Lindl. BR	*Furtado et al. 327* (CESJ)	6		VU
P. geiselii Ruschi BR	*Kautsky s.n.* (HB 42825)	1	EN	CR
P. hysteranthum Barb.Rodr. BR	*Kollmann et al. 8285* (MBML)	3		
Platystele Schltr. (1)				
P. oxyglossa (Schltr.) Garay	*Calazans et al. 1038* (VIES)	3		VU
Pleurothallopsis Porto & Brade (1)				
P. nemorosa (Barb.Rodr.) Porto & Brade BR	*Herzog ex Chiron 12093* (MBML)	1		
Pogoniopsis Rchb.f. (2)				
P. nidus-avis Rchb.f. BR	*Dias et al. 811* (VIES)	1		VU
P. schenkii Cogn. BR	*Oliveira & Silva 295* (RB)	4		VU
Polystachya Hook. (5)				
P. caespitosa Barb.Rodr. BR	*Folli 1893* (CVRD, RB)	1		
**P. caracasana* Rchb.f.	*Zorzanelli et al. 1930* (CAP)	4		
**P. concreta* (Jacq.) Garay & H.R.Sweet	*Assis et al. 5130* (VIES)	27		
**P. paulensis* Rchb.f.	*Ribeiro et al. 515* (SAMES)	4		VU
P. rupicola Brade BR	*Chiron 12106* (MBML)	3	CR	VU
Prescottia Lindl. (6)				
P. lancifolia Lindl. BR	*Zorzanelli 1016* (CAP, SP, VIES)	5		
P. montana Barb.Rodr.	*Fontana et al. 3445* (MBML)	4		
P. oligantha (Sw.) Lindl.	*Silva & Lieven 240* (VIES)	5		
P. phleoides Lindl. BR	*Mota 32* (MBML)	1		
P. plantaginifolia Lindl. ex Hook. BR	*Pereira et al. 9920* (VIES)	33		
P. stachyodes (Sw.) Lindl.	*Kollmann et al. 13186* (MBML)	12		
Promenaea Lindl. (2)				
P. guttata Rchb.f. BR	*Marcusso et al. 1206* (CESJ)	9		VU
P. xanthina (Lindl.) Lindl. BR	*Marcusso et al. 865* (HRCB)	9		
Prosthechea Knowles & Westc. (16)				
P. aemula (Lindl.) W.E.Higgins	*Favoreto & Gava 157* (CESJ, VIES)	13		

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Table 1. *Continues...*

Prosthechea alagoensis (Pabst) W.E.Higgins [BR]	*Folli 2186* (CVRD)	1		
P. allemanii (Barb.Rodr.) W.E.Higgins [BR]	*Esgario et al. 125* (MBML)	2		VU
P. allemanoides (Hoehne) W.E.Higgins [BR]	*Zorzanelli 961* (CAP, VIES)	6		
P. bohnkiana V.P.Castro & G.F.Carr [BR]	*Seidel 955* (HB)	1		
P. bulbosa (Vell.) W.E.Higgins [BR]	*Guimarães et al. 358* (MBML)	10		
P. calamaria (Lindl.) W.E.Higgins	*Calazans et al. 1037* (VIES)	12		
P. campos-portoi (Pabst) W.E.Higgins [BR, ES]	*Marcusso et al. 1828* (HRCB, RB)	2		
P. ebanii Chiron & V.P.Castro [BR, ES]	*Ebani ex Chiron 8132* (SP, **holotype**)	1		
P. elisae Chiron & V.P.Castro [BR, ES]	*Alves-Araújo et al. 1789* (VIES)	2		
**P. glumacea* (Lindl.) W.E.Higgins [BR]	*Berger & Berger 50* (MBML)	2		VU
P. kautskyi (Pabst) W.E.Higgins [BR, ES]	*Kollmann 6314* (MBML)	3		
P. pachysepala (Klotzsch) Chiron & V.P.Castro [BR]	*Marcusso et al. 1302* (CESJ)	4		
P. pygmaea (Hook.) W.E.Higgins	*Zorzanelli et al. 541* (CAP)	7		
P. schunkiana (Campacci & P.A.Harding) W.E.Higgins [BR, ES]	*Schunk ex Campacci 1686* (SP, **holotype**)	1		
P. vespa (Vell.) W.E.Higgins	*Silva et al. 378* (VIES)	10		
Pseudolaelia Porto & Brade (6)				
P. brejetubensis M.Frey [BR, ES]	*Frey & Perim 30* (RB, **holotype**)	1	CR	VU
P. canaanensis (Ruschi) F.Barros [BR]	*Couto et al. 5951* (MBML)	8	VU	VU
P. citrina Pabst [BR]	*Kollmann et al. 12669* (MBML)	9	EN	VU
P. dutrae Ruschi [BR]	*Arantes & Resende 418* (RB, VIES)	14	VU	
P. geraensis Pabst [BR]	*Burle-Marx s.n.* (HB 69137)	1		
P. vellozicola (Hoehne) Porto & Brade [BR]	*Manhães & Couto 1053* (MBML)	13		
Psilochilus Barb.Rodr. (1)				
**P. modestus* Barb.Rodr.	*Coelho & Ferreira 148* (MBML)	5		VU
Pteroglossa Schltr. (3)				
P. euphlebia (Rchb.f.) Garay [BR]	*Couto et al. 6008* (MBML)	2		VU
P. glazioviana (Cogn.) Garay	*Zorzanelli & Batista 1971* (CAP)	6		VU
P. roseoalba (Rchb.f.) Salazar & M.W.Chase	*Couto 1137* (BOTU, MBML)	1		
Rauhiella Pabst & Braga (1)				
R. silvana Toscano [BR]	*Fraga 689* (MBML)	1	EN	CR
Restrepiella Garay & Dunst. (1)				
R. ovatipetala (Chiron & Xim.Bols.) Rojas-Alv. & Karremans [BR, ES]	*Toscano de Brito 3915* (UPCB)	2		
Rodriguezia Ruiz & Pav. (8)				
**R. bahiensis* Rchb.f. [BR]	*Zappi et al. 428* (UEC)	1		
**R. bracteata* (Vell.) Hoehne	*Silva et al. 117* (VIES)	4		VU
**R. decora* (Lem.) Rchb.f.	*Peixoto et al. 3055* (MO)	1		
R. limae Brade [BR]	*Folli 1790* (CVRD, RB)	1		
R. obtusifolia (Lindl.) Rchb.f. [BR]	*Kollmann 13394* (MBML)	7		VU
R. pubescens (Lindl.) Rchb.f. [BR]	*Marcusso & Kamimura 1388* (CESJ)	5		VU
R. sticta M.W.Chase [BR]	*Tedesco ex Chiron 8833* (SP)	4		
R. venusta (Lindl.) Rchb.f. [BR]	*Couto et al. 5825* (MBML)	3		VU
Sacoila Raf. (1)				
S. lanceolata (Aubl.) Garay	*Paula et al. 1524* (RB)	30		
Sarcoglottis C.Presl (2)				
S. acaulis (Sm.) Schltr.	*Chiron 13145* (MBML)	13		
S. depinctrix Christenson & Toscano [BR]	*Couto et al. 893* (MBML)	3		
Sauroglossum Lindl. (1)				
S. elatum Lindl.	*Marcusso 875* (HRCB)	12		

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Table 1. *Continues...*

Scaphyglottis Poepp. & Endl. (6)				
S. brasiliensis (Schltr.) Dressler [BR]	*Couto & Zorzanelli 6346* (MBML)	4		
**S. emarginata* (Garay) Dressler	*Couto et al. 5988* (MBML)	4		
S. livida (Lindl.) Schltr.	*Sanson ex Chiron 10131* (MBML)	5		
S. modesta (Rchb.f.) Schltr.	*Furtado et al. 362* (CESJ)	11		
S. prolifera (R.Br.) Cogn.	*Fontana & Fadini 216* (MBML)	3		
**S. sickii* Pabst	*Kollmann & Sobral 6593* (MBML)	1		
Schunkea Senghas (1)				
S. vierlingii Senghas [BR, ES]	*Schunk & Pfister s.n.* (HEID, **holotype**)	1		
Sobralia Ruiz & Pav. (2)				
S. liliastrum Lindl.	*Vergne et al. 74* (CVRD, HRCB)	4		EN
S. sessilis Lindl.	*Fraga et al. 3531* (MBML, RB)	8		VU
Specklinia Lindl. (4)				
S. erecta Luer & Toscano [BR, ES]	*Toscano de Brito 1451* (HUEFS, **holotype**)	1		
S. grobyi (Bateman ex Lindl.) F.Barros	*Marcusso et al. 1496* (CESJ, HRCB)	17		
S. marginalis (Rchb.f.) F.Barros	*Marcusso et al. 1400* (CESJ)	3		
S. subpicta (Schltr.) F.Barros [BR]	*Royer & Cardoso 139* (UPCB)	4		VU
Stanhopea J.Frost ex Hook. (3)				
S. guttulata Lindl. [BR]	*Krahl 174* (VIES)	6		VU
S. insignis J.Frost ex Hook. [BR]	*Fontana 2059* (MBML)	5		VU
**Stanhopea lietzei* (Regel) Schltr. [BR]	*Demuner et al. 4251* (MBML)	3		VU
Stelis Sw. (18)				
S. aprica Lindl.	*Marcusso & Kamimura 1063* (CESJ, HRCB)	12		
S. argentata Lindl.	*Silva & Lieven 190* (VIES)	10		
S. capijumensis Luer & Toscano [BR, ES]	*Frey 294* (MBML, **holotype**)	1		
S. ciliaris Lindl.	*Chiron 12122* (MBML)	1		
S. deregularis Barb.Rodr.	*Zorzanelli 1501* (CAP)	5		
S. freyi Luer & Toscano [BR, ES]	*Frey 120* (MBML, **holotype**)	2		
S. gunningiana (Barb.Rodr.) M.H.J.van der Meer	*Toscano de Brito 2868* (UPCB)	9		
S. grandiflora Lindl.	*Menini Neto et al. 982* (BHCB)	7		
S. intermedia Poepp. & Endl.	*Chiron 12072* (MBML)	4		
S. kautskyi Luer & Toscano [BR, ES]	*Kautsky 1008 ex Toscano de Brito 1002* (MBML, **holotype**)	1		
**S. montserratii* (Porsch) Karremans	*Chiron 11241* (MBML)	5		VU
S. papaquerensis Rchb.f.	*Silva et al. 451* (VIES)	8		
**S. parvula* Lindl.	*Chiron 11019* (*in vivo* in Guy Chiron's collection)	2		
**S. peliochyla* Barb.Rodr. [BR]	*Chiron 8153* (*in vivo* in Guy Chiron's collection)	3		
S. ruprechtiana Rchb.f.	*Sucre & Silva 9129* (RB)	2		
S. sclerophylla (Lindl.) Karremans	*Marcusso et al. 1732* (CESJ)	15		
S. susanensis (Hoehne) Pridgeon & M.W.Chase [BR]	*Folli 5295* (CVRD)	1		
S. synsepala Cogn. [BR]	*Silva & Lieven 191* (VIES)	1		
Thysanoglossa Porto & Brade (1)				
T. spiritu-sanctensis N.Sanson & Chiron [BR, ES]	*Sanson ex Chiron 10137* (MBML, **holotype**)	1		
Trichocentrum Poepp. & Endl. (10)				
T. auricula (Vell.) Meneguzzo & M.W.Chase [BR]	*Lombardi et al. 9729* (HRCB, UPCB)	9		
T. divaricatum (Lindl.) Meneguzzo & M.W.Chase	*Horst et al. 130* (VIES)	13	VU	
***T. edwallii* (Cogn.) Meneguzzo & M.W.Chase	*Marcusso et al. 1915* (HRCB, RB)	2		
T. fuscum Lindl.	*Molina & Pujals 353* (MBM)	9		
T. hians (Lindl.) Meneguzzo & M.W.Chase [BR]	*Bolson et al. 580* (UPCB)	3	VU	VU

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TABLE 1. *Continues...*

Trichocentrum jonesianum (Rchb.f.) M.W.Chase & N.H.Williams	*Bicalho s.n.* (SP 174975)	1		VU
T. mirabile (Rchb.f.) Meneguzzo & M.W.Chase BR	*Brade et al. 18592* (RB)	1	EN	EN
T. paniculatum (Brade) Meneguzzo & M.W.Chase BR	*Kollmann & Vervloet 3053* (MBML)	2	VU	EN
T. pumilum (Lindl.) M.W.Chase & N.H.Williams	*Marcusso et al. 1718* (CESJ)	13		
T. schwambachiae (V.P.Castro & Toscano) Meneguzzo BR, ES	*Mattedi et al. 193* (MBML)	8	VU	EN
Trichopilia Lindl. (1)				
T. fragrans (Lindl.) Rchb.f.	*Vervloet et al. 2133* (MBML)	2		VU
Trizeuxis Lindl. (1)				
T. falcata Lindl.	*Folli 2417* (CVRD, RB)	2		VU
Uleiorchis Hoehne (1)				
U. ulei (Cogn.) Handro	*Brotto & Völtz 4789* (MBM)	2		
Vanilla Mill. (7)				
V. capixaba Fraga & D.R.Couto BR, ES	*Couto 1270* (RB, **holotype**)	1		CR
V. chamissonis Klotzsch	*Fraga & Couto 3912* (HUEFS, RB, VIES)	10		
V. dietschiana Edwall BR	*Peixoto et al. 442* (RB)	1	VU	EN
V. dubia Hoehne BR	*Fontana et al. 1797* (MBML)	2	EN	VU
V. edwallii Hoehne	*Bolson & Imig 629* (UPCB)	5		VU
** *V. mexicana* Mill.	*Folli 3591* (CEN, CVRD, ESA)	1		
V. phaeantha Rchb.f.	*Fiorini et al. 9* (SAMES)	11		
Warczewiczella Rchb.f. (1)				
W. wailesiana (Lindl.) É.Morren BR	*Fraga 624* (MBML)	6		VU
Warmingia Rchb.f. (1)				
W. eugenii Rchb.f.	*Sucre & Soderstrom 9958* (RB)	2		
Warrea Lindl. (1)				
W. warreana (Lodd. ex Lindl.) C.Schweinf.	*Meneguzzo & Campacci 1406* (RB)	5		EN
Wullschlaegelia Rchb.f. (1)				
W. aphylla (Sw.) Rchb.f.	*Krahl 156* (VIES)	1		
Xylobium Lindl. (3)				
X. colleyi (Bateman ex Lindl.) Rolfe	*Kollmann & Fontana 10011* (MBML)	3		EN
X. pallidiflorum (Hook.) G.Nicholson	*Kollmann et al. 7363* (MBML)	2		VU
X. undulatum (Ruiz & Pav.) Rolfe	*Freitas 105* (MBML)	12		
Zootrophion Luer (1)				
Z. atropurpureum (Lindl.) Luer	*Kollmann 11977* (MBML)	1		VU
Zygopetalum Hook. (5)				
Z. crinitum G.Lodd. BR	*Silva et al. 608* (VIES)	3		EN
Z. crinitum subsp. *pabstii* (Toscano) Meneguzzo BR, ES	*Meneguzzo & Campacci 1407* (RB)	4	EN	VU
Z. maculatum (Kunth) Garay	*Gonella et al. 1152* (MBML)	23		
Z. maxillare G.Lodd.	*Zorzanelli 1656* (CAP)	7		EN
Z. mosenianum Barb.Rodr. BR	*Zorzanelli 1766* (CAP)	2		VU
Zygostates Lindl. (9)				
Z. castellensis (Brade) C.Royer, Toscano & E.C.Smidt BR	*Fontana et al. 577* (MBML)	2	CR	EN
Z. cornuta Lindl. BR	*Couto 228* (MBML)	3		VU
Z. greeniana Rchb.f. BR	*Marcusso 1389* (HRCB)	5		VU
Z. kuhlmannii Brade BR	*Kuhlmann 6599* (RB, **holotype**)	1	EN	
Z. linearisepala (Senghas) Toscano BR, ES	*Lorenzoni 24* (MBML)	2	CR	EN
Z. lunata Lindl. BR	*Marcusso 1517* (CESJ)	10		
Z. nunes-limae (Porto & Brade) C.Royer, Toscano & E.C.Smidt BR	*Sanson ex Chiron 10129* (MBML)	1		
Z. pellucida Rchb.f. BR	*Toscano de Brito 871* (K)	3		
Z. tripollinica (Barb.Rodr.) C.Royer, Toscano & E.C.Smidt BR	*Brade 19419* (RB)	1		

Table 2. Orchidaceae species reported in the literature for the state of Espírito Santo, Brazil, and those for which no corresponding specimens or verified records were found.

Species	References
Aspasia silvana F.Barros[1]	Barros (1988); Flora e Funga do Brasil (2026)
Bifrenaria atropurpurea Lindl.[2]	Pabst & Dungs (1977); Campacci (2003)
Bulbophyllum micranthum Barb.Rodr.	Chiron & Bolsanello (2013b)
Campylocentrum densiflorum Cogn.	Chiron & Bolsanello (2013b)
Catasetum micranthum Barb.Rodr.[3]	Flora e Funga do Brasil (2026)
Cattleya crispa Lindl.	Pabst & Dungs (1975)
Cattleya mantiqueirae (Fowlie) Van den Berg	Flora e Funga do Brasil (2026)
Cattleya munchowiana (F.E.L.Miranda) Van den Berg[4]	Flora e Funga do Brasil (2026)
Cyclopogon organensis (Pabst) Szlach. & Rutk.	Flora e Funga do Brasil (2026)
Cyrtopodium parviflorum Lindl.	Romero-González *et al.* (2008); Flora e Funga do Brasil (2026)
Epidendrum campestre Lindl.	Flora e Funga do Brasil (2026)
Epidendrum erectum Brieger & Bicalho	Flora e Funga do Brasil (2026)
Epidendrum hassleri Cogn.	Flora e Funga do Brasil (2026)
Epidendrum parahybunense Barb.Rodr.[5]	Flora e Funga do Brasil (2026)
Gomesa pectoralis (Lindl.) M.W.Chase & N.H.Williams	Flora e Funga do Brasil (2026)
Habenaria guilleminii Rchb.f.	Flora e Funga do Brasil (2026)
Habenaria hexaptera Lindl.	Batista *et al.* (2011); Flora e Funga do Brasil (2026)
Habenaria johannensis Barb.Rodr.	Batista *et al.* (2006, 2011); Flora e Funga do Brasil (2026)
Habenaria paranaensis Barb.Rodr.	Pabst & Dungs (1975); Flora e Funga do Brasil (2026)
Habenaria trifida Kunth	Flora e Funga do Brasil (2026)
Myoxanthus pulvinatus (Barb.Rodr.) Luer	Pabst & Dungs (1975); Chiron & Bolsanello (2013a)
Octomeria irrorata Schltr.	Pabst & Dungs (1975: 168); Flora e Funga do Brasil (2026)
Pabstiella colorata (Pabst) Luer & Toscano	Pabst & Dungs (1975); Flora e Funga do Brasil (2026)
Pabstiella viridula (Barb.Rodr.) Luer & Toscano	Chiron & Bolsanello (2013a); Flora e Funga do Brasil (2026)
Rodriguezia leucantha Barb.Rodr.	Flora e Funga do Brasil (2026)
Rodriguezia pardina Rchb.f.	Pabst & Dungs (1977); Flora e Funga do Brasil (2026)
Sobralia yauaperyensis Barb.Rodr.	Flora e Funga do Brasil (2026)
Specklinia barbosana (De Wild.) Campacci	Flora e Funga do Brasil (2026)
Trichocentrum cepula (Hoffmanns.) J.M.H.Shaw	Flora e Funga do Brasil (2026)
Zygopetalum sellowii Rchb.f.	Hoehne (1953)
Zygostates grandiflora (Lindl.) Mansf.	Pabst & Dungs (1977); Flora e Funga do Brasil (2026)

[1] Barros (1988) cites a specimen cultivated in the collection of the Institute of Genetics (USP, São Paulo), originating from the municipality of Santa Teresa (ES). However, this specimen has not been located, and the species remains without a confirmed record for the state of Espírito Santo.
[2] The species was collected in the Serra do Caparaó, located on the border between the states of Minas Gerais and Espírito Santo. However, despite examining herbarium material and conducting targeted fieldwork in Espírito Santo, no specimens from that state were found.
[3] Based on specimen *Kollmann 49* (MBML), from the MBML Orchidarium, Santa Teresa, of unknown origin.
[4] Type material originating from the Krenak territory, municipality of Resplendor (Minas Gerais), bordering Baixo Guandu (ES). To date, it has not been recorded in the state of Espírito Santo.
[5] Species cited as VU in the List of Threatened Flora of the State of Espírito Santo (Espírito Santo, 2022).

In terms of generic richness, *Pabstiella* Brieger & Senghas was the most representative genus, with 70 species, followed by *Acianthera* Scheidw. (63), *Maxillaria* Ruiz & Pav. (44) and *Epidendrum* L. (42). These figures are consistent with patterns widely documented for highly diverse areas of the Atlantic Forest, particularly in montane environments and well-preserved humid forests, where these genera tend to reach their highest diversification levels (BFG, 2022; Flora e Funga do Brasil, 2026). *Maxillaria*, for instance, is recognized for its high diversity in montane and humid forest environments and for its pronounced morphological variation, which is associated with diverse ecological and reproductive strategies (Schuiteman & Chase, 2015). *Pabstiella* and *Acianthera* belong to Pleurothallidinae, a subtribe particularly diverse in tropical montane forests and often undercollected, yet notable for its high levels of endemism and ecological specialization (Chiron *et al.*, 2012; Karremans & Díaz-Morales, 2019; Pridgeon, 2005). Likewise, Laeliinae, represented here by *Epidendrum*, comprises predominantly epiphytic or rupicolous genera adapted to a broad range of environmental conditions and constitutes a major component of Neotropical orchid floras (van den Berg *et al.*, 2000). Previous studies (Abreu *et al.*, 2011; Romanini & Barros, 2007) have shown that Laeliinae is frequently the most species-rich subtribe in surveys conducted in the southeastern Atlantic Forest, a pattern consistent with that observed in Espírito Santo, where *Epidendrum* ranks among the four richest genera.

The ten richest genera accounted for 51% of the total species richness recorded, whereas 52 genera were represented by a single species. This pattern, characterized by strong generic dominance combined with a substantial proportion of low-diversity genera, is recurrent in megadiverse tropical floras and reflects the coexistence of a few hyperdiverse genera, typically exhibiting broad ecological plasticity and high diversification capacity, with a large number of sparsely represented genera (ter Steege *et al.*, 2013). The fact that 52 genera are represented by only one species further underscores the pronounced floristic complexity and environmental heterogeneity of Espírito Santo, where narrowly distributed or infrequently recorded taxa coexist with highly diversified lineages (Gentry, 1982). Such an arrangement is typical of tropical ecosystems structured by steep environmental gradients and complex evolutionary histories, such as the Atlantic Forest. This pattern also has direct conservation implications, as poorly represented genera may be more vulnerable to habitat loss and forest fragmentation (Honnay & Jacquemyn, 2007; Pflüger *et al.*, 2019).

Among the 730 taxa inventoried, 490 (67.1%) are endemic to Brazil (Table 1), of which 382 taxa (78% of the Brazilian endemics and 52.3% of the total) are restricted to the Atlantic Forest (BFG, 2022). Additionally, the study documented 102 taxa (101 species and one subspecies; 14%) endemic to the state of Espírito Santo (Table 1; Figs. 3–8). These data highlight the remarkable orchid diversity in Espírito Santo and emphasize its strategic importance for the conservation of the family. According to Flora e Funga do Brasil (2026), the state harbors approximately 27.5% of all orchid species and 49% of the genera recorded for Brazil, as well as nearly 20% of the species endemic to the Atlantic Forest. In contrast, the Brazilian Atlantic Forest, of which only 12–27% of the original native forest cover remains (Fundação SOS Mata Atlântica & INPE, 2024; Rezende *et al.*, 2018), is highly fragmented and largely restricted to small, isolated remnants (Ribeiro *et al.*, 2009). Nevertheless, within an area of approximately 4.6 million hectares corresponding to Espírito Santo, nearly 750 orchid species were recorded, including numerous endemic and threatened taxa. This scenario underscores the urgent need for targeted conservation actions and public policies aimed at the protection and effective management of this exceptionally biodiverse region.

A particularly relevant result was the documentation of 103 Orchidaceae species not currently listed for Espírito Santo in Flora e Funga do Brasil (2026) (Table 1). A critical review of the literature revealed that 85 of these species had previously been reported for the state, whereas 18 have not, to my knowledge, been previously documented for Espírito Santo and are therefore considered new state records in the present study. In addition, historical voucher specimens collected in Espírito Santo were located for 69 of the 103 species in Brazilian botanical collections (CRIA, 2025; Reflora, 2025), indicating that a substantial portion of the distributional information available in herbarium collections has not yet been incorporated

into *Flora e Funga do Brasil*. This discrepancy may reflect several factors, including the large volume of herbarium material awaiting taxonomic revision, limited access to some regional collections, differences in the availability of distributional data at the time individual taxonomic treatments were prepared, and the continuously evolving nature of online floristic databases such as Flora e Funga do Brasil (2026). In this context, the results presented here highlight the importance of critically reassessing botanical collections and integrating specimen-based evidence with continuously updated distribution databases, as herbarium collections represent fundamental repositories of historical and spatial information on plant diversity (Funk, 2018; Lavoie, 2013; Nualart *et al.*, 2017). Such efforts are essential not only for improving the accuracy and completeness of floristic information but also for supporting more robust assessments of endemism and conservation status and for identifying conservation priorities for the Brazilian orchid flora.

Geographic distribution.— Regarding species distribution within the state of Espírito Santo, the most diverse microregions were *Central Serrana*, with 446 recorded taxa, and *Southwest Serrana*, with 414 taxa. These were followed by Central South, with 272 taxa, and Metropolitan, with 235 orchid taxa. The total number of taxa recorded in each of the ten microregions of the state is summarized in Table 3.

The high species richness recorded in the *Central Serrana* and *Southwest Serrana* microregions can be attributed to the combination of pronounced environmental heterogeneity, broad altitudinal gradients, and the presence of extensive remnants of montane and submontane Atlantic Forest. These regions encompass a mosaic of phytophysiognomies and microhabitats favorable to the diversification and coexistence of Orchidaceae, particularly epiphytic species (Kersten, 2010; Zotz, 2016), a pattern also documented in other montane areas of the Atlantic Forest (Blum *et al.*, 2011; Furtado & Menini Neto, 2022). Additionally, a history of intensive collecting efforts and the presence of protected areas and research centers, especially in traditionally sampled municipalities such as Santa Teresa and Domingos Martins, likely contribute to the elevated richness values observed (Ruschi, 1986). This suggests that both ecological factors and sampling intensity may partially explain the concentration of records in these microregions.

Although the Central South and Metropolitan microregions exhibit comparatively lower species richness, they still harbor a substantial number of orchid species, possibly reflecting the presence of significant forest remnants and relatively continuous collecting efforts over time. However, in these areas, greater anthropogenic pressure, intense landscape fragmentation, and the marked reduction of original forest cover (Fundação SOS Mata Atlântica & INPE, 2024) likely constrain the occurrence of more specialized species, resulting in lower richness values when compared to the montane regions (e.g., Fraga & Peixoto, 2004). This pattern reinforces the role of the montane regions of Espírito Santo as important centers of Orchidaceae diversity and highlights the need to expand floristic survey efforts in less-sampled microregions of the state.

Among the 78 municipalities of Espírito Santo, Santa Teresa stood out as the richest in Orchidaceae taxa, with 384 recorded species, followed by Domingos Martins (283 species) and Castelo (161 species). The high richness observed in Santa Teresa is strongly associated with its location in a mountainous region characterized by pronounced environmental heterogeneity, broad altitudinal gradients, predominantly humid climate, and extensive remnants of montane Atlantic Forest, conditions widely recognized as favorable for the diversification and persistence of orchids, particularly epiphytic and endemic species. In addition to environmental factors, the prominence of Santa Teresa also reflects a well-established history of botanical research and intensive sampling efforts, initiated by the pioneering work of Augusto Ruschi (summarized in Ruschi, 1986) and reinforced by subsequent floristic inventories and taxonomic studies, which have substantially contributed to the documented richness (Marcusso *et al.*, 2022b; Guimarães *et al.*, in prep.). A similar pattern, although less pronounced, is observed in Domingos Martins and Castelo, municipalities likewise situated in montane environments with considerable habitat diversity. Together, these results reinforce the role of the mountainous regions of Espírito Santo as important centers of Orchidaceae diversity within the Atlantic Forest (Chiron & Bolsanello, 2013–2015; Marcusso *et al.*, 2022a).

TABLE 3. Microregions of Espírito Santo, Brazil, their numbering on the map in Figure 2, and the number of recorded Orchidaceae species.

Microregion	Nº map (Fig. 2)	Nº species
Central *Serrana*	2	446
Southwest *Serrana*	3	414
Central South	5	272
Metropolitan	1	235
Caparaó	6	175
Doce River	7	151
South Coast	4	132
Central-West	8	80
Northeast	9	60
Northwest	10	43

Within the Central South and Metropolitan microregions, the municipalities of Mimoso do Sul (114 species) and Guarapari (67 species) stand out, respectively. In Mimoso do Sul, this pattern is strongly associated with collections conducted in the Pedra dos Pontões region, an area recognized for its high floristic diversity, particularly of rupicolous flora, and for harboring numerous endemic and threatened species (Couto *et al.*, 2017; Guimarães & Couto, unpubl. data). In Guarapari, most records originate from the Paulo César Vinha State Park (Guarnier *et al.*, 2022), a protected area that safeguards extensive *restinga* remnants. This environment supports a specialized assemblage of Orchidaceae adapted to specific edaphic and microclimatic conditions, contributing to the relatively high species richness recorded in the municipality.

This study revealed that 13 municipalities lack documented records or collections of Orchidaceae species, most of them concentrated in the northern portion of the state (Northeast and Northwest microregions). The absence of records in these areas highlights significant sampling gaps, possibly associated with historically lower collecting effort, a high degree of anthropogenic alteration of native vegetation, or logistical difficulties in accessing certain localities. This pattern underscores the influence of sampling bias on richness estimates and spatial patterns observed in floristic surveys, particularly in megadiverse regions such as the Atlantic Forest (Gasper *et al.*, 2025; Gouveia *et al.*, 2025). Therefore, the absence of records should not be interpreted as a true absence of Orchidaceae, but rather as a reflection of insufficient inventory effort. In this context, prioritizing future botanical surveys in historically undersampled municipalities is essential to refine knowledge of Orchidaceae distribution in Espírito Santo and to provide a more robust basis for biodiversity conservation planning and management strategies.

Among the species recorded, *Eulophia maculata* (Lindl.) Rchb.f. was the most widely distributed within Espírito Santo, occurring in 34 municipalities, followed by *Prescottia plantaginifolia* Lindl. ex Hook. (33) and *Epidendrum secundum* Jacq. (31). The broad municipal distribution of these species reflects distinct biogeographic and ecological processes that contribute to their successful establishment across heterogeneous landscapes. *Eulophia maculata* is native to Africa and represents one of the most successful naturalized orchids in the Neotropics (Ackerman, 2007; Cohen & Ackerman, 2009). Since its introduction, it has expanded widely throughout tropical America, frequently colonizing disturbed habitats, forest edges, secondary vegetation, and even urban environments. Its terrestrial habit, autogamous or facultatively self-pollinating reproductive system, and tolerance to a wide range of edaphic and light conditions are often cited as key traits underlying its invasive success (Cohen & Ackerman, 2009; Wetterer & Wetterer, 2022). Its extensive distribution in Espírito Santo likely reflects these ecological attributes, combined with the high degree of landscape fragmentation observed in the state. *Prescottia plantaginifolia*, in contrast, is native and broadly distributed throughout Brazil, occurring in diverse vegetation types, from ombrophilous forests to seasonal formations (BFG, 2022; Flora e Funga do Brasil, 2026). Species of *Prescottia* Lindl. are terrestrial and generally tolerant of shaded understory conditions, which may facilitate their persistence across fragmented forest remnants. Similarly, *Epidendrum secundum* is one of the most widespread orchids in the Neotropics, occurring from Mexico to southern Brazil and across a broad altitudinal gradient (Hágsater & Soto-Arenas, 2005). Its ecological amplitude, phenotypic variability, and capacity to occupy both open and forested habitats contribute to its extensive distribution.

Protected areas.— Regarding protected areas, the occurrence within conservation units was assessed for a subset of 186 out of the 730 inventoried Orchidaceae taxa in Espírito Santo. The remaining taxa will be evaluated in a subsequent phase of the project, as part of a broader and ongoing assessment of the state's orchid flora. Most of the taxa analyzed to date occur in conservation units of high ecological value that preserve substantial remnants of Atlantic Forest.

The significant representation of Orchidaceae within these areas reflects the central role of protected areas in maintaining the state's floristic diversity, particularly under the intense fragmentation that characterizes the Atlantic Forest biome (Vancine *et al.*, 2024). Protected areas frequently harbor higher orchid richness because they maintain structurally complex environments, greater availability of microhabitats, more stable microclimatic conditions, and reduced anthropogenic disturbance (Schödelbauerová *et al.*, 2009; Zhang *et al.*, 2015). These factors are especially critical for the persistence of epiphytic and rupicolous species, which depend on specific substrate availability, humidity regimes, and forest structure (Barberena *et al.*, 2018). In fragmented landscapes, such ecological conditions are often restricted to well-preserved forest remnants. This pattern has been widely documented in floristic inventories conducted in Atlantic Forest conservation units, which frequently function as refugia of diversity and endemism for Orchidaceae (Barberena *et al.*, 2021; Lenzi *et al.*, 2015; Zandoná & Catharino, 2015). Beyond preserving species richness, protected areas may also safeguard evolutionary processes by maintaining viable populations across environmental gradients, thereby contributing to long-term resilience (Margules & Pressey, 2000). Therefore, the present results reinforce the strategic importance of conservation units in Espírito Santo not only for safeguarding local plant diversity but also for sustaining regional patterns of orchid diversity within the Atlantic Forest domain.

Among the protected areas, the Santa Lúcia Biological Station (SLBS) in the municipality of Santa Teresa stood out as the richest, with 44 recorded species, followed by the Augusto Ruschi Biological Reserve, also located in Santa Teresa (42 species), and the Forno Grande State Park, situated in the municipality of Castelo (30 species). The prominence of SLBS as the most species-rich protected area can be attributed to its location within a mountainous region characterized by pronounced environmental heterogeneity, combined with a long and systematic history of botanical research initiated by Augusto Ruschi and expanded by subsequent studies (Mendes & Padovan, 2000; Thomaz & Monteiro, 1997). SLBS is also recognized for harboring one of the richest arboreal floras in the Atlantic Forest (Saiter & Thomaz, 2014), contributing to high forest structural complexity and, consequently, to the availability of diverse substrates and microhabitats that favor epiphytes, including numerous Orchidaceae species. A similar pattern is observed in the Augusto Ruschi Biological Reserve and the Forno Grande State Park, both located in montane areas with well-preserved Atlantic Forest remnants. These areas are widely regarded as important centers of orchid diversity and conservation in southeastern Brazil (Bochorny *et al.*, 2022; Marcusso *et al.*, 2022b). Together, these findings reinforce the role of mountainous conservation units as priority areas for the protection of orchid diversity in Espírito Santo and highlight the importance of maintaining and expanding research, monitoring, and management efforts within these protected landscapes.

Threatened species.— Of the total species recorded in Espírito Santo, 81 (11%) are classified as threatened at the national level according to the Official List of Threatened Species of Brazil (Brasil, 2022). Of these, 30 (37%) are classified as Vulnerable (VU), 31 (38.3%) as Endangered (EN), and 20 (24.7%) as Critically Endangered (CR) (Table 1). Notably, 51 species (63% of the nationally threatened orchids recorded in the state) fall within the two highest threat categories considered here (EN and CR).

At the state level, 285 species (39% of the orchid flora recorded in Espírito Santo) are included in the Red List of Espírito Santo (Espírito Santo, 2022). Of these, 180 (63.2%) are classified as VU, 68 (23.9%) as EN, and 37 (13%) as CR (Table 1). Although state-level assessments reflect conservation risk at a regional scale, they provide a complementary perspective by identifying species and populations that may be particularly vulnerable within Espírito Santo. Particularly noteworthy are the 105 species classified

as EN or CR, representing 36.8% of the regionally threatened orchid flora and highlighting the need for targeted conservation and population monitoring.

Habitat loss, degradation, and fragmentation, driven primarily by agricultural expansion, urbanization, and infrastructure development, are among the main threats to Orchidaceae, together with the illegal collection of ornamental species. Orchids may be particularly susceptible to anthropogenic disturbance because many species combine restricted geographic ranges and habitat specialization with dependence on specific ecological interactions (Swarts & Dixon, 2009; Wraith & Pickering, 2018). These threats are especially relevant in the Atlantic Forest, where extensive habitat loss and fragmentation have resulted in increasingly isolated forest remnants and plant populations (Rezende *et al.*, 2018; Ribeiro *et al.*, 2009). The occurrence of 81 nationally threatened species, 63% of which are classified as EN or CR, together with the high proportion of regionally threatened taxa, reinforces the importance of Espírito Santo for the conservation of Brazilian Orchidaceae and highlights the need to protect remaining habitats, particularly those harboring species at greater risk of extinction.

Particularly noteworthy is the genus *Cattleya* Lindl., 26 of the 28 species recorded in the state are classified as threatened in at least one of the two evaluated red lists, highlighting the marked vulnerability of this group in Espírito Santo. This pattern is strongly associated with the high ornamental value and long history of commercial exploitation of *Cattleya*, which makes its species frequent targets of illegal collection. In addition, *Cattleya* species are often especially sensitive to habitat loss and fragmentation, as they include large-sized taxa that frequently exhibit restricted geographic distributions, traits widely recognized as key risk factors for orchid conservation (Fay *et al.*, 2025; Swarts & Dixon, 2009; Wraith & Pickering, 2018). The combination of biological vulnerability and anthropogenic pressure likely contributes to the disproportionate representation of the genus among threatened taxa in the state. These findings underscore the need for targeted conservation strategies focused on *Cattleya*, including the effective protection of natural habitats, strengthened enforcement against illegal extraction, and the implementation of long-term population monitoring programs, particularly in areas where these species are known to occur.

Conversely, confirming the occurrence of these species within Espírito Santo expands current knowledge of their geographic distribution and provides a strategic opportunity to support their inclusion in management actions, conservation plans, and public policies, particularly within the Atlantic Forest context. These findings further emphasize the importance of Espírito Santo as a key area for the conservation of threatened Orchidaceae in Brazil.

Final Considerations. The remarkable species richness of Orchidaceae documented in this study for the state of Espírito Santo is comparable to that recorded in other highly diverse regions of the Atlantic Forest (BFG, 2022; Stehmann *et al.*, 2009), reinforcing the biological importance of the state within this biome. Although Orchidaceae is widely recognized as one of the largest and most ecologically and economically significant families of flowering plants, prior to this study only a limited number of localized and taxonomically focused works had been published exclusively addressing this family in Espírito Santo.

In this context, the present work represents a substantial contribution to advancing knowledge of the state's floristic diversity by providing the most comprehensive and critically updated inventory of Orchidaceae to date. By documenting the remarkable richness, levels of endemism, and conservation status of the family in Espírito Santo, this study highlights the strategic role of the state in safeguarding orchid diversity within the Atlantic Forest. It is expected that these findings will stimulate further comprehensive floristic inventories in the region, encompassing other vascular plant families and thereby deepening our understanding of the extraordinary biodiversity of this key Atlantic Forest area.

Finally, periodic reassessments of the orchid flora of Espírito Santo are strongly recommended, using the present inventory as a baseline for future comparisons. The establishment of long-term monitoring programs focused particularly on Atlantic Forest endemic and threatened species is essential to track changes in conservation status and to effectively support evidence-based protection and management strategies.

Figure 3. Orchidaceae species endemic to Espírito Santo, Brazil. The threat category assigned at the state level is indicated in the upper right corner, when available. **A**. *Acianthera fornograndensis*. **B**. *Acianthera freyi*. **C**. *Acianthera maculiglossa*. **D**. *Anathallis kautskyi*. **E**. *Anathallis sansoniana*. **F**. *Bifrenaria mellicolor*. **G**. *Bulbophyllum boudetianum*. **H**. *Bulbophyllum uhl-gabrielianum*. **I**. *Cattleya dichroma*. **J**. *Cattleya gloedeniana*. **K**. *Cattleya kautskyana*. **L**. *Cattleya macrobulbosa*. Photos by Marcos A. da Silva (A), Dalton H. Baptista (B, D, F), Renato X. Bolsanello (C), Guy R. Chiron (E, H), Sandro L. X. Tobias (G), Eric Kataoka (I), and Mauro S. Rosim (J–L).

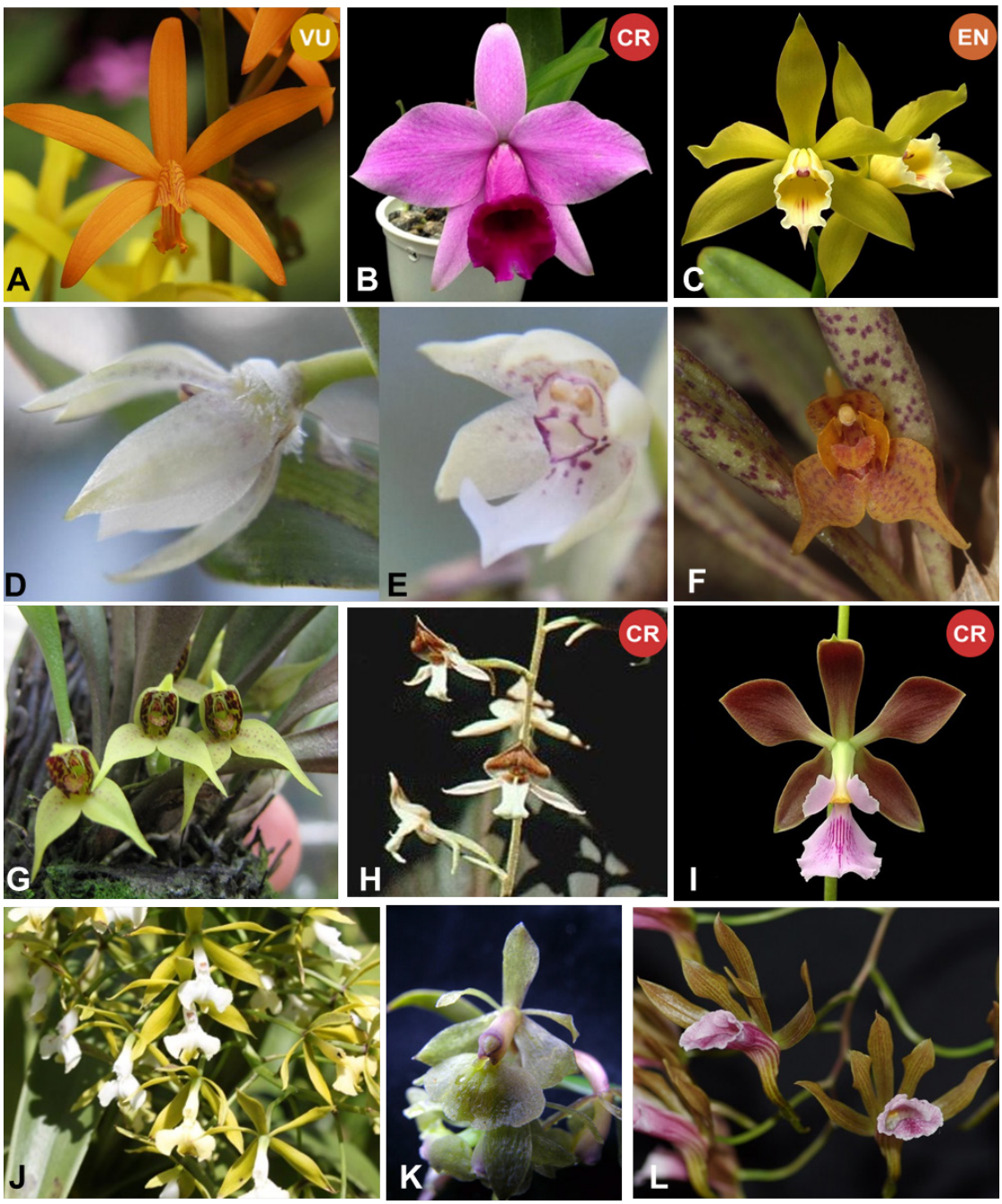

Figure 4. Orchidaceae species endemic to Espírito Santo, Brazil. The threat category assigned at the state level is indicated in the upper right corner, when available. **A**. *Cattleya neokautskyi*. **B**. *Cattleya praestans*. **C**. *Cattleya xanthina*. **D–E**. *Dichaea elianae*. **F**. *Dryadella auriculigera*. **G**. *Dryadella vitorinoi*. **H**. *Eltroplectris assumpcaoana*. **I**. *Encyclia spiritusanctensis*. **J**. *Epidendrum kautskyi*. **K**. *Epidendrum veltenianum*. **L**. *Galeandra schunkii*. Photos: Fred Clarke (A), Mauro S. Rosim (B–C, I), Renato X. Bolsanello (D–E), Daniela C. Imig (F), Carlos Roberto Martins (G), Roberto A. Kautsky (H), Reginaldo de Vasconcelos Leitão (J), Marcos A. Campacci (K), and Sylvio R. Pereira (L).

Figure 5. Orchidaceae species endemic to Espírito Santo, Brazil. The threat category assigned at the state level is indicated in the upper right corner, when available. **A**. *Gomesa colorata*. **B**. *Gomesa novaesiae*. **C**. *Gomesa uhlii*. **D**. *Masdevallia discoidea*. **E**. *Maxillaria kautskyi*. **F**. *Maxillaria milenae*. **G**. *Maxillaria monantha*. **H**. *Maxillaria schunkeana*. **I**. *Myoxanthus conceicionensis*. **J**. *Myoxanthus ruschii*. **K**. *Octomeria hexalobata*. **L**. *Octomeria sansoniana*. Photos: Luiz F. Varella (A, C), Roland Amsler (B), Tomas Bajza (D), Eduard D. L. Schmidt (E, G), Dan Souza/Orchidstudium (F), Dalton H. Baptista (H–I), Claudio N. Fraga (J), Nelson Sanson (K), and Guy R. Chiron (L).

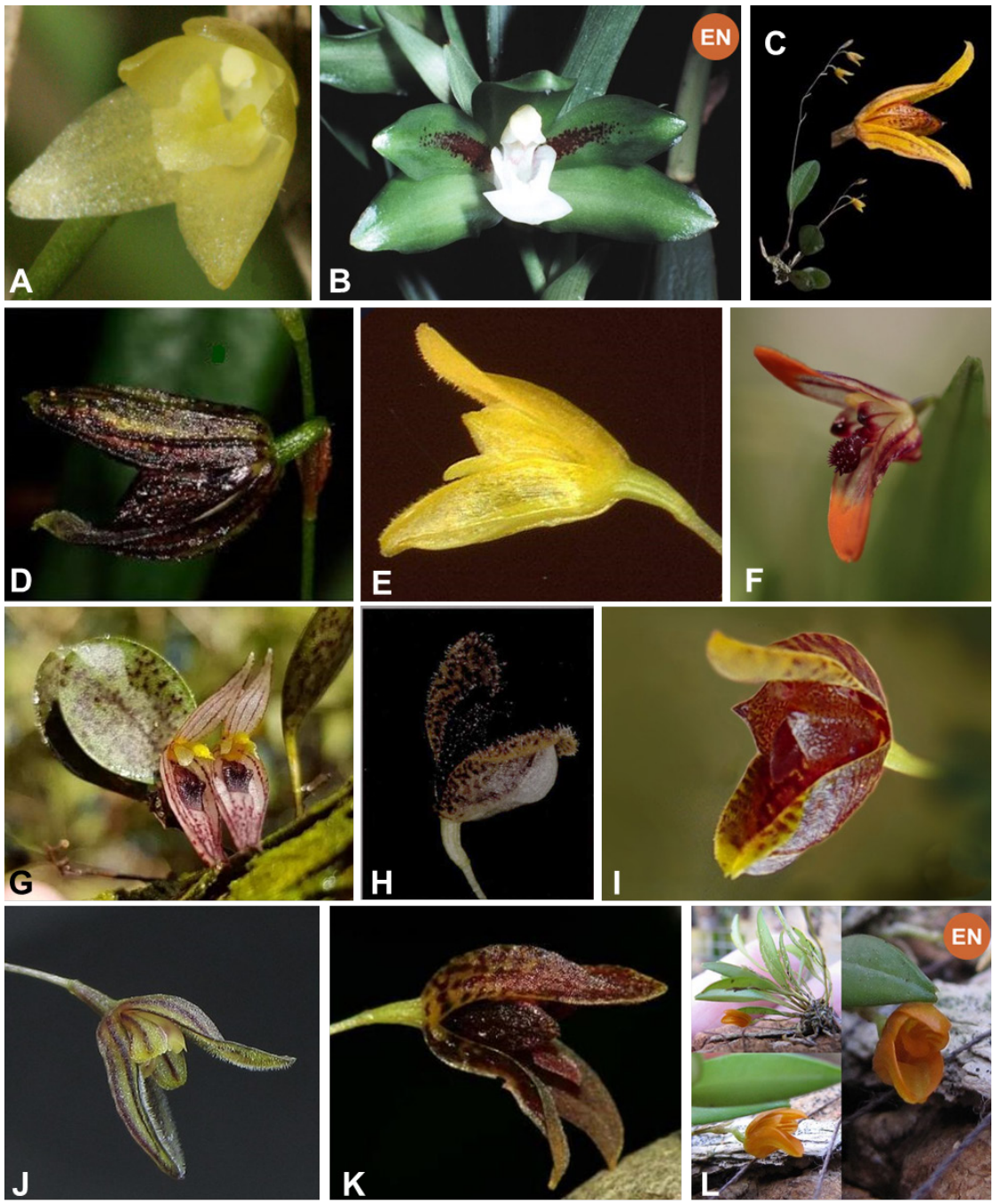

Figure 6. Orchidaceae species endemic to Espírito Santo, Brazil. The threat category assigned at the state level is indicated in the upper right corner, when available. **A**. *Octomeria sulfurea*. **B**. *Pabstia schunkiana*. **C**. *Pabstiella assisii*. **D**. *Pabstiella atrata*. **E**. *Pabstiella biriricensis*. **F**. *Pabstiella bofiae*. **G**. *Pabstiella castellensis*. **H**. *Pabstiella catafestae*. **I**. *Pabstiella cordilabia*. **J**. *Pabstiella decurva*. **K**. *Pabstiella lobiglossa*. **L**. *Pabstiella pseudotrifida*. Photos: Guy R. Chiron (A, D–E, H, K), Vitorino P. Castro Neto (B), Nicolás Gutiérrez Morales (C), Marcelo Rodrigues (F), Rodrigo Ferreira (G), Maria Rita Cabral/Orchidstudium (I), Carlos Roberto Martins (J, L).

Figure 7. Orchidaceae species endemic to Espírito Santo, Brazil. The threat category assigned at the state level is indicated in the upper right corner, when available. **A**. *Pabstiella ruschii*. **B**. *Pabstiella setibensis*. **C**. *Pabstiella silvanae*. **D**. *Pabstiella villosisepala*. **E**. *Prosthechea campos-portoi*. **F**. *Prosthechea ebanii*. **G**. *Prosthechea elisae*. **H**. *Prosthechea kautskyi*. **I**. *Pseudolaelia brejetubensis*. **J**. *Restrepiella ovatipetala*. **K**. *Schunkea vierlingii* Senghas. **L**. *Bifrenaria novaesiae* (formerly treated under *Scuticaria*). **M**. *Thysanoglossa spiritu-sanctensis*. Photos: Carlos Roberto Martins (A, D, J), Guy R. Chiron (B–C, F–G), Dalton H. Baptista (E, L), Gabriel M. Marcusso (H), Mauro S. Rosim (I), Marcos A. Campacci (K), and Nelson Sanson (M).

Figure 8. Orchidaceae species endemic to Espírito Santo, Brazil. The threat category assigned at the state level is indicated in the upper right corner, when available. **A**. *Trichocentrum schwambachiae*. **B**. *Vanilla capixaba*. **C**. *Zygopetalum crinitum* subsp. *pabstii*. **D**. *Zygostates linearisepala*. Photos: Delfina de Araujo (A), Dayvid R. Couto (B), ASSON/Niterói (C), and Karlheinz Senghas (D).

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Use of Artificial Intelligence. I used ChatGPT GPT-5.3 (March–May 2026) solely to improve readability and language.

Conflict of interest. The author declares no conflict of interest.

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