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Artículo

Type specimens in the Herbarium of the Faculty of Forestry Sciences of the National Agrarian University La Molina (MOLF), Peru

Especímenes tipo del Herbario de la Facultad de Ciencias Forestales de la Universidad Nacional Agraria La Molina (MOLF), Perú

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Abstract

This article presents the catalogue of type specimens held at the Herbarium of the Faculty of Forest Sciences at the National Agrarian University La Molina (MOLF). It provides detailed information on type status, currently accepted names, and conservation status for 84 vascular plant taxa. The MOLF Herbarium houses 38 holotypes, 100 isotypes, one lectotype, and one isolectotype, associated with collections made between 1963 and 2022. The majority of taxa documented belong to the families Orchidaceae, Melastomataceae, and Fabaceae.

Keywords: botanical collections, plant taxonomy, Neotropical flora, vascular plant diversity.

Resumen

Este artículo presenta el catálogo de los especímenes tipo conservados en el Herbario de la Facultad de Ciencias Forestales de la Universidad Nacional Agraria La Molina (MOLF). Provee datos e información de los tipos, nombres actualmente aceptados y categoría de conservación para 84 taxones de plantas vasculares. El Herbario MOLF conserva 38 holotipos, 100 isotipos, un lectotipo y un isolectotipo, asociados a colecciones organizadas entre 1963 y 2022. La mayoría de los taxones reportados aquí pertenecen a las familias Orchidaceae, Melastomataceae y Fabaceae.

Palabras clave: colecciones botánicas, taxonomía vegetal, flora neotropical, diversidad de plantas vasculares.

Introduction

Herbaria are a remarkable source of knowledge of plants. Specimens provide "verifiable and citable evidence of the occurrence of particular plants at particular points in space and time" (Nic Lughadha et al., 2018, p. 1) and offer important information to ecology, ethnobotany and conservation (Willis et al., 2003; Morales & Villalobos, 2004; Muñoz-Schick et al., 2012; Nesbitt, 2014). They have also been instrumental in characterizing phenological responses to climate change (Cook et al., 2021). Moreover, in the absence of field data, herbarium specimens can play a crucial role in conservation assessments (Willis et al., 2003) and in addressing key questions in plant biology (Willis et al., 2017).

Type specimens are a critical component of biological collections, serving as the cornerstone of nomenclature in taxonomic research. Their preservation is widely regarded as a priority (Arreguín et al., 1996; Trujillo, 2014; Jang et al., 2020). As Nesbitt explains, voucher specimens "allow identifications to be made in the first instance; they allow identifications to be checked by subsequent researchers; and they allow work to be updated in the light of new taxonomic concepts" (2014, p. 314). Although efforts to catalogue type specimens in Latin America have improved (Arreguín et al., 1996; Arreguín et al., 2006; Gonzáles, 2014; Morales & Villalobos, 2004; Méndez, 2008; Peña & Jaramillo, 2019; Fernández et al., 2015; Méndez & Azpillaga, 2013; Muñoz-Schick et al., 2012; Castellanos et al., 2021; Morales, 2014), much of the available information remains incomplete. In fact, a significant number of specimens designated as nomenclatural types are still untraced (Fernández et al., 2015). This situation is also evident in Peruvian herbaria, where data on type specimens are often lacking (Velarde, 1968; Velarde, 1969; López, 1975; López et al., 2003; Rodríguez et al., 2009; Treviño et al., 2012; MIDAGRI, 2022).

The Faculty of Forestry Sciences of the National Agrarian University La Molina (UNALM) was established in 1964 as part of a joint initiative between the UNALM, the Forest and Wildlife Service of the Ministry of Agriculture of Peru and the United States Department of Agriculture Forest Service, with a herbarium at its core. The herbarium's earliest collections originated from the Dendrology Project (1961-1966), which focused on identifying Peruvian timber trees. This initiative laid the foundation for what would become the most extensive national collection of woody flora in Peru. Today, the herbarium—registered under the acronym MOLF (formerly MOL)—, is recognized as a leading scientific institution in Peru. Nevertheless, a comprehensive listing of its type specimens remains unavailable, despite recent efforts at compilation and cataloguing.

Materials and Methods

This catalogue includes type specimens traced up to September 2022. All information was cross-referenced with protologues to verify collection data, including collector's name, collection number, date, location, altitude and type category, as available through JSTOR Global Plants (https://plants.jstor.org/). Fifty three type specimens

cited for MOL were not located in the collection during the preparation of this document (Table 1).

In Peru, the political subdivisions are organized into departments, provinces, and districts. The spatial distribution of type specimens is presented at the department level (Figure 1). To account for authorship, all individuals involved in the description of each taxon were considered. However, only the primary collector was considered when recording collector information. The Orchidaceae type specimens included here do not form part of the Bennett Collection (Trujillo, 2014), which is also held at MOLF.

Protologue information is provided for each taxon, including collection site, date and collectors. When data were missing from the protologue, supplemental information was added in square brackets ([ ]) as permitted by Art. 9.2 of the International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) (Turland et al., 2018). If the protologue indicates that the specimen was deposited at Servicio Forestal (Peru), Proyecto Dendrología, or MOL, the repository is recorded as MOLF. Additional annotations include habitat, spatial distribution, and endemism, based on relevant literature. Conservation status is provided according to the Red List of Threatened Species of the International Union for Conservation of Nature (IUCN) if available. If the currently accepted name of a taxon differs from the original publication, the relationship—*Basionym of* or *Synonym of*— along with the publication date, is indicated below the type information.

Results

Update of the data on Types

A key aspect of curatorial work at herbaria is the conservation of field data, associated labelling, and annotation notes, including determinations and revisions. These elements are essential for reconstructing the context of specimen collection, understanding the sequence taxonomic identifications, and clarifying the status of type material. For instance, in the case of *Ormosia schunkei* Rudd, the protologue designates the holotype as housed in the US National Herbarium (accession number 2554593), corresponding to the specimen collected by José Schunke-Vigo under sample number 3. While isotype images are available via JSTOR Global Plants web, two different number sets appear on these specimens: one retains the original field number (Schunke- Vigo, J., #3), recognized as the holotype and isotypes at Smithsonian Institution (US) and Universidad Nacional de Colombia (COL); the other set (Schunke-Vigo, J., #2998), found at US, Conservatoire et Jardin botaniques de la Ville de Genève (G), Field Museum of Natural History (F) and COL (Figure 5), reflects a later renumbering by the collector.

Requirements for valid publication of plant names have evolved over recent decades. Since January 1990, it has been mandatory to explicitly designate the type specimen using the word “type” or “holotype” (Art. 40.6 in Turland et al., 2018). Consequently, the correct designation of types published prior to this date —particularly before 1958— can be ambiguous (McNeill, 2014). Given that MOLF’s earliest collections date from 1926 to 1970 (Reynel et al., 2020), the herbarium may house types that are difficult to identify in published taxonomic treatments or were not cited in protologues. For example, the protologue of *Bathysa multiflora* L.O. Williams mentions type material at F, US, G and “others” (Williams, 1965), without referencing the Dendrology Project or the Servicio Forestal. In other instances, isotypes are omitted altogether, such as in the case of *Mauria denticulata* J.F. Macbr., whose holotype is located at the Field Museum, but the isotype preserved by Weberbauer at UNALM is not cited. Similarly, the protologue of *Ormosia schunkei* Rudd refers only to a specimen deposited at the US National Herbarium, omitting mention of the isotype held at MOLF. Recent changes to the International Code of Nomenclature (ICN) now require that the herbarium, collection, or institution housing the type be explicitly specified (Art. 40.7 in Turland et al., 2018). Therefore, tracing and verifying the type status of older specimens often demands additional effort and careful archival research.

A significant number of types are related to the Dendrology Project, which makes historical aspects key to the curatorial framework. In 4% of the cases (four taxa), the herbarium was cited as Servicio Forestal in the protologue or there is an indication that the type was collected as part of the Peruvian Forest Serv. Dendrology Project. This is the case of *Lecythis peruviana* L.O. Williams (Figure 3), *Phragmotheca leucoflora* D.R. Simpson (Figure 4), *Zanthoxylum sobrevielae* D.R. Simpson and *Zanthoxylum albuquerquei* D.R. Simpson.

The Missouri Botanical Garden has contributed a significant number of duplicates to the MOLF Herbarium. For this reason, there are widespread cases of duplicates received after the respective names were published, as it happens with *Notopleura cincinalis* C.M. Taylor and *Magnolia peruviana* A. Vázquez.

In more recent publications, holotypes deposited at MOLF are typically cited using the acronym MOL, with the exception of the isotypes of *Begonia amoeboides* Moonlight, *Begonia lamolina* Moonlight, *Magnolia jaenensis* Marcelo-Peña, *Magnolia manguillo* Marcelo-Peña & F. Arroyo, *Parkinsonia peruviana* C.E. Hughes, Daza & Hawkins and *Zanthoxylum tambopatense* Reynel.

The inclusion of local collections in JSTOR Global Plants not only facilitates the evaluation of type specimens for plant taxonomy but also encourages in-person visits of specialists, thereby enhancing curatorial efforts and improving overall data quality (Mori et al., 2012; Morales & Villalobos, 2004). This virtuous circle holds significant scientific value and should be actively promoted in local herbaria. In this spirit, the present article provides type specimen information to promote further taxonomic research and to foster greater interest in the collections housed at MOLF.

Representativeness of types kept at the herbarium MOLF

The botanical collections at MOLF have increased considerably in the past seventy years, now comprising approximately 50,000 specimens. The Peruvian woody flora alone is represented by 162 families (Reynel et al., 2020). This paper documents 38 holotypes, 100 isotypes, one epitype and one isolectotype (Table 2) across 84 taxa, 13 of which include holotype and isotype specimens. The six families with the highest number of types are Orchidaceae (10), Melastomataceae (9), Fabaceae (7), Rutaceae (6), Begoniaceae (5), and Magnoliaceae (5).

Temporal distribution of types

Specimens at MOLF represent collection efforts spanning from 1926 to 2022. Type specimens from 1926 to 1970 account for only 8% of the herbarium's current holdings. During the 1970s and 1980s, few collections were made in Peru due to widespread violence in the country. In subsequent years, duplicate specimens were donated by the Flora of Peru project of the Missouri Botanical Garden, particularly those collected by Alwyn H. Gentry (Reynel et al., 2020). From that point forward, specimen acquisition increased significantly, especially between 2000 and 2020, when the herbarium received 70% of its current collection.

Before 1991, only isotypes were deposited at MOLF. The first two holotype specimens added were *Psychotria ortiziana* C.M.Taylor and *Zanthoxylum tambopatense* Reynel. Since 2009, the inclusion of holotypes has been relatively consistent (Figure 2).

Spatial distribution

Most types have been collected in Peru. However, the isotypes of *Zanthoxylum campicola* Reynel are from Colombia. Most Peruvian types were collected in the Department of Amazonas (19 taxa), nine of which come from the Province of Bongará: *Begonia amoeboides* Moonlight, *Begonia lamolina* Moonlight, *Dendropanax umbellatus* J.F. Macbr., *Magnolia enepeceana* Rob. Fern. & Marcelo-Peña, *Magnolia reynelii* Rob.Fern. & Marcelo-Peña, *Meriania bongarana* Rob. Fern., R. Goldenb. & Michelang., *Meriania callosa* Rob. Fern., R. Goldenb. & Michelang., *Meriania penningtonii* Rob. Fern., R. Goldenb. & Michelang. and *Trichilia dazae* T.D.Penn.

Until 2016, most specimens were recorded in seven departments: Madre de Dios, Cajamarca, Amazonas, Pasco, Loreto, Junín and Ucayali (Reynel et al., 2020). These records include 55 species and 10% of the type specimens. Although the collections cover nearly all departments of Peru, information gaps remain due to limited exploration in remote or difficult-to-access areas, such as Huancavelica and Apurímac (Reynel et al., 2020). Consequently, few or no specimens have been collected from these departments (Figure 1).

Collectors and descriptors

Thirty-five collectors have contributed type specimens to MOLF, with 20% of these resulting from binational collaborations. The most significant contributions come from Rodolfo Vásquez, James Graham, Camilo Díaz, Aniceto Daza, and José Schunke, who together account for 5% of the type specimens. Aniceto Daza has contributed the highest number of collection types, having individually collected three types and collaborated on an additional sixteen. The team led by Rodolfo Vásquez conducted sequential botanical surveys across various regions of Peru (Reynel et al., 2020), including Yanachaga-Chemillén National Park (Pasco), Jenaro Herrera and Santa Maria de Nanay (Loreto), the Cenepa River, and the Department of Amazonas. Notable species collected in these areas include *Triolena rojasiae* Michelang. & R. Goldenb., *Calatola microcarpa* Gentry ex Duno & Janovec, *Inga gereauana* (Pipoly & Vásquez) T.D. Penn. and *Notopleura cincinalis* C.M. Taylor.

One MOLF's most important collectors was José Schunke (José Shunke-Vigo), whose specimens include the types of *Palicourea ucayalina* C.M.Taylor, *Ormosia schunkei* Rudd and *Sida florulenta* Fryxell. His contributions have notably expanded the geographical representation of the herbarium's collections (Croat & Graham, 2019).

Furthermore, Peruvian researchers based at MOLF have described several new species, with Robin Fernández-Hilario and Carlos Reynel authoring nine and four new taxa, respectively, all with types deposited at MOLF. The increasing work of local researchers over the past two decades highlights MOLF's growing role in the knowledge and cataloguing of Peru's native flora.

Catalogue of type species

Acanthaceae

Aphelandra apecoi R.Villanueva, Rob.Fernández & Pillaca. Phytotaxa 459(3): 203 (2020).

Holotype: PERU. Huánuco, Prov. Huánuco, Dist. Chinchao [Chaglla], camino a catarata San Miguel, 1279 m, 09°29'20"S, 75°54'5"W, 16 January 2020 [fl.], R. Villanueva et al. 402 (MOLF000010).

Remarks: Shrub. The collection is restricted to Chinchao, Department of Huánuco, particularly in the area affected by agriculture.

Aphelandra rugosa R.Villanueva, Rob.Fernández & Pillaca. Phytotaxa 459(3): 198 (2020).

Holotype: PERU. Huánuco, Prov. Leoncio Prado, Dist. José Crespo y Castillo [Pucayacu], camino rumbo a catarata Otorongo y alrededores, 659 m, 8°40'43'02"S, 76°05'21.30"W, 13 January 2020 [fl., fr.], R. Fernández-Hilario et al. 1835 (MOLF000011).

Remarks: Shrub. The collection comes from disturbance areas near the Cordillera Azul National Park.

Dicliptera mercedesiae R.Villanueva, Wassh. & Rob.Fern. Phytotaxa 518(1): 37 (2021).

Holotype: PERU. Junín, Prov. Chanchamayo, Dist. San Ramón, Fundo Génova, 11°05'47.81[S], 75°21'39 W, 1152 m, 29 May 2018 [fl.], R. Villanueva & G. Bravo 72 (MOLF000012).

Remarks: Herb. The species is native to the pre-montane forests of the Departments of Pasco and Junín.

Anacardiaceae

Mauria denticulata J.F.Macbr. Publ. Field Mus. Nat. Hist., Bot. Ser. 8: 122 (1930).

Isotype: PERU. Ayacucho, Prov. Huanta, Choimacota Valley, February 1926 [fl.], Weberbauer 7546 (MOLF000091).

Remarks: Tree. The species is native to the evergreen bush-wood subxerophytic in the Department of Ayacucho.

Annonaceae

Pseudoxandra xylopiifolia Maas & Westra. Blumea 55(3): 272 (2010).

Isotype: PERU. Ucayali, Prov. Coronel Portillo, Distr. Calleria, basin of Río Utiquinia, Quebrada Espjoyacu, affluent of Quebrada Manuela, 300 m a.s.l., 23 July 2003 [fr.], Graham 2447 (MOLF000013).

Remarks: Tree. The species is distributed in the Department of Ucayali, at 100-500 m a.s.l. (Vásquez et al., 2018). Listed as Data Deficient (DD) (IUCN, 2025).

Araliaceae

Dendropanax umbellatus (Ruiz & Pav.) J.F.Macbr. Publ. Field Columb. Mus. Bot. Ser. 13(5): 42 (1959).

Epitype: PERU. Amazonas, Prov. Bongará, Dist. Yambrasbamba, bosques aledaños al río Imaza, 05°39’40.22”S, 77°58’12.75”W, 1530 m a.s.l., 11-12 January 2019 [fr.], R. Fernández, R. Villanueva, W. Chuquitucto & A. Wong 1649 (MOLF000014).

Remarks: Designated by Fernández-Hilario et al., 2020. Tree. The species is endemic to Andean montane forests in the Departments of Amazonas, Cajamarca, Huánuco and Pasco.

Begoniaceae

Begonia amoeboides Moonlight. Phytotaxa 381(1): 119 (2018).

Holotype: PERU. Amazonas Department, Prov. Bongará, Dist. Yambrasbamba, road from Amazonas to Rioja, 5°41’22”S, 77°47’11”W, 2088 m a.s.l., 31 January 2016 [fl., fr.], P.W. Moonlight & A. Daza 150 (MOLF000016).

Isotypes: PERU. Amazonas Department, Prov. Bongará: Dist. Yambrasbamba, road from Amazonas to Rioja, 5°41’22”S, 77°47’11”W, 2088 m a.s.l., 31 January 2016 [fl., fr.], P.W. Moonlight & A. Daza 150 (MOLF000017, MOLF000103).

Remarks: Herb. Two of their populations are in Bosque de Protección Altomayo (San Martín) and Parque Nacional Yanachaga-Chemillén (Pasco).

Begonia elachista Moonlight & Tebbitt. Eur. J. Taxon. 281: 5 (2017).

Holotype: PERU. Region Pasco, Prov. Oxapampa, Dist. Palcazu, Parque Nacional Yanachaga-Chemillén, sector Paujil, 150 m from entrance to Las Cavernas on trail from Paujil, 10°20’40”S, 75°15’1”W, 432 m a.s.l., 25 February 2016 [fl.], P. W. Moonlight & A. Daza 318 (MOLF000015).

Remarks: Herb. The species was collected in a primary lowland forest.

Begonia lamolina Moonlight. Phytotaxa 381(1): 121 (2018).

Holotype: PERU. Department of Amazonas, Prov. Bongará, Dist. Yambrasbamba, road from Amazonas to Rioja, 5°41’52”S, 77°4 8’35”W, 2301 m a.s.l., 31 January 2016 [fr.], P.W. Moonlight & A. Daza 144 (MOLF000018).

Isotypes: PERU. Department of Amazonas, Prov. Bongará, Dist. Yambrasbamba, road from Amazonas to Rioja, 5°41’52”S, 77°4 8’35”W, 2301 m a.s.l., 31 January 2016 [fl.], P.W. Moonlight & A. Daza 144 (MOLF000019, MOLF000104).

Remarks: Herb. The species was collected in the montane forests in the Departments of Amazonas and San Martín.

Begonia speculum Moonlight & Tebbitt. Edinburgh J. Bot. 74(2): 112 (2016).

Holotype: PERU. San Martín Region, Rioja Province, Bosque de Protección de Alto Mayo (BPAM), road from Amazonas to Rioja, km 393, 5°4”11S, 77°41”24W, 2 February 2016 [fl.], P.W. Moonlight & A. Daza 158 (MOLF000092).

Remarks: Herb. The species grows in subtropical to montane forest at 1335-1800 m a.s.l.

Begonia veitchii var. *machupicchuensis* Tebbitt. Edinburgh J. Bot. 77(1): 141 (2019).

Holotype: PERU. Cusco Region, Cusco Department, Prov. La Convencion, Santa Teresa

District, road from Santa Theresa, overlooking hydroelectric station, 13°08'S, 72°35'W, 1615 m a.s.l., 7 January 2015 [fl.], M. C. Tebbitt 802 (MOLF000108).

Remarks: Herb. The distribution of the species is restricted to the area around the archaeological site of Machu Picchu in the Province of La Convención and Urubamba, in the Department of Cusco, at 1450-3400 m a.s.l.

Chrysobalanaceae

Licania palcazuensis Prance. PhytoKeys 42: 2 (2014).

Isotype: PERU. Pasco, Oxapampa, Palcazu District, Parque Nacional Yanachaga-Chemillén, Cerro Panjil-Ozuz, Permanent plot tree, 24, 10°10'S, 75°10'W, 850 m a.s.l., 12 May 2005 [fl.], A Monteagudo, A Peña, R. Francis et al. 8250 (MOLF000105).

Remarks: Basionym of *Moquilea palcazuensis* (Prance) Sothers & Prance, Kew Bull. 71(4)-58: 37 (2016). Tree. The species grows in the montane forest of Selva Central, Department of Pasco. It is listed as Data Deficient (DD) under *Moquilea palcazuensis* (IUCN, 2025).

Clusiaceae

Chrysochlamys chrisharonii Vásquez & R.Rojas. Arnaldoa 16(2): 26 (2010).

Isotypes: PERU. Dpto. Pasco, Prov. Oxapampa, Dtto. Huancabamba, Parque Nacional Yanachaga-Chemillén, Sector Tunqui, bosque primario, suelo muy húmedo, 10°16'13''S, 75°31'00''W, 1840 m a.s.l., 11 February 2008 [fl.], R. Vásquez et al. 33328 (MOLF000020, MOLF000021).

Remarks: Tree. The species grows principally in riparian primary forests, in the Department of Pasco, at 1200-1700 m a.s.l. (Vásquez & Rojas, 2009).

Elaeocarpaceae

Sloanea potsniroki Vásquez. Arnaldoa 16(2): 48 (2010).

Isotype: PERU. Dpto. Pasco, Prov. Oxapampa, Dtto. Villa Rica, Ubiriqui, primary forest, rocky soil, 10°42'36''S, 75°03'00"W, 970 m a.s.l., 25 June 2009 [fl.], R. Vásquez, L. Valenzuela, A. Peña, L. Mateo, 36156 (MOLF000109).

Remarks: Tree. The species grows in the alluvial plateaus from primary forests, in the Department of Pasco, at 300-1000 m a.s.l. (Vásquez, 2009; Vásquez et al., 2018).

Ericaceae

Vaccinium ortizii Luteyn & Pedraza. Brittonia 63(2): 265 (2011).

Isotype: PERU. Pasco, Prov. Oxapampa, Dtto. Huancabamba, Parque Nacional Yanachanga-Chemillén, trail towards El Hito, 10°23'40.3"S, 75°28'55.7"W, 2265 m, 4 August 2005 [fl., fr.], E. Ortiz V. & R. Francis J. 737 (MOLF000107).

Remarks: Epiphytic shrub. The species grows in the lower montane cloud forest, at 1500-2500 m a.s.l. in the Department of Pasco.

Eriocaulaceae

Paepalanthus caryonauta Hensold. PhytoKeys 64: 16 (2016).

Isotypes: PERU. Cuzco, Dist. Huayopata, sector San Luis, bosque primario intervenido, 13°04'S, 72°23'W, ca. 3000-3500 m, 24 November 2006, [fl.], L. Valenzuela et al. 8117 (MOLF000140, MOLF000141).

Remarks: Herb. The species is known from two disjunct paramo zones, between Colombia, Ecuador, Peru, and Bolivia.

Euphorbiaceae

Croton camposii Riina & Ore-Rengifo. Syst. Bot. 43(1): 213 (2018).

Isotypes: PERU. San Martin, Rioja to Pedro Ruiz, border with Amazonas, 1800 m a.s.l., 4 December 2003 [fl.], T. D. Pennington, R. T. Pennington & A. Daza 17644 (MOLF000133, MOLF000134, MOLF000135, MOLF000136, MOLF000137).

Remarks: Tree. The species grows in secondary successional dwarf montane forests, at 1800-2200 m a.s.l. in the Department of San Martín.

Croton tumbesinus Riina. Syst. Bot. 43(1): 217 (2018).

Isotype: PERU. Tumbes, Tumbes, Pampas de Hospital El Caucho, quebrada Faical between El Caucho and Campo Verde, 370 m a.s.l., 21 January 1989 [fl.], C. Diaz, T. Pennington & C. Reynel 3199 (MOLF000102).

Remarks: Tree. The species is known from two localities in the intervening areas of dry coastal forests in the Departments of Tumbes (Peru) and Manabi (Ecuador), at 190-450 m a.s.l.

Incadendron esseri K.Wurdack & Farfán. PhytoKeys 85: 71 (2017).

Isotype: PERU. Cusco, La Convención, District Quellouno, Abra de Yavero, 12°28'43"S 072°29'00"W, 2301 m, 24 September 2007 [fl.], G. Calatayud, I. Huamantupa, E. Suclli, & R. Ayerbe 4711 (MOLF000022).

Remarks: Type species of the genus *Incadendron*. Tree. The species is distributed in the montane forests of the Andes of Peru and Ecuador. It is listed as Vulnerable (VU) (IUCN, 2025).

Fabaceae

Affonsea gereauana Pipoly & R.Vásquez. Novon 4: 169 (1994).

Isotype: PERU. Loreto, Provincia de Maynas, Distrito de Sta. Maria de Nanay, Rio Nanay, Caserio Mishana, 8 September 1990 [fr.], R. Vásquez, O. Phillips & N. Jaramillo 14326 (MOLF000029).

Remarks: Basionym of *Inga gereauana* (Pipoly & R.Vásquez) T.D.Penn. Gen. Inga, Bot. 781 (1997). Tree. The species is endemic to the Amazonian basin in the Department of Loreto. It grows in undisturbed lowland rain forest on non-flooded land (Pennington, 1997). It is listed as Vulnerable (VU) (IUCN, 2025) under *Inga gereauana*.

Caesalpinia celendiniana G.P.Lewis & C.E.Hughes. Kew Bull. 65: 210 (2010).

Isotypes: PERU. Cajamarca, Celendín, Marañón river valley, km 47, road Celendín to Balsas on slopes on west side of the valley, 22 April 2002 [fl., fr.], C. E. Hughes et al. 2210 (MOLF000131, MOLF000132).

Remarks: Erect herb to brittle multi-stemmed, sometimes scrambling, shrub. The species is native to dry thorn scrub and tropical dry forests, at 1250-1600 m a.s.l.

Caesalpinia pluviosa var. *maraniona* G.P.Lewis & C.E.Hughes. Kew Bull. 65: 213 (2010).

Isotypes: PERU. Cajamarca, Celendín, Marañón Valley, km 50, road from Celendín to Leimebamba, 23 April 2002 [fl., fr.]., C. E. Hughes, A. Daza & Forrest 2215 (MOLF000027, MOLF000028).

Remarks: Shrub or small tree. The species is native to dry thorn scrub and tropical dry forests. Its distribution is restricted to the middle reaches of the upper Marañón river valley.

Maraniona lavinii C.E.Hughes, G.P.Lewis, Daza & Reynel. Syst. Bot. 29: 371 (2004).

Holotype: PERU. Cajamarca, Marañon Valley, 46 km east of Celendín, road to Leimebamba, on slopes above Puente Chocanto and Balsas, 6°51’24”S, 78°03’49”W, 1450 m, 22 April 2002 [fl.], C. E. Hughes et al. 2209 (MOLF000030).

Remarks: Tree. Type species of the genus *Maraniona*. The species is restricted to dry deciduous tropical forests and thorn scrub forests on steep rocky slopes above the Marañón river (Hughes et al., 2004).

Ormosia schunkei Rudd. Phytologia 18: 337 (1969).

Isotype: PERU. Dpto. Huánuco, Prov. Pachitea, Dpto. Honoria, en bosque alto, terreno húmedo, Huacamayo, sud este de la Quebrada Aymiría, 350 m a.s.l., 3 February 1969 [fr.], José Schunke no. 3 (MOLF000031).

Remarks: Tree. The species is native to the Amazonian rainforests and is distributed in the Departments of Huánuco and Ucayali.

Parkinsonia peruviana C.E.Hughes, Daza & Hawkins. Kew Bull. 58: 467 (2003).

Holotype: PERU. Amazonas, Chachapoyas, 5 km ENE of Balsas, Marañón Valley, 22 April 2002 [fl., fr.], C. E. Hughes 2213 (MOLF000032).

Isotype: PERU. Amazonas, Chachapoyas, 5 km ENE of Balsas, Marañón Valley, 22 April 2002 [fl., fr.], C. E. Hughes 2213 (MOLF000033, MOLF000034, MOLF000035).

Remarks: Tree. The species is native to seasonally tropical dry forests, restricted to the Marañón Valley in the Department of Amazonas. It is listed as Critically Endangered (CR) (IUCN, 2025).

Generiaceae

Diastema fimbratiloba Moonlight & J.L.Clark. Edinburgh J. Bot. 77(1): 90 (2019).

Holotype: PERU. Ucayali Region, Coronel Portillo Province, c.500 m beyond Margariti on path from Divisoria pass, 09°09’54’’S, 75°47’59’’W, 1630 m a.s.l., 7 February 2016 [fl.], P.W. Moonlight & A. Daza 197 (MOLF-000117).

Remarks: Herb. The species is known from a small population between the Departments of Ucayali and Huánuco.

Icacinaceae

Calatola microcarpa Gentry ex Duno & Janovec. Phytotaxa 124(1): 44 (2013).

Isotype: PERU. Loreto: Province Ucayali, Sapuena, Jenaro Herrera, Quebrada Supay, 04°55’S, 73°45’W, 120 m, 7 June 1989 [fr.], R. Vásquez 12300 (MOLF000036).

Remarks: Tree. The species has been registered in moist upland and floodplain forests, at 120-400 m a.s.l. in the Departments of Loreto and Madre de Dios (Peru), and the state of Acre (Brazil).

Lauraceae

Yasunia quadrata van der Werff. Novon 20(4): 494 (2010).

Isotype: PERU. Ucayali, Coronel Portillo, Río Utiquinia basin, Quebrada Espjoyacu, afluente de la quebrada Manuela, 07°56.679S, 73°53.619W, 30 June 2003 (fl.), J. G. Graham 2369 (MOLF000037).

Remarks: Tree. The species grows in the Amazonian lowlands in Peru and Ecuador. It is listed as Data Deficient (DD) Category (IUCN, 2025).

Lecythidaceae

Lecythis peruviana L.O.Williams. Fieldiana, Bot. 31: 30 (1965).

Isolectotype: PERU. Loreto, Quebrada Valentín, Río Tahuayo, Fernando Lores District, Maynas Province, 31 October 1962, [fl., fr.], Arostegui V. 67 (MOLF000124, MOLF000125).

Remarks: Synonym of *Eschweilera coriaceae* (DC.) S.A.Mori, Fl. Neotrop. Monogr. 21(2): 203 (1990). Tree. The species is common in non-flooded and periodically flooded forests in the Departments of Amazonas, Junín, Loreto, Madre de Dios, Pasco, and Puno, at 100-1000 m a.s.l. (Mori & Prance, 1990; Vásquez et al., 2018).

Loranthaceae

Gaiadendron coronatum Kuijt. Novon 24(2): 173 (2015).

Isotype: PERU. Dpto. Pasco, Prov. Oxapampa, Distr. Bermúdez, cabecera de la cuenca (oeste) del Río Ariapo, afluente del Río Ucayali, alturas del cerro Ariapo, Reserva Comunal el Sira, bosque enano, con abundante luz solar, 9°28’38”S, 74°35’07”W, 1995 m, 18 November 2009 [fl.], J. G. Grahan 5424 (MOLF000038).

Remarks: Shrub. The species grows between the elfin forest and dense cloud forest in the Reserva Comunal el Sira in the Department of Pasco.

Peristethium grahamii Kuijt. Novon 24(2): 176 (2015).

Isotypes: PERU. Dept. Ucayali, Prov. Coronel Portillo, Distr. Iparia, cabecera de la cuenca (oeste) del Río Ariapo, afluente del Río Ucayali, alturas del cerro Ariapo, Reserva Comunal el Sira, bosque enano, con abundante luz solar y árboles o arbustos emergentes; parásito en trepador,

flores color amarillo, las hojas y tallos son de color verde amarillento, 9°28’49”S, 74°35’04”W, 2070 m a.s.l., 15 December 2009 [male fl., female fr.], J.G. Graham 5737 (MOLF000039, MOLF000040).

Remarks: Shrub. The species grows between the elfin forest and dense cloud forest in the Reserva Comunal el Sira in the Department of Pasco.

Magnoliaceae

Magnolia enepeceana Rob.Fern. & Marcelo-Peña. Brittonia 72(3): 325 (2020).

Holotype: PERU. Amazonas, Prov. Bongará, Dist. Yambrasbamba, Centro de Investigación de la ONG Neotropical Primate Conservation y bosque “El Toro” de la Comunidad Campesina de Yambrasbamba, 5°39.284’S, 77°54.855’W, 2000 m, 26-29 November 2018 [fl., fr.], R. Fernandez & W. Chuquitucto 1741 (MOLF000041).

Isotype: PERU. Amazonas, Prov. Bongará, Dist. Yambrasbamba, Centro de Investigación de la ONG Neotropical Primate Conservation y bosque “El Toro” de la Comunidad Campesina de Yambrasbamba, 5°39.284’S, 77°54.855’W, 2000 m, 26-29 November 2018 [fl., fr.], R. Fernandez & W. Chuquitucto 1741 (MOLF000042).

Remarks: Tree. The species is endemic to the montane forest of northern Peru, in the Department of Amazonas, at 1900-2000 m a.s.l. It is listed as Critically Endangered (CR) (IUCN, 2025).

Magnolia jaenensis Marcelo-Peña. Brittonia 65(1): 107 (2013).

Holotype: PERU. Cajamarca, Jaén, San Luis del Nuevo Retiro, 78° 57' 00.3" LW, 5° 39' 50" LS, 2435 m, 18 August 2009, J. L. Marcelo-Peña, K. Saldaña & C. Yrigoin 4490 (MOLF000043).

Isotypes: PERU. Cajamarca, Jaén, San Luis del Nuevo Retiro, 78° 57' 00.3" LW, 5° 39' 50" LS, 2435 m, 18 August 2009, J. L. Marcelo-Peña, K. Saldaña & C. Yrigoin 4490 (MOLF000044, MOLF000045, MOLF000046).

Remarks: Tree. The species grows in montane moist forest in the Department of Cajamarca (Peru) and the Province of Zamora Chinchipe (Ecuador), at 2000-2500 m a.s.l. It is listed as Endangered (EN) (IUCN, 2025).

Magnolia manguillo Marcelo-Peña & F.Arroyo. Brittonia 65(1): 110 (2013).

Holotype: PERU. Cajamarca, Jaén, San Luis del Nuevo Retiro, 78°56'16.16"LW, 5°39'45.61"LS, 2307 m, 27 January 2010 [fl.], J. L. Marcelo-Peña, F. Arroyo, V. Marcelo & D. Yrigoin 5065 (MOLF000048).

Isotype: PERU. Cajamarca, Jaén, San Luis del Nuevo Retiro, 78° 56' 16.16" LW, 5° 39' 45.61" LS, 2307 m, 27 January 2010 [fl.], J. L. Marcelo-Peña, F. Arroyo, V. Marcelo & D. Yrigoin 5065 (MOLF000048).

Remarks: Tree. The species grows in montane forests in the Department of Cajamarca, at 1900-2300 m a.s.l. It is listed as Endangered (EN) (IUCN, 2025).

Magnolia peruviana A.Vázquez. Recursos Forest. Occid. México 117, (2012).

Isotype: PERU. Amazonas, Bagua Province, Distrito Imaza, Region del Marañon, Comunidad de Yamayakat, Quebrada Kusu-Chapi, Río Marañón, Bosque primario colinas, 4°55’S, 78°19’W, 550 m a.s.l., February 1995 [fl., bud], R. Vásquez 20057, N. Jaramillo, R. Apanu, Kugkumas (MOLF 000090).

Remarks: Tree. The species grows above 550 m a.s.l. in the Department of Amazonas. It is listed as Data Deficient (DD) (IUCN, 2025).

Magnolia reynelii Rob.Fern. & Marcelo-Peña. Brittonia 72(3): 332 (2020).

Holotype: PERU. Amazonas, Prov. Bongará, Dist. Yambrasbamba, Centro de Investigación de la ONG Neotropical Primate Conservation y bosque “El Toro” de la Comunidad Campesina de Yambrasbamba, 5°39.284’S, 77°54.855’W, 2000 m a.s.l., 26-29 November 2018 [fl., fr.], R. Fernández & W. Chuquitucto 1742 (MOLF000049).

Isotype: PERU. Amazonas, Prov. Bongará, Dist. Yambrasbamba, Centro de Investigación de la ONG Neotropical Primate Conservation y bosque "El Toro" de la Comunidad Campesina de Yambrasbamba, 5°39.284'S, 77°54.855'W, 2000 m a.s.l., 26-29 November 2018 [fl., fr.], R. Fernández & W. Chuquitucto 1742 (MOLF000050).

Remarks: Tree. The species is endemic to the montane forest of the north of Peru, in the Department of Amazonas, at 1900-2000 m a.s.l. It is listed as Critically Endangered (CR) (IUCN, 2025).

Malvaceae

Phragmotheca leucoflora D.R.Simpson. Phytologia 51: 308 (1982).

Isotypes: PERU. Dept. Loreto, Prov. Maynas; Dist. Alto Nanay, 150m., Peruvian Forest Serv. Dendrology Project tree n° I-148: flowering collection 28 October 1964 [fl.], A. Gutierrez R. 179 (MOLF000051, MOLF000052).

Remarks: Tree. The species is distributed in humid forests between Peruvian and Ecuadorian Amazonian forests (Simpson, 1982; Vásquez et.al., 2018).

Sida florulenta Fryxell. Lundellia 12: 20 (2009).

Isotype: PERU. Ucayali, Provincia de Padre Abad, Distr. Padre Abad Pampa Yurac. Arbusto de 2-3 m. Flores de color amarillo, brácteas verde oscuro. Bosque secundario, 300 m a.s.l., 9°3'S, 75°30'W, 9 September 2004 [fl.], Schunke Vigo & Graham 15875 (MOLF000053).

Remarks: Synonym of Sida boliviana Gand., Bull. Soc. Bot. France 71(5-6): 633 (1924). Shrub. The species grows in secondary forests in the Province of Padre Abad in the Departments of Ucayali and La Convención in the Department of Cuzco (Fryxell, 2009).

Melastomataceae

Meriania bongarana Rob.Fern., R.Goldenb. & Michelang. Willdenowia 52(1): 45 (2022).

Holotype: PERU. Amazonas, Prov. Bongará, Dist. Yambrasbamba, inmediaciones de la Estación Biológica Abra Patricia, 05°41'32.91"S, 77°48'41.1"W, 2320 m a.s.l., 19-20 February 2020 [fl., fr.], R. Fernandez-Hilario, R. Villanueva & L. Pillaca 1930 (MOLF000006!).

Remarks: Tree. The species was collected in Abra Patricia in an undisturbed area of the Province of Bongará, Department of Amazonas.

Meriania callosa Rob.Fern., R.Goldenb. & Michelang. Willdenowia 52(1): 49 (2022).

Holotype: PERU. Amazonas, Prov. Bongará, Dist. Yambrasbamba, ruta desde CP Santa Rosa hacia bosque El Toro, 05°40'07.98"S, 77°55'30.04"W, 1950 m a.s.l., 11 November 2020 [fl.], R. Fernández-Hilario, W. Chuquitucto & A. Wong 2055 (MOLF000007!).

Isotype: PERU. Amazonas, Prov. Bongará, Dist. Yambrasbamba, ruta desde CP Santa Rosa hacia bosque El Toro, 05°40'07.98"S, 77°55'30.04"W, 1950 m a.s.l., 11 November 2020 [fl.], R. Fernández-Hilario, W. Chuquitucto & A. Wong 2055 (MOLF000008!).

Remarks: Tree. The species grows in montane forests in the Province of Bongará in the Department of Amazonas.

Meriania dazae Rob.Fern., R.Goldenb. & Michelang. Nordic J. Bot. 39(3): 6 (2021).

Holotype: PERU. Amazonas, Prov. Rodríguez de Mendoza, Dist. Vista Alegre, along Salas Creek, 2750 m a.s.l., 06°06'50.58''S, 77°26'48.21''W, 06 August 2012 [fl.], J.L. Marcelo-Peña, R. Fernández-Hilario & J. Santos 6568 (MOLF000001).

Isotype: PERU. Amazonas, Prov. Rodríguez de Mendoza, Dist. Vista Alegre, along Salas Creek, 2750 m a.s.l., 06°06'50.58'' S, 77°26'48.21'' W, 06 August 2012 [fl.], J.L. Marcelo-Peña, R. Fernández-Hilario & J. Santos 6568 (MOLF000002).

Remarks: Tree. The species was collected in montane forests in Vista Alegre Omia Regional Conservation in the Province of Rodriguez de Mendoza in the Department of Amazonas.

Meriania penningtonii Rob.Fern., R.Goldenb. & Michelang. Nordic J. Bot. 39(3): 2 (2021).

Holotype: PERU. San Martín [Amazonas], Rioja to Pedro Ruiz, border with Amazonas [near to CPBuenos Aires], 5°45'S, 77°40'W, 1800 m a.s.l., 04 December 2003 [fl.], T.D. Pennington, R.T.Pennington & A. Daza 17639 (MOLF000003, MOLF000004, MOLF000005).

Remarks: Tree. The species was collected in montane forests in the Province of Bongará in the Department of Amazonas.

Meriania rubriflora Michelang. & R.Goldenb. Phytotaxa 374(3): 190 (2018).

Isotype: PERU. Pasco, Province of Oxapampa, Distrito Huancabamba, Sector Oso Playa, Camino a la parcela Oso Playa, 10°19'05"S 75°36'28"W, 2565 m a.s.l., 25 June 2006 [fl.], L. Cárdenas, A.Monteagudo, A. Peña, J. Mateo, R. Francis 458 (MOLF000023).

Remarks: Shrub. A unique population of the species was registered in a disturbed forest in the Province of Oxapampa in the Department of Pasco.

Meriania vasquezii Rob.Fern., R.Villanueva & Michelang. Willdenowia 52(1): 66 (2022).

Isotype: PERU. Pasco, Prov. Oxapampa, Dist. Chontabamba, Ulcumano Lodge, 10°38'08"S, 75°25'39"W, 2244 m a.s.l., 23 February 2021 [fl.], R. Vásquez, L. Valenzuela, E.Pinche & C. Rojas 45480 (MOLF000009!).

Remarks: Tree or treelet. The species is endemic to high-elevation montane forests in the Province of Oxapampa in the Department of Pasco, at 2244 m a.s.l.

Miconia odoratissima L.A.Cárdenas. Phytotaxa 188(3): 122 (2014).

Isotype: PERU. Pasco, Oxapampa, Huancabamba, sector San Daniel, 10°26'37" S, 75°26'57" W, 2171 m a.s.l., 9 September 2006 [fl., fr.], L. Cárdenas, G. Castillo & J Mateo 820 (MOLF000024).

Remarks: Tree or treelet. The species is endemic to the central forests of Peru, neighboring localities at the border of the Yanachaga Chemillén National Park in the Department of Pasco.

Miconia pozuzoana L.A.Cárdenas & Michelang. Phytotaxa 188(3): 126 (2014).

Isotype: PERU. Pasco, Oxapampa, Pozuzo, Sector Huampal, Pan de Azúcar, cerca al área de observación de gallitos de las rocas. 10°11'05"S, 75°34'51"W, 1000-1100 m a.s.l., 22 July 2006 [fl.], L. Cárdenas & V. Flores 622 (MOLF000025).

Remarks: Treelet. The species is endemic to cloud forests in central Peru, inside the Yanachaga Chemillén National Park in the Department of Pasco, at 1000-1100 m a.s.l.

Triolena rojasiae Michelang. & R.Goldenb. Phytotaxa 374(3): 199 (2018).

Isotype: PERU. Pasco, Province of Oxapampa, Dist. Palcazú, Parque Nacional Yanachaga-Chemillén, Sector Paujil, Quebrada Tunel, 429 m a.s.l., 10°20'42"S 75°15'48"W, 17 March 2008 [fl., fr.], R. Vásquez, A. Monteagudo, I. Huamantupa, A. Peña 34034 (MOLF000026).

Remarks: Herb. The species grows on rocks along rivers inside forest of Yanachaga-Chemillén National Park in the Department of Pasco, at 300-500 m a.s.l.

Meliaceae

Cedrela kuelapensis T.D.Penn. & Daza, Monogr. Cedrela 65 (2010).

Holotype: PERU. Amazonas, Provincia de Luya, El Tingo to Chachapoyas, just below El Tingo [fl.], T.D.Pennington, R.T.Pennington & A.Daza 17596 (MOLF000129).

Isotype: PERU. Amazonas, Provincia de Luya, El Tingo to Chachapoyas, just below El Tingo [fl.], T.D.Pennington, R.T.Pennington & A.Daza 17596 (MOLF000130).

Remarks: Tree. The species grows in tropical deciduous forests of Marañón Valley in the north

of Peru, at 900-2200 m a.s.l. It is listed as Vulnerable (VU) (IUCN, 2025).

Cedrela molinensis T.D.Penn. & Reynel, Monogr. Cedrela 84 (2010).

Isotypes: PERU. Piura, Porcuya, Km 23-24 road Olmos to Jaen [fl., fr.], A.Daza 1551 (MOLF000054, MOLF000055, MOLF000056, MOLF000057, MOLF000058, MOLF000059, MOLF000060).

Remarks: Tree. The species is known from the population of the Departments of Piura and Tumbes, at 700-1600 m a.s.l. It is listed as Endangered (CR) (IUCN, 2025).

Cedrela nebulosa T.D.Penn. & Daza, Monogr. Cedrela 91 (2010).

Holotype: PERU. Amazonas, Prov. Rodriguez de Mendoza, road Mendoza to Chachapoyas, hillside above Mendoza [fl.], T.D. Pennington, A.Daza & León 17844 (MOLF000061).

Remarks: Tree. The species grows in wet montane and disturbed forests between elevation through the Amazonian basins in Peru, Equator, and Colombia, at 1100-2400 m a.s.l.

Trichilia dazae T.D.Penn. Phytotaxa 259(1): 46 (2016).

Isotypes: PERU. Amazonas, Prov. Bongará, San Carlos, February 2007 [fl.], T. D. Pennington & A. Daza 18007 (MOLF000096, MOLF000097, MOLF000098, MOLF000099, MOLF000100).

Remarks: Tree. The species grows in seasonal wet evergreen montane forest, commonly in disturbed areas, in the Department of Amazonas, at 1900-2150 m a.s.l. (Pennington, 2016). It is listed as Endangered (EN) (IUCN, 2025).

Trichilia reynelii T.D.Penn. Phytotaxa 259(1): 117 (2016).

Isotypes: PERU. Junín, Prov. Satipo, Distrito Pangoa, Puerto Ocopa [fl.], Reynel 280 (MOLF000062, MOLF000063).

Remarks: Tree. The species is known by collection from the transition between rainforest and seasonally dry forests at the eastern end of the Chanchamayo Valley in the Department of Junín, at 600-800 m a.s.l. (Pennington, 2016). It is listed as Critically Endangered (CR) (IUCN, 2025).

Moraceae

Ficus sirensis Mitidieri & Pedern. Syst. Bot. 45(1): 91 (2020).

Holotype: PERU. Coronel Portillo, Iparia, Sira Communal Reserve, valley within the basins of Ariapo and Iparia rivers, tributaries of the Ucayali River, 9°27.85'S, 74°33.95'W, 1550-1600 m a.s.l., 04 November 2009 [fr.], J. G. Graham 5257 (MOLF000106).

Remarks: Tree. The species is known only from the type locality located in the northwestern side of Peru, in the Province of Coronel Portillo in the Department of Ucayali, at 1550-1600 m a.s.l. (Rivera et al., 2020).

Orchidaceae

Epidendrum anchihuayense Hágsater & Rob.Fern. Icon. Orchid. 19(1): t. 1904 (2022).

Holotype: PERU. Dept. Ayacucho, Prov. La Mar: Distr. Anchihuay: Jaiyamonte, 3400 m a.s.l., 23 May 2015 [fl.], Robin Fernández Hilario 936 (MOLF000143).

Remarks: Epiphytic herb. It grows in southern and northern Peru, at 3330-3400 m a.s.l. (Hágsater et al., 2022).

Epidendrum bricenorum Damian & Hágsater. Icon. Orchid. 16(1): t. 1607 (2018).

Holotype: PERU. Amazonas, Luya, Anexo Vista Hermosa, Área de Conservación ENDA, 2100 m, 18 March 2016, [fl.], Alexander Damián Parizaca y Julio Briceño 6020 (MOLF000144).

Remarks: Herb. Terrestrial and epiphytic, scandent, sympodial, and erect. The species is known from two collections, in northern Peruvian Andes, on both sides of the Marañón river basin; in montane forest, at 2100-2850 m a.s.l.

Epidendrum yanatilense Damian & Hágsater. Phytotaxa 246(4): 288 (2016).

Holotype: PERU. Cusco, Provincia de Calca. Distrito de Yanatile 4 km from Santiago Valley, 571 12°34'31.74"S, 72°25'24.05"W, 2450 m, 27 May 2015 [fl.], A.Damián & U. Huaycho 0300 (MOLF000145).

Remarks: Herb, epiphytic, erect, sympodial, caespitose. The species is known only from the type collection in the Province of Calca, in the Department of Cusco, at 2400 m a.s.l.

Lepanthes odobenus Damian & B.T.Larsen. Phytotaxa 291(2): 151 (2017).

Holotype: PERU. Amazonas, Prov. Chachapoyas, Dist. Magdalena, above "Saula", 6°24'10" S, 77°49'30"W, 2800 m a.s.l., 20 March 2016 [fl.], A. Damián & J. Torres 7010 (MOLF000146).

Remarks: Epiphytic, caespitose herb. The species is only known from one locality, in a humid cloud forest in the Province of Chachapoyas in the Department of Amazonas, at 2800 m a.s.l. (Damian & Larsen, 2017).

Lepanthes peruviana Damian & B.T.Larsen. Phytotaxa 291(2): 151 (2017).

Holotype: PERU. Amazonas, Prov. Chachapoyas, Dist. Magdalena, above "Saula", 6°24'10" S, 77°49'3'"W, 2800 m a.s.l., 20 March 2016 [fl.], A. Damian & J. Torres 7001 (MOLF000148).

Remarks: Epiphytic herb. The species grows in the high mountains in the Department of Amazonas, at 2800 m a.s.l. (Damian & Larsen, 2017).

Lepanthes pseudoprofusa Damian & B.T.Larsen. Phytotaxa 291(2): 153 (2017).

Holotype: PERU. Amazonas, Prov. Chachapoyas, Dist. Magdalena, above "Saula", 6°24'10" S, 77°49'30" W, 2800 m, 20 March 2016 [fl.], A. Damian & J. Torres 7003 (MOLF000147).

Remarks: Epiphytic herb. The species grows in humid cloud forests in Northern Peru, in the Departments of Piura, Cajamarca, and Amazonas, at 2800 m a.s.l.

Pteroglossa acalcarata Damian & Salazar. Phytotaxa 311(3): 240 (2017).

Holotype: PERU. Cusco, Provincia de Calca, Distrito de Yanatile, 3 km from Santiago valley, 1400 m a.s.l., 8 January 2015 [fl.], A. Damián & U. Huaycho 200 (MOLF000149).

Remarks: Terrestrial herb. The species was registered only on the hills in semi-deciduous forest in the District of Yanatile, Department of Cusco, at 1400 m a.s.l.

Stelis peruviana Damian & Karremans. Syst. Bot. 41(2): 293 (2016).

Holotype: PERU. Yanatile, Calca, cloud forest, 12°35'6" S, 72°25'57" W, 1990 m, 27 May 2015 [fl.], A. Damián & U. Huaycho 0400 (MOLF000150).

Remarks: Epiphytic herb. The species is known only by the type collection from the montane forest in the Province of Calca, Department of Cusco, at 1990 m a.s.l.

Telipogon santiagocastroviejoi Nauray, A.Galán & R.Farfán. Anales Jard. Bot. Madrid 65(1): 90 (2008).

Isotype: PERU. Cusco, Quispicanchis, Marcapata, Marcapata, 13°35'06' S, 70°58'12''W, 2864 m a.s.l., 20 April 2007 [fl.], W. Nauray & R. Farfán 3764 (MOLF000152).

Remarks: Herb caespitose epiphytic. The species grows in the cloud forest at around 2800 m a.s.l.

Telipogon tupayachii Nauray & A.Galán. Anales Jard. Bot. Madrid 65(1): 93 (2008).

Isotype: PERU. Cusco, Paucartamabo, Kosñipata, Tres Cruces-Acjanaco, National Park of Manu, 13°9'49''S, 71°37'57''W, 3471 m, 25 April 2007 [fl.], W. Nauray & M. Mamani 3768 (MOLF000151).

Remarks: Herb. The species has been registered between the elfin forest and the humid Puna, at 3400 m a.s.l.

Pentaphylacaceae

Freziera croatii D.Santam. & A.K.Monro. Kew Bull. 74(1)-14: 12 (2019).

Isotypes: PERU. Departamento de Pasco, Provincia de Oxapampa, río San Alberto valley, E of 619 Oxapampa, primary high montane forest, 10°34'S, 075°22'W, 2600 m a.s.l., 25 July 1984 [fl. bud, fr.], ED. N. Smith & A. Preter 8029 (MOLF000126, MOLF000127, MOLF000128).

Remarks: Tree or shrub. The species grows in undisturbed humid forests, at 2600-2800 m a.s.l. It is listed as Endangered (EN) (IUCN, 2025).

Freziera oxapampensis D.Santam. Harvard Pap. Bot. 20(1): 74 (2015).

Isotype: PERU. Pasco, Provincia Oxapampa, Río San Alberto valley, E of Oxapampa, W slopes of 626 Cordillera Yanachaga, High montane primary forest, on ridge, 10°34' S, 75°22' W, 2500 m a.s.l., 24 July 1984 [fr.], D. N. Smith & A. Pretel 8002 (MOLF000119).

Remarks: Tree. The species has been registered in a single location from the Province of Oxapampa, in a sclerophyllous forest, at 2136-2720 m a.s.l. It is listed as Vulnerable (VU) (IUCN, 2025).

Rubiaceae

Bathysa multiflora L.O. Williams. Fieldiana. Botany 31(2): 44. 1965.

Isotype: PERU. “Silata”, Granja, Reserva Forestal, Satype, Depto. Junin, Pcia. Jauja, 800 m a.s.l., 25 February 1963 [fl.], Cesar Bazán Vásquez 07 (MOLF000064, MOLF000065, MOLF000066, 634 MOLF000067, MOLF000068, MOLF000069).

Remarks: Tree. The species has been registered in the Department of Junín.

Notopleura cincinalis C.M.Taylor. Ann. Missouri Bot. Gard. 88(3): 491 (2001).

Isotype: PERU. Amazonas, provincial Condosconqui, distrito El Cenepa, región Nororiental del Marañón, Tío Cenepa, comunidad Tytino, 04°33’S, 78°10’W, 450 m a.s.l., 22 November 1993 [fr.], R. Vásquez, C. Díaz, J. Mostacero, F. Mejía & J. Ampam 18503 (MOLF000070).

Remarks: Tree. The species is native to humid forests, distributed from the South of Ecuador to the North of Peru.

Palicourea ucayalina C.M.Taylor. Novon 24(1): 78 (2015).

Holotype: PERU. Ucayali, prov. Padre Abad, distr. Boqueron Padre Abad, 300 m a.s.l., 21 June 2004 [fl.], J. Schunke Vigo & J., G. Graham 15678 (MOLF000071).

Remarks: Tree. The species is native to the primary humid forest in northern Peru.

Psychotria ortiziana C.M.Taylor. Novon 24(4): 423 (2016).S

Holotype: PERU. Madre de Dios, prov. Tambota, Las Piedras, albergue Cuzco Amazónico, 12°29’S, 69°03’W, 200 m a.s.l., 23 February 1991 [fl.], M. Timaná 1506 (MOLF000138).

Remarks: Tree. The species was registered in wet forests in the western Amazon basin, at 193-900 m a.s.l.

Rutaceae

Raputia codo-pozuzoensis Rob.Fern. & Arteaga. PhytoKeys 89: 75 (2017).

Holotype: PERU. Huánuco, Prov. Puerto Inca, Dist. Codo de Pozuzo, alrededores de toma de agua cerca al Río Pozuzo, 9°40'57.76"S, 75°30'31.35"W, 565 m a.s.l., 01 February 2015 [fl.], R. Fernandez, R. Arteaga & F. Meza 830 (MOLF000078, MOLF000079).

Remarks: Tree. The species is native to premontane humid forests and is distributed in the Department of Pasco.

Zanthoxylum albuquerquei D.R.Simpson. Phytologia 51: 314 (1982).

Isotypes: PERU: Dept. Loreto[Ucayali], Prov. Coronel Portillo, Dist. Callería, Vivero del Region Forestal (Peruvian Forest Service Regional Tree Nursery), 4 km de Pucallpa, alt. ca. 130 m a.s.l., Peruvian Forest 661 Service Project Dendrology tree no. PA-14, fruiting collection, 1 August 1968,

Manuel Castillo S. 28 (MOLF000080, MOLF000081, MOLF000082, MOLF000083).

Remarks: Tree. The species grows in Amazonian humid forests. It is listed as Endangered (EN) (IUCN, 2025).

Zanthoxylum campicola Reynel. Fl. Neotrop. Monogr. 117: 72 (2017).

Isotypes: COLOMBIA. Medellín, Parque Ecol. Piedras Blancas, Paraje de Quebrada, 6°18'N, 75°29'W, 2350 m a.s.l., 20 May 1995 [fl., fr.], R.Fonnegra, F. Roldán & A. Acevedo 5607 (MOLF00084, MOLF00085).

Remarks: Tree. The species is distributed from Colombia to Ecuador.

Zanthoxylum lepidopteriphilum Reynel. Novon 5: 365, (1995).

Isotype: PERU. Piura, Prov. Huancabamba, Canchaque, between "Chorro Blanco" and "Warwar", 2000-2500 m a.s.l., 18 January 1989 [fr], C. Díaz, T.D. Pennington & C. Reynel 3192 (MOLF000086).

Remarks: Tree. The species is native to cloud forests and is distributed in the Provinces of Imbabura and Loja (Ecuador) and the Departments of Piura and Cajamarca (Peru).

Zanthoxylum sobrevielae D.R.Simpson. Phytologia 51: 316 (1982).

Isotype: PERU. Department of Loreto, Prov. Coronel Portillo, Dist. Callería, "bosque seco tropical", Km 33 Carretera Pucallpa a Huánuco, 160 m a.s.l., 8 February 1968 [fl.], Manuel Castillo S. 1 (MOLF000087).

Remarks: Synonym of *Zanthoxylum ekmanii* (Urb.) Alain, Contr. Ocas. Mus. Hist. Nat. Colegio De La Salle 9: 24 (1950). Fide: Fl. Neotrop. Monogr. 117: 72 (Reynel 2017). Tree. The species grows in tropical dry forests between the Province of Napo (Ecuador) and the Department of Loreto (Peru).

Zanthoxylum tambopatense Reynel. Fl. Neotrop. Monogr. 117: 169 (2017).

Isotypes: PERU. Madre de Dios, Tambopata, Cuzco Amazónico touristic reserve, 12°29'S, 69°03'W, 200 m a.s.l., 31 July 1991 [female, fr.], M. Timaná 1968 (MOLF000087, MOLF000088).

Remarks: Tree. The species is distributed between the Region of Acre (Brazil), the Departments of Beni, Santa Cruz and La Paz (Bolivia) and the Department of Loreto (Peru).

Zanthoxylum sambucirhachis Reynel. Novon 28(1): 9 (2020).

Isotype: ECUADOR. Los Ríos, Quevedo Canton, Parroquia Centinela-La Pirámide, vía Santo Domingo de los Colorados-Quevedo, entrando por Patricia Pilar Km. 41, bosque húmedo tropical, bosque secundario, 01°409S, 79°209W, 650 m a.s.l., 25 February 1992 [female, fl.], C. Quelal & G. Tipaz 361 (MOLF000139).

Remarks: Tree. The species grows in premontane rainforest in Ecuador, at 100-1200 m a.s.l.

Sabiaceae

Meliosma chanchamayensis Rob.Fern. & Reynel. Phytotaxa 559(1): 46 (2022).

Holotype: PERU. Junín, Prov. Chanchamayo, Dist. San Ramón, La Promisoria, 11°05'S, 75°23'W [11°03'20''S, 75°24'40''W], 1070-1200 m a.s.l., 26 November 1998 [fl.], T.D. Pennington & A. Daza 16505 (MOLF000110, MOLF000111).

Remarks: Tree. The species has been registered at only a single locality in the District of San Ramón (Junín).

Meliosma dazae Rob.Fern. Phytotaxa 559(1): 49 (2022).

Holotype: PERU. Junín, Prov. Chanchamayo, Dist. San Ramón, road to Mina Pichita, just above mine, 11°05'40''S, 75°25'03''W, 2100 m, 18 November 2002 [fl.], R.T. Pennington, A.K. Monro & A. Daza 1290 (MOLF000112).

Isotype: PERU. Junín, Prov. Chanchamayo, Dist. San Ramón, road to Mina Pichita, just above mine, 11°05'40''S, 75°25'03''W, 2100 m, 18 November 2002 [fl.], R.T. Pennington, A.K. Monro & A. Daza

1290 (MOLF000113, MOLF000114, MOLF000115, MOLF000116).

Remarks: Tree. The species has been registered at only a single locality in the District of San Ramón (Junín).

Salicaceae

Hasseltia yanachagaensis Vásquez & A.Monteag. Arnaldoa 20(2): 254 (2014).

Isotype: PERU. Dpto. Pasco, Prov. Oxapampa, Distrito. Huancabamba, Tunqui, zona de amortiguamiento del Parque Nacional Yanachaga Chemillén, 10°16’03S, 75°31’43W, 1760 m a.s.l., 4 November 2007 [fl.], A. Monteagudo et al. 15921 (MOLF000118).

Remarks: Tree. The species is known from Yanachaga Chemillén National Park collections, registered above 1760 m a.s.l.

Solanaceae

Brunfelsia cabiesesiana J.G.Graham. PhytoKeys 75: 84 (2016).

Holotype: PERU. Department of Ucayali, Prov. Coronel Portillo, Dist. Iparia, Reserva Comunal El Sira, 9°27.8'S, 74°33.5'W, 1500 m a.s.l., 24 October 2007, J. G. Graham 5970 (MOLF000072).

Remarks: Tree. The species grows in cloud forests on the East slopes of the Cordillera El Sira, between the Departments of Ucayali and Pasco.

Saracha andina Rob.Fern., Revilla & E.Pariente. PhytoKeys 85: 34 (2017).

Holotype: PERU. Ayacucho, Prov. Lucanas, Dist. Ocaña, Centro Poblado San José de Tomate [CP 725 Pachaca] – Sector Palca, 14°18'12.9"S, 74°45'33.11"W, 3700 m a.s.l., 26 June 2015 [fl., fr.], E. Pariente, R. Fernández & L. Ríos 110 (MOLF000073).

Isotype: PERU. Ayacucho, Prov. Lucanas, Dist. Ocaña, Centro Poblado San José de Tomate [CP 725 Pachaca] – Sector Palca, 14°18'12.9"S, 74°45'33.11"W, 3700 m a.s.l., 26 June 2015 [fl., fr.], E. Pariente, R. Fernández & L. Ríos 110 (MOLF000074).

Remarks: Tree. The species is native to the Central Andes and is distributed between the Departments of Ayacucho, Huancavelica, and Lima.

Solanum junctum S.R.Stern & M.Nee. PhytoKeys 39: 28 (2014).

Isotype: PERU. Pasco, Prov. Oxapampa, Dist. Pozuzo, 1 km N del Puente Yulitunqui-Sector Huampal, Parque Nacional Yanachaga-Chemillén, 10°09'47"S, 75°33'58"W, 975-1100 m a.s.l., 15 April 2005 [fl., fr.], E. Ortiz V. & J. Mateo M. 576 (MOLF000075).

Remarks: Tree. The species is distributed in the Departments of Amazonas, Ayacucho, Junín, Pasco, and San Martín.

Styracaceae

Styrax excelsus P.W.Fritsch. Novon 25(3): 282 (2017).

Isotypes: PERU. Cusco, Prov. La Convención, Distr. Quelloúno, Lacco, 12°37´31”S, 72°14´03”W, 2770 m a.s.l., 17 June 2006 [fl.], L. Valenzuela, J. Farfán, E. Suclli & J. Farfán F. 6917 (MOLF000122, MOLF000123).

Remarks: Tree. The species growth in primary wet forests in the Department of Cuzco.

Urticaceae

Coussapoa peruviana C.C.Berg. Novon 23(1): 15 (2014).

Isotypes: PERU. Junín, San Ramón-La Merced, Est. Exp. La Génova, 11°05’S, 75°821’W, 1100 m a.s.l., 13 November 1998 [fl.], A. Daza & T. D. Pennington 16370 (MOLF000076, MOLF000077).

Remarks: Tree. This is native to humid secondary forests, registered at only in the Department of Junín.

Table 1. List of type specimens not considered in the catalogue.

Family	Name of taxon	Reference
Amaryllidaceae	*Clinanthus longissimus*	Esquerre & Meerow, 2020
Amaryllidaceae	*Hippeastrum ugentii*	Ochoa, 2006
Annonaceae	*Annona oxapampae*	Maas & Westra, 2010
Annonaceae	*Cremastosperma bullatum*	Pirie & Zapata, 2004
Araceae	*Philodendron schmidtiae*	Croat et al., 2013
Asteraceae	*Centenaria rupacquiana*	Gonzáles et al., 2018
Asteraceae	*Grindelia tarapacana* var. *verrucosa*	Granda et al.. 2000
Asteraceae	*Pentacalia poeppigiana*	Granda, A., 2009
Asteraceae	*Senecio tassaensis*	Montesinos, 2014
Caryophyllaceae	*Paronychia sanchez-vegae*	Montesinos, 2018
Crassulaceae	*Echeveria deltoidea*	Pino & Vilcapoma, 2018
Eriocaulaceae	*Paepalanthus caryonauta*	Hensold, 2016
Erythroxylaceae	*Erythroxylum ulei* var. *escalerense*	White, 2020
Fabaceae	*Inga tenuicalyx*	Pennington, 1997
Fabaceae	*Tachigali inca*	Huamantupa, 2020
Fabaceae	*Tachigali pilosa*	van der Werff, 2013a
Gesneriaceae	*Nautilocalyx rugosus*	Rojas & Clark, 2015
Lauraceae	*Ocotea mollivillosa*	van der Werff, 2014
Lauraceae	*Ocotea glabriflora*	van der Werff, 2013b
Loranthaceae	*Peristethium confertiflorum*	Kuijt, 2012
Magnoliacaeae	*Magnolia manuensis*	Arroyo & Serna-Gonzáles, 2020
Malpighiaceae	*Heteropterys tiinae*	Anderson, 2014
Melastomataceae	*Macrocentrum andinum*	Michelangeli & Goldenberg, 2018
Melastomataceae	*Miconia chemillensis*	Cárdenas et al., 2014
Moraceae	*Ficus machupicchuensis*	Berg & Homeier, 2010
Passifloraceae	*Passiflora praemorsa*	Boza, 2014
Primulaceae	*Cybianthus candamoensis*	Pipoly & Ricketson, 2006
Primulaceae	*Cybianthus condorensis*	Pipoly & Ricketson, 2018
Santalaceae	*Phoradendron alatum*	Kuijt, 2011
Siparunaceae	*Siparuna vasqueziana*	Renner & Hausner, 2000
Solanaceae	*Jaltomata yungayensis*	Mione et al., 2000
Solanaceae	*Larnax macrocalyx*	Leiva et al., 1998
Solanaceae	*Markea vasquezii*	Rodríguez, 2006
Solanaceae	*Solanum ancoripae*	Särkinen et al., 2015
Solanaceae	*Solanum arenicola*	Särkinen et al., 2015
Solanaceae	*Solanum kulliwaita*	Knapp, S., 2010
Solanaceae	*Solanum mariae*	Särkinen et al., 2015
Urticaceae	*Cecropia chlorostachya*	Berg, 2002
Urticaceae	*Cecropia puberula*	Berg & Franco, 1996

Table 2. Type specimens held at MOLF.

Family	Taxon	Holotype	Isotype	Epitype	Isolectotype
Acanthaceae	*Aphelandra apecoi*	X			
Acanthaceae	*Aphelandra rugosa*	X			
Acanthaceae	*Dicliptera mercedesiae*	X			
Anacardiaceae	*Mauria denticulata*		X		
Annonaceae	*Pseudoxandra xylopiifolia*		X		
Araliaceae	*Dendropanax umbellatus*			X	
Begoniaceae	*Begonia amoeboides*	X	X		
Begoniaceae	*Begonia elachista*	X			
Begoniaceae	*Begonia lamolina*	X	X		
Begoniaceae	*Begonia speculum*	X			
Begoniaceae	*Begonia veitchii* var. *machupicchuensis*	X			
Chrysobalanaceae	*Licania palcazuensis*		X		
Clusiaceae	*Chrysochlamys chrisharonii*		X		
Elaeocarpaceae	*Sloanea potsniroki*		X		
Ericaceae	*Vaccinium ortizii*		X		
Eriocaulaceae	*Paepalanthus caryonauta*		X		
Euphorbiaceae	*Croton camposii*		X		
Euphorbiaceae	*Croton tumbesinus*		X		
Euphorbiaceae	*Incadendron esseri*		X		
Fabaceae	*Caesalpinia celendiniana*		X		
Fabaceae	*Caesalpinia pluviosa* var. *maraniona*		X		
Fabaceae	*Inga bicentenaria*	X	X		
Fabaceae	*Affonsea gereauana*		X		
Fabaceae	*Maraniona lavinii*	X			
Fabaceae	*Ormosia schunkei*		X		
Fabaceae	*Parkinsonia peruviana*	X	X		
Gesneriaceae	*Diastema fimbratiloba*	X			
Gesneriaceae	*Pachycaulos huancambabe*	X			
Icacinaceae	*Calatola microcarpa*		X		
Lauraceae	*Yasunia quadrata*		X		
Lecythidaceae	*Lecythis peruviana*				X
Loranthaceae	*Gaiadendron coronatum*		X		
Loranthaceae	*Peristethium grahamii*		X		
Magnoliaceae	*Magnolia enepeceana*	X	X		
Magnoliaceae	*Magnolia jaenensis*	X	X		
Magnoliaceae	*Magnolia manguillo*	X	X		
Magnoliaceae	*Magnolia peruviana*		X		
Magnoliaceae	*Magnolia reynelii*	X	X		
Malvaceae	*Phragmotheca leucoflora*		X		
Malvaceae	*Sida florulenta*		X		
Melastomataceae	*Meriania callosa*	X	X		
Melastomataceae	*Meriania dazae*	X	X		
Melastomataceae	*Meriania penningtonii*	X	X		

Family	Taxon	Holotype	Isotype	Epitype	Isolectotype
Melastomataceae	*Meriania rubriflora*		X		
Melastomataceae	*Meriania vasquezii*		X		
Melastomataceae	*Miconia odoratissima*		X		
Melastomataceae	*Miconia pozuzoana*		X		
Melastomataceae	*Triolena rojasae*		X		
Meliaceae	*Cedrela kuelapensis*	X	X		
Meliaceae	*Cedrela molinensis*		X		
Meliaceae	*Cedrela nebulosa*	X			
Meliaceae	*Trichilia dazae*		X		
Meliaceae	*Trichilia reynelii*		X		
Moraceae	*Ficus sirensis*	X			
Orchidaceae	*Epidendrum anchihuayense*	X			
Orchidaceae	*Epidendrum bricenoorum*	X			
Orchidaceae	*Epidendrum yanatilense*	X			
Orchidaceae	*Lepanthes odobenus*	X			
Orchidaceae	*Lepanthes peruviana*	X			
Orchidaceae	*Lepanthes pseudoprofusa*	X			
Orchidaceae	*Pteroglossa acalcarata*	X			
Orchidaceae	*Stelis peruviana*	X			
Orchidaceae	*Telipogon santiagocastroviejoi*		X		
Orchidaceae	*Telipogon tupayachii*		X		
Pentaphylacaceae	*Freziera croatii*		X		
Pentaphylacaceae	*Freziera oxapampensis*		X		
Rubiaceae	*Bathysa multiflora*		X		
Rubiaceae	*Notopleura cincinalis*		X		
Rubiaceae	*Palicourea ucayalina*	X			
Rubiaceae	*Psychotria ortiziana*	X			
Rutaceae	*Raputia codopozuzoensis*	X			
Rutaceae	*Zanthoxylum albuquerquei*		X		
Rutaceae	*Zanthoxylum campicola*		X		
Rutaceae	*Zanthoxylum lepidopteriphilum*		X		
Rutaceae	*Zanthoxylum sobrevielae*		X		
Abiaceae	*Meliosma chanchamayensis*	X			
Sabiaceae	*Meliosma dazae*	X	X		
Salicaceae	*Hasseltia yanachagaensis*		X		
Solanaceae	*Brunfelsia cabiesesiana*	X			
Solanaceae	*Saracha andina*	X	X		
Solanaceae	*Solanum junctum*		X		
Styracaceae	*Styrax excelsus*		X		
Urticaceae	*Coussapoa peruviana*		X		
		40	58	1	1

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Figure 1. Spatial distribution of type specimens held at MOLF.

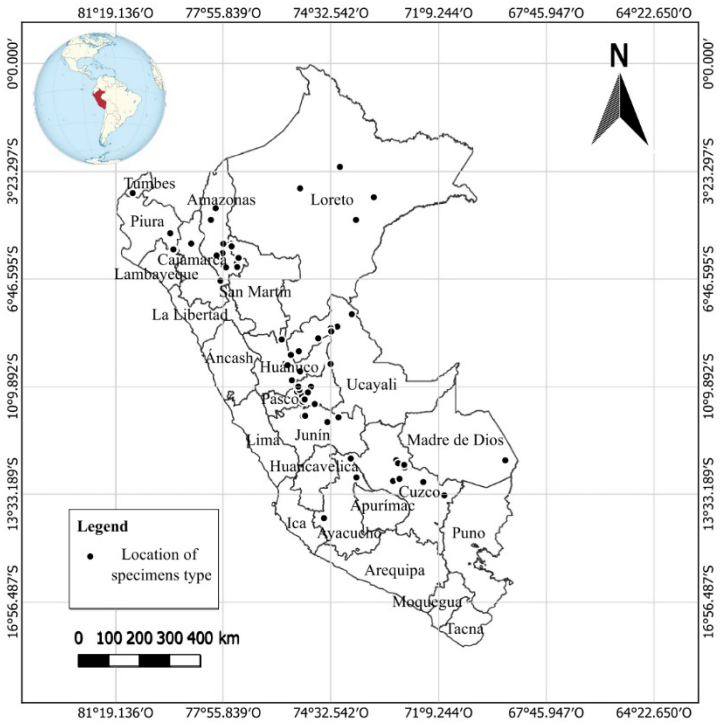


Figure 2. Temporary distribution of type specimens held at MOLF.

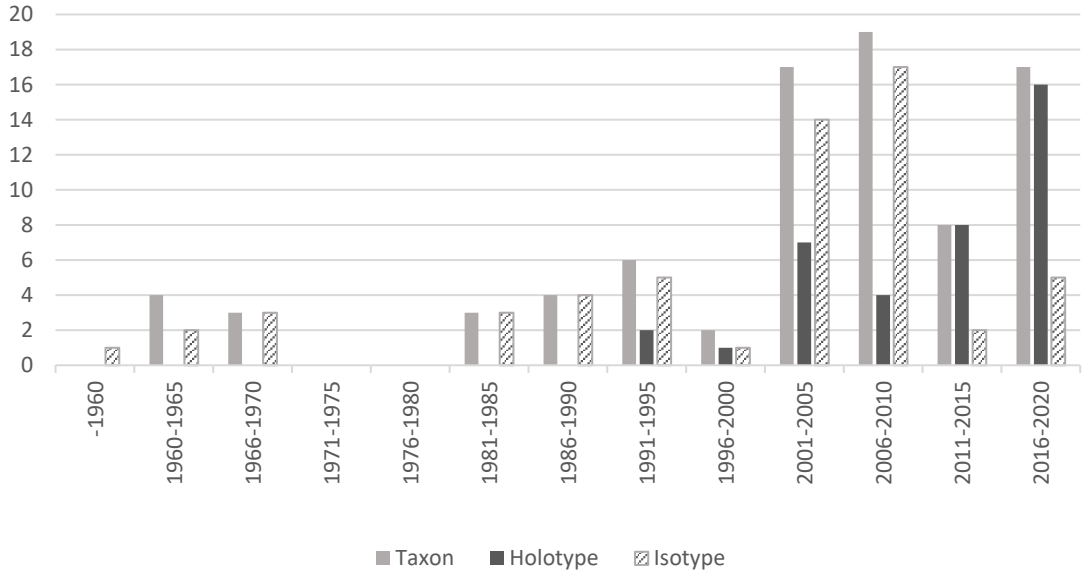


Figure 3. Type specimen of *Lecythis peruviana*.

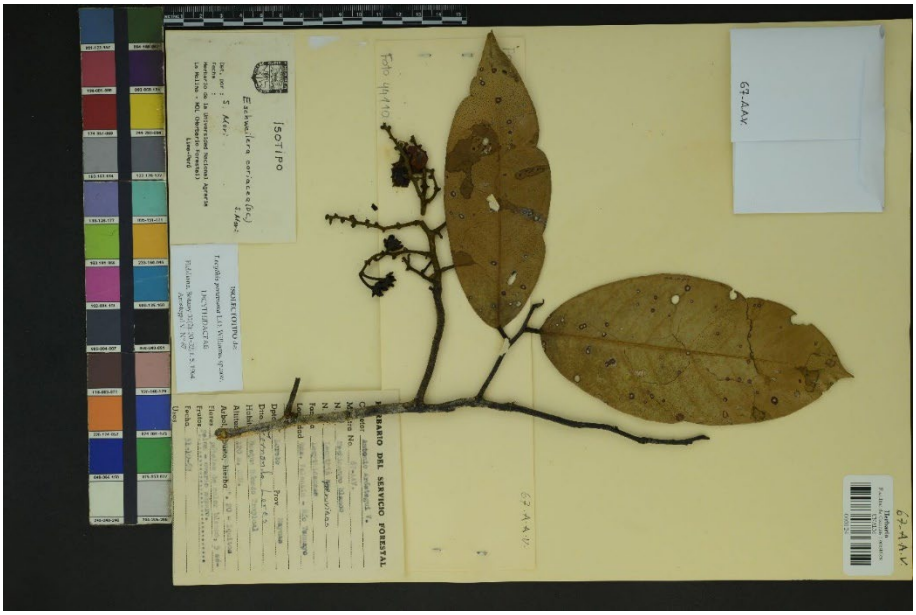


Figure 4. Type specimen of *Phragmontheca leucoflora*.

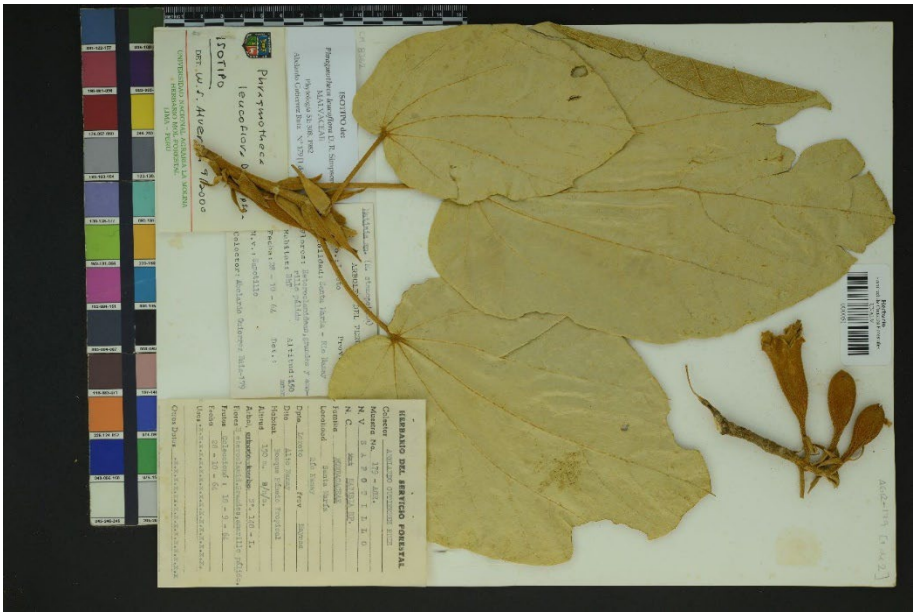
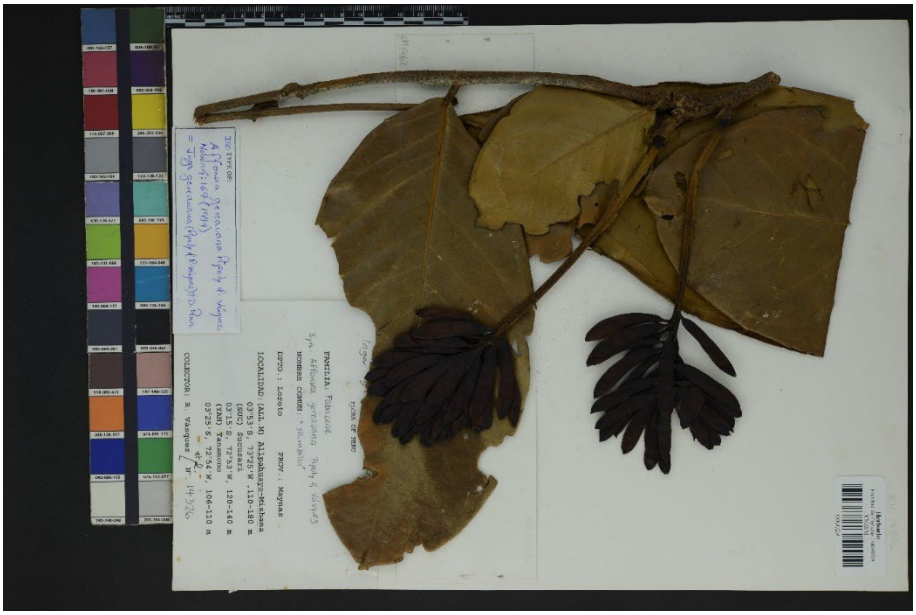


Figure 5. Type specimen of *Ormosia schunkei*.

Figure 6. Type specimen of *Affonsea gereauana*.



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References

Anderson, W. R. (2014). Siete nuevas especies de Malpighiaceae neotropicales. *Acta Botanica Mexicana*, (109), 23-43. https://doi.org/10.21829/abm109.2014.1146

Arreguín, M. D. L. L., Fernández, R., & Rodríguez, A. (1996). Catálogo de los ejemplares tipo de plantas vasculares del Herbario de la Escuela Nacional de Ciencias Biológicas (ENCB), del Instituto Politécnico Nacional, México. *Polibotánica*, *3*, 18-81.

Arreguín, M. D. L. L., Fernández, R., & Rosete, E. (2006). Adiciones de ejemplares tipo de plantas vasculares depositados en el Herbario de la Escuela Nacional de Ciencias Biológicas del Instituto Politécnico Nacional. *Polibotánica*, *22*, 151-159.

Arroyo, F., & Serna-González, M. (2020). Two new species of *Magnolia* (Magnoliaceae) from Peru. *Phytotaxa, 471*(1), 54-60.

Baldeón, S., Flores, M., & Roque, J. (2006). Fabaceae endémicas del Perú. *Revista Peruana de Biología*, *13*(2), 302-337.

Berg, C. C. (2002). An account on the *Cecropia* species (Cecropiaceae) of Peru. *Caldasia, 24*(2), 229-238. https://revistas.unal.edu.co/index.php/cal/article/view/39411

Berg, C. C., & Homeier, J. (2010). Three new species of South American Moraceae. *Blumea: Biodiversity, Evolution and Biogeography of Plants, 55*(2), 196-200.

Berg, C. C., & Franco, P. (1996). New taxa and combinations in Moraceae and Cecropiaceae from Central and South America. *Novon*, *6*(3) 230-252.

Berg, C. C., & Ulloa, C. (2014). Two new species of *Coussapoa* (Urticaceae, Cecropieae). *Novon*, *23*(1), 14-17. https://doi.org/10.3417/2013002

Boza, T. E. (2014). Two new species of *Passiflora* subg. *Decaloba* (Passifloraceae) from Peru and Bolivia. *Novon, 23*(3), 263-267.

Carballo, C., González-Montelongo, C., Losada-Lima, A., Acebes, J., & León, M. (2019). Especímenes typus de plantas vasculares del Herbario de la Universidad de La Laguna (TFC). I. *Vieraea: Folia Scientarum Biologicarum Canariensium*, *46*, 231-250. https://doi.org/10.31939/vieraea.2019.46.tomo01.11

Cardenas, L. A., Burke, J. M., & Michelangeli, F. A. (2014). Five new species of *Miconia* (Melastomataceae) from the central Peruvian Andes. *Phytotaxa*, *188*(3), 121-134. http://dx.doi.org/10.11646/phytotaxa.188.3.1

Castellanos, C., Vargas, F., Forero, E., & Guerrero-Salazar, W. (2021). Tipos de leguminosas colombianas I. (Leguminosae: subfamilia Cercidoideae), con notas sobre el género *Schnella* en Colombia. *Revista de la Academia Colombiana de Ciencias Exactas, Físicas y Naturales*, *45*(175), 527-540. https://doi.org/10.18257/raccefyn.1243

Clark, J. L., & Moonlight, P. W. (2020). A new species of *Diastema* (Gesneriaceae) from the eastern Andean slopes of Peru. *Edinburgh Journal of Botany*, *77*(1), 89-97. https://doi.org/10.1017/S0960428619000192

Cook, D., Lee, S., Gardner, D., Molyneux, R., Johnson, R., & Taylor, C. (2021). Use of herbarium voucher specimens to investigate phytochemical composition in poisonous plant research. *Journal of Agricultural and Food Chemistry*, *69*(14), 4037-4047. https://doi.org/10.1021/acs.jafc.1c00708

Croat, T. B., Grib, J. J., & Kostelac, C. V. (2013). New Species of *Philodendron* (Araceae) from South America. *Aroideana, 27*, 16-70.

Croat, T., & Graham, J. (2019). En memoria: José Schunke Vigo, famoso coleccionista de plantas peruanas. *Arnaldoa*, *26*(2), 827-830. http://doi.org/10.22497/arnaldoa.262.26220

Damián, A., & Hágsater, E. (2016). *Epidendrum yanatilense* (Orchidaceae: Laeliinae), a new species from Cusco, Peru. *Phytotaxa*, *246*(4), 287-292. http://dx.doi.org/10.11646/phytotaxa.246.4.4

Damian, A., & Karremans, A. P. (2016). A new species of *Stelis* (Orchidaceae: Pleurothallidinae) from Peru. *Systematic Botany*, *41*(2), 293-297. https://doi.org/10.1600/036364416X691876

Damian, A., & Larsen, B. (2017). Three new species of *Lepanthes* (Pleurothallidinae: Orchidaceae) from Amazonas, Peru. *Phytotaxa*, *291*(2), 149-156. https://doi.org/10.11646/phytotaxa.291.2.6

Damian, A., & Salazar, G. A. (2017). A new species and first record of the genus *Pteroglossa* (Orchidaceae: Spiranthinae) from Peru. *Phytotaxa*, *311*(3), 235-244. https://doi.org/10.11646/phytotaxa.311.3.3

Duno de Stefano, R., Janovec, J. P., & Can, L. L. (2013). Three decades to connect the sexes: *Calatola microcarpa* (Icacinaceae), a new species from the southwestern Amazon. *Phytotaxa*, *124*(1), 43-49. https://doi.org/10.11646/phytotaxa.124.1.5

Esquerre-Ibañez, B., & Meerow, A. W. (2020). A new species of *Clinanthus* (Amaryllidaceae: Amaryllidoideae: Clinantheae) from Cordillera de los Tarros, northwest Peru, and notes on related species. *Phytotaxa,* *438*(1), 7–16. https://doi.org/10.11646/phytotaxa.438.1.7

Feio, A. C., Ore-Rengifo, M. I., Berry, P. E., & Riina, R. (2018). Four new species of dragon's blood *Croton* (Euphorbiaceae) from South America. *Systematic Botany*, *43*(1), 212-220. https://doi.org/10.1600/036364418X697111

Fernandez-Fernández, D., Freire, E., Peñafiel, M., Romero, G., Tello, F., & Toapanta, E. (2015). Catálogo de especímenes tipo del Herbario Nacional del Ecuador (QCNE), Museo Ecuatoriano de Ciencias Naturales. *ACI Avances en Ciencias e Ingenierías*, *7*(1), B39-B87. https://doi.org/10.18272/aci.v7i1.227

Fernandez-Hilario, R., & Arteaga, R. (2017). A new species of *Raputia* (Rutaceae) from the Selva Central of Peru. *PhytoKeys*, *89*, 73-84. https://doi.org/10.3897/phytokeys.89.20136

Fernandez-Hilario, R., & Smith, S. D. (2017). A new species of *Saracha* (Solanaceae) from the Central Andes of Peru. *PhytoKeys*, *85*, 31-43. https://doi.org/10.3897/phytokeys.85.12607

Fernandez-Hilario, R., Villanueva, R., & Fack, V. (2020). Redescription and typification of *Dendropanax umbellatus* (Araliaceae). *Phytotaxa*, *447*(1), 51-60. https://doi.org/10.11646/phytotaxa.447.1.5

Fernandez-Hilario, R., Villanueva-Espinoza, R., Fack, V., Shanee, S., & Marcelo-Peña, J. L. (2020). Dos nuevas especies de *Magnolia* de los extremadamente amenazados bosques montanos del norte de Perú. *Brittonia*, *72*(3), 324-336. https://doi.org/10.1007/s12228-020-09607-y

Fernandez-Hilario, R., Goldenberg, R., & Michelangeli, F. A. (2021). Two new species and two new country records for *Meriania* (Melastomataceae) from northern Peru. *Nordic Journal of Botany*, *39*(3), 1-16. https://doi.org/10.1111/njb.02969

Fernandez-Hilario, R., Rojas, R. D. P., Villanueva-Espinoza, R., Lajo, L., Wong, A. A., Paredes-Burneo, D., Pillaca-Huacre, L., Michelangeli, F. A., & Goldenberg, R. (2022). Nine new species and a new country record for *Meriania* (Melastomataceae) from Peru. *Willdenowia*, *52*(1), 39-74. https://doi.org/10.3372/wi.52.52103

Fernandez-Hilario, R., & Reynel, C. (2022). Two new species of *Meliosma* (Sabiaceae) from the premontane and montane forests of the Selva Central of Peru. *Phytotaxa*, *559*(1), 45-54. https://doi.org/10.11646/phytotaxa.559.1.5

Fritsch, P. W. (2017). A new species of *Styrax* (Styracaceae) from Peru. *Novon: A Journal for Botanical Nomenclature*, *25*(3), 282-285. https://doi.org/10.3417/D-16-00009

Fryxell, P. A. (2009). A new South American subsection of *Sida* sect. *Nelavaga* (Malvaceae) with two new species. *Lundellia*, *12*, 15-27. https://doi.org/10.25224/1097-993X-12.1.15

Gonzáles, L. (2014). Actualización del catálogo de la colección de tipos de plantas vasculares en el Herbario Luz María Villarreal de Puga (IBUG). *Ibugana*, *6*, 3-80.

Gonzáles, P., Cano, A., & Robinson, H. (2018) A new genus of *Compositae* (Eupatorieae, Piqueriinae) from Peru, named Centenaria to honour the 100 th anniversary of the Natural History Museum of the National University Mayor of San Marcos.

PhytoKeys, *113*, 69-77. https://doi.org/10.3897/phytokeys.113.28242

Graham, J. G., & Janovec, J. P. (2016). A remarkable new species of *Brunfelsia* (Solanaceae) from the eastern Andes of central Peru. *PhytoKeys*, *75*, 81-91. https://doi.org/10.3897/phytokeys.75.10759

Granda, A., Bartoli, A., & Tortosa, R. D. (2000). Una variedad de *Grindelia tarapacana* (Asteraceae, Astereae) de Perú. *Bol. Soc. Argent. Bot, 35*(1-2), 157-159.

Granda, A. (2009). *Pentacalia poeppigiana* (Asteraceae, Senecioneae), una nueva especie del Perú. *Darwiniana, 47*(2), 321-326.

Hágsater, E. (2018). The genus *Epidendrum*, Part 12. Species new & old in *Epidendrum*. *Icones Orchidacearum*, *16*(1), pl. 1607-1608.

Hágsater, E., & Santiago, E. (2022). The genus *Epidendrum*, Part 15. Species new & old in *Epidendrum*. *Icones Orchidacearum*, *19*(1), pl. 1901-1949.

Hensold, N. (2016). The Andean *Paepalanthus pilosus* complex (Eriocaulaceae): A revision with three new taxa. *PhytoKeys*, *64*, 1-57. https://doi.org/10.3897/phytokeys.64.6864

Huamantupa-Chuquimaco, I., de Lima, H. C., & Cardoso, D. B. (2020). *Tachigali inca* (Caesalpinioideae -Leguminosae), a new species of giant tree from Amazonian forests. *Webbia, 75*(2), 243-250. https://doi.org/10.36253/jopt-9604

Hughes, C. E., Daza, A., & Hawkins, J. A. (2003). A new *Palo Verde* (*Parkinsonia*: Leguminosae: Caesalpinioideae) from Peru. *Kew Bulletin*, *58*, 467-472. https://doi.org/10.2307/4120630

Hughes, C. E., Lewis, G. P., Daza, A., & Reynel, C. (2004). *Maraniona*: A new dalbergioid legume genus (Leguminosae, Papilionoideae) from Peru. *Systematic Botany*, *29*(2), 366-374.

International Union for Conservation of Nature and Natural Resources. (2025). *The IUCN Red List of Threatened Species* (Version 2025). International Union for Conservation of Nature. https://www.iucnredlist.org

Jang, H. D., Park, J. M., Hyun, C. W., Lee, B. Y., & Noh, T. K. (2020). Type specimens of vascular plants in the herbarium of the National Institute of Biological Resources (KB) of the Republic of Korea. *Phytotaxa*, *434*(2), 170-182. https://doi.org/10.11646/phytotaxa.434.2.3

Knapp, S. (2010). New species of *Solanum* (Solanaceae) from Peru and Ecuador. *PhytoKeys,* 1, 33-51. https://doi.org/10.3897/phytokeys.1.659

Kuijt, J. (2011). Thirteen New Species of Neotropical *Viscaceae* (Dendrophthora and Phoradendron). *Novon, 21*(4), 444-462.

Kuijt, J. (2012). Reinstatement and expansion of the genus *Peristethium* (Loranthaceae) 1. *Annals of the Missouri Botanical Garden, 98*(4), 542-577.

Kuijt, J., & Graham, J. G. (2015). Two new species of Loranthaceae from central Peru. *Novon*, *24*(2), 173-178. https://doi.org/10.3417/2013035

Leiva González, S., Rodríguez Rodríguez, E., & Campos de la Cruz, J. (1998). Cinco nuevas especies de *Larnax* (Solanaceae: Solaneae) de los bosques montanos del norte del Perú. Arnaldoa, *5*(2).

León, B., & Monsalve, C. (2006). Anacardiaceae endémicas del Perú. *Revista Peruana de Biología*, *13*(2), 33-34.

Lewis, G. P., Hughes, C. E., Daza, A., Sotuyo, J. S., & Simon, M. F. (2010). Three new legumes endemic to the Marañón Valley, Perú. *Kew Bulletin*, *65*(2), 209-220. https://doi.org/10.1007/s12225-010-9203-6

López, A. (1975). Catálogo de tipos e isotipos del herbarium trujillense. *Boletín de la Sociedad Botánica de La Libertad*, *7*(1-2), 1-16.

López, A., Rodríguez, E. F., & Medina, V. (2003). Catálogo de los tipos e isotipos del herbarium trujillense (HUT). Parte II. *Arnaldoa*, *10*(2), 39-92.

Maas, P. J. M., & Westra, L. Y. T. (2010). New species of Annonaceae from the Neotropics and miscellaneous notes. *Blumea: Biodiversity, Evolution and Biogeography of Plants*, *55*(3), 259-275. https://doi.org/10.3767/000651910X547011

Macbride, J. F. (1930). Spermatophytes, mostly Peruvian II. *Field Museum of Natural History, Botanical Series*, *8*(2), 77-130.

Macbride, J. F. (1959). Araliaceae. En J. F. Macbride (Ed.), *Flora of Peru* (Vol. 8, pp. 8-44). Field Museum of Natural History.

Marcelo-Peña, J. L., & Arroyo, F. (2013). *Magnolia jaenensis* y *M. manguillo*, nuevas especies de Magnoliaceae del norte de Perú. *Brittonia*, *65*(1), 106-112. https://doi.org/10.1007/s12228-012-9280-y

McNeill, J. (2014). Holotype specimens and type citations: General issues. *Taxon*, *63*(5), 1112-1113. http://dx.doi.org/10.12705/635.7

Méndez, O. (2008). Los tipos del herbario "Dr. Alberto Alonso Triana" (ULV), del Jardín Botánico de Villa Clara. *Revista del Jardín Botánico Nacional*, *29*, 139-144.

Méndez, E., & Azpillaga, M. (2013). Tipos de plantas vasculares conservados en el herbario Mendoza Ruiz Leal (MERL). *Boletín de la Sociedad Argentina de Botánica*, *48*(1), 143-160.

Michelangeli, F. A., & Goldenberg, R. (2018). New and noteworthy Melastomataceae from the Yanachaga-Chemillén National Park and surrounding areas in Oxapampa, Pasco, Peru. *Phytotaxa*, *374*(3), 185-210. https://doi.org/10.11646/phytotaxa.374.3.1

Ministerio de Desarrollo Agrario y Riego. (2022). *Instituciones científicas depositarias de material biológico - SERFOR, Ministerio de Desarrollo Agrario y Riego - MIDAGRI*. https://www.datosabiertos.gob.pe/dataset/instituciones-cient%C3%ADficas-depositarias-de-material-biol%C3%B3gico-serfor

Mione, T., Leiva, S., & Yacher, L. (2000). Three new species of *Jaltomata* (Solanaceae) from Ancash, Peru. *Novon*, *10*(1), 53-59.

Montesinos Tubée, D. B. (2014) Three new caespitose species of Senecio (Asteraceae, Senecioneae) from South Peru. *PhytoKeys*, *39*, 1-17. https://doi.org/10.3897/phytokeys.39.7668

Montesinos Tubée, D. B., Cano, A., García-Llatas, L. F., Ju, Y. & Kool, A. (2018). *Paronychia sanchez-vegae* (Caryophyllaceae), a new woody species of Paronychia from North Peru. *Phytotaxa*, *334*(1), 41-48. https://doi.org/10.11646/phytotaxa.334.1.6

Moonlight, P. W., & Tebbitt, M. C. (2016). Two new Peruvian species of *Begonia* (Begoniaceae) and an amended description of *Begonia thyrsoidea*. *Edinburgh Journal of Botany*, *74*(2), 111-122. https://doi.org/10.1017/S0960428616000299

Moonlight, P. W., Reynel, C., & Tebbitt, M. (2017). *Begonia elachista* Moonlight & Tebbitt sp. nov., an enigmatic new species and a new section of *Begonia* (Begoniaceae) from Peru. *European Journal of Taxonomy*, *281*, 1-13. http://dx.doi.org/10.5852/ejt.2017.281

Moonlight, P. W., & Reynel, C. (2018). Two new species of *Begonia* from Andean Peru. *Phytotaxa*, *381*(1), 116-126. https://doi.org/10.11646/phytotaxa.381.1.15

Morales, C., & Villalobos, N. (2004). Tipos de plantas vasculares en el herbario de la Universidad de Costa Rica (USJ). *Lankesteriana*, *4*(3), 187-208. https://doi.org/10.15517/lank.v4i3.21256

Morales, C. (2014). Manejo exitoso de una inundación en el herbario USJ de Costa Rica. *NED Research Journal / Cuadernos de Investigación UNED*, *5*(2), A1-A9.

Mori, S. A., Prance, G. T., & De Zeeuw, C. H. (1990). *Lecythidaceae - Part II, the zygomorphic-flowered New World genera (Couroupita, Corythophora, Bertholletia, Couratari, Eschweilera, & Lecythis). With a study of secondary xylem of Neotropical Lecythidaceae* (Flora Neotropica Monograph No. 21, Pt. II). New York Botanical Garden.

Mori, S. A., Berkov, A., Gracie, C. A., & Hecklau, E. F. (2012). *Tropical plant collecting: From the field to the internet*. TECC Editora.

Muñoz-Schick, M., Morales, V., & Moreira-Muñoz, A. (2012). La colección de tipos de plantas vasculares del Herbario Nacional de Chile (SGO): Análisis histórico, temporal y espacial. *Gayana Botánica*, *69*(1), 123-135.

Nauray, W. A., & Galán de Mera, A. (2008). Ten new species of *Telipogon* (Orchidaceae, Oncidiinae) from southern Peru. *Anales del Jardín Botánico de Madrid*, *65*(1), 73-95.

Nesbitt, M. (2014). Chapter 22. Use of herbarium specimens in ethnobotany. En J. Salick, K. Konchar, & M. Nesbitt (Eds.), *Curating biocultural collections: A handbook* (pp. 313-328). Royal Botanic Gardens, Kew.

Nic Lughadha, E., Walker, B., Canteiro, C., Chadburn, H., Davis, A., Hargreaves, S., Lucas, E., Schuiteman, A., Williams, E., Bachman, S., Baines, D., Barker, A., Budden, A., Carretero, J., Clarkson, J., Roberts, A., & Rivers, M. (2018). The use and misuse of herbarium specimens in evaluating plant extinction risks. *Philosophical Transactions of the Royal Society B*, *374*, 20170402. http://dx.doi.org/10.1098/rstb.2017.0402

Ochoa, C M. (2006). *Hippeastrum ugentii* (Amaryllidaceae: Hippeastreae): a new species from central Peru. *Phytologia, 88*, 176-178. https://doi.org/10.5962/bhl.part.27428

Pedraza-Peñalosa, P., & Luteyn, J. L. (2011). Andean *Vaccinium* (Ericaceae: Vaccinieae): Seven new species from South America. *Brittonia*, *63*(2), 257-275. https://doi.org/10.1007/s12228-010-9164-y

Pennington, T. D. (1997). *The genus Inga: Botany*. Royal Botanic Gardens, Kew.

Pennington, T. D., & Muellner, A. N. (2010). *A monograph of Cedrela (Meliaceae)*. DH Books.

Pennington, T. D. (2016). Systematic treatment of *Trichilia* (Meliaceae) from the Americas. *Phytotaxa*, *259*(1), 18-162. http://dx.doi.org/10.11646/phytotaxa.259.1.5

Peña, J., & Jaramillo, N. (2019). Catálogo de especímenes tipo del Herbario Reinaldo Espinosa (LOJA), Universidad Nacional de Loja. *Bosques Latitud Cero*, *9*(2), 1-19.

Pino, G., & Segovia, G. V. (2018). The Echeverias of the Chillón River Valley, Lima, Perú, including three new taxa. *Cactus and Succulent Journal, 90*(3), 168-185.

Pipoly III, J. J., & Vásquez, R. (1994). Una nueva *Affonsea* (Fabaceae: Mimosoideae: Ingeae) de la Amazonía peruana. *Novon*, *4*(2), 169-171. https://doi.org/10.2307/3391589

Pipoly III, J. J., & Ricketson, J. M. (2006). New species of *Cybianthus martius* (Myrsinaceae) from the Hylaean/Andean interface of Peru. *Novon, 16*(2), 248-253.

Pipoly III, J. J., & Ricketson, J. M. (2018). A new species of *Cybianthus* (Myrsinaceae) from the Cordillera del Cóndor (Ecuador and Peru). *Novon, 26*(1), 56-58.

Pirie, M. D., & Cruz, M. Z. (2004). Three new endemic species of *Cremastosperma* (Annonaceae) from the Río Marañon basin, Amazonas, Peru. *Arnaldoa*, *11*, 7-20.

Prance, G. T. (2014). Three new species of *Licania* (Chrysobalanaceae) from Peru. *Phytokeys*, *42*, 1-10. https://doi.org/10.3897/phytokeys.42.7924

Renner, S. S., & Hausner, G. (2000). New Species of *Siparuna* (Siparunaceae) III. Three new species and one newly ranked entity from Colombia, Ecuador, and Peru. *Novon, 10*, 134-143.

Reynel, C. (1995). New Andean *Zanthoxylum* (Rutaceae) with distinctive vegetative characters. *Novon*, *5*(4), 362-367. https://doi.org/10.2307/3391965

Reynel, C. (2017). *Zanthoxylum* (Rutaceae). *Flora Neotropica Monograph* No. 117. The New York Botanical Garden.

Reynel, C. (2020). Eight new species of Neotropical *Zanthoxylum* (Rutaceae). *Novon: A Journal for Botanical Nomenclature*, *28*(1), 1-14. https://doi.org/10.3417/2019400

Reynel, C., Terreros, S., & Palacios, S. (2020). *El herbario de la Facultad de Ciencias Forestales de la UNALM*. Herbario de la Facultad de Ciencias Forestales, Universidad Nacional Agraria La Molina.

Rivera, N. M., Pederneiras, L. C., Parizaca, A. D., & Castillo, J. A. (2020). A new species and a new record of *Ficus* sect. *Pharmacosycea* (Moraceae) from Peru. *Systematic Botany*, *45*(1), 91-95.

https://doi.org/10.1600/036364420X15801369352342

Rodríguez, E. F., Arroyo, S. J., & López, A. (2009). Adiciones al catálogo de los tipos e isotipos del Herbarium Trujillense (HUT). *Arnaldoa*, *16*(1), 41-52.

Rodríguez, E. F. (2006). Una nueva especie de *Markea* (Solanaceae: Juanulloeae) para el Perú. *Arnaldoa*, *13*(2), 306-313.

Rojas, G. R., & Clark, J. L. (2015). *Nautilocalyx rugosus* (Gesneriaceae), a new species from the Río Cenepa watershed (Amazonas, Peru). *Journal of the Botanical Research Institute of Texas*, *9*(2) 345-349.

Rudd, V. E. (1969). *Ormosia schunkei*, another new species from Peru. *Phytologia*, *18*(6), 337-338.

Santamaria-Aguilar, D. (2015). Validation of two names and the description of a new species of *Freziera* (Pentaphylacaceae) from the Peruvian Andes. *Harvard Papers in Botany*, *20*(1), 69-76. https://doi.org/10.3100/hpib.v20iss1.2015.n5

Santamaria-Aguilar, D., & Monro, A. K. (2019). Compendium of *Freziera* (Pentaphylacaceae) of South America, including eleven new species and the typification of 22 names. *Kew Bulletin*, *74*(14), 1-47. https://doi.org/10.1007/s12225-018-9790-1

Särkinen, T., Gonzáles, P., & Knapp, S. (2015). Four new non-spiny *Solanum* (Solanaceae) species from South America. *PhytoKeys*, 44, 39. https://doi.org/10.3897/phytokeys.44.8693

Simpson, D. R. (1982). New species from South America. III. *Phytologia*, *51*(5), 303-322.

Stern, S. R. (2014). A new species of spiny *Solanum* (Solanaceae) from Peru. *PhytoKeys*, *39*, 27-34. https://doi.org/10.3897/phytokeys.39.7513

Taylor, C. M. (2001). Overview of the Neotropical genus *Notopleura* (Rubiaceae: Psychotrieae), with the description of some new species. *Annals of the Missouri Botanical Garden*, *88*(3), 478-515. https://doi.org/10.2307/3298587

Taylor, C. M. (2015). *Rubiacearum Americanarum Magna Hama* Pars XXXIV: The new group *Palicourea* sect. *Tricephalium* with eight new species and a new subspecies (Palicoureeae). *Novon: A Journal for Botanical Nomenclature*, *24*(1), 55-95. http://dx.doi.org/10.3417/2015001

Taylor, C. M. (2016). *Rubiacearum Americanarum Magna Hama* Pars XXXI: More new Neotropical species and morphological notes for *Psychotria* (Psychotrieae). *Novon: A Journal for Botanical Nomenclature*, *24*(4), 413-434. http://dx.doi.org/10.3417/2015021

Tebbitt, M. C., Reynel, C., Huaylla Limachi, L., & Martín, C. M. (2019). A taxonomic revision of *Begonia* (Begoniaceae). *Edinburgh Journal of Botany*, *77*(1), 127-144. https://doi.org/10.1017/S0960428619000295

Treviño, I., Sotomayor, D., Cueva, M., Perez, R., Cáceres, L., Ramos, D., Ortiz, E., & Quipuscoa, V. (2012). Herbarium Arequepense (HUSA): Informatización y representatividad de su colección. *Revista Peruana de Biología*, *19*(2), 219-222.

Trujillo, D. (2014). Annotated list of Orchidaceae types of the Bennett collection at the Forestry Herbarium MOL. *Lankesteriana*, *14*(1), 1-88.

Turland, N. J., Wiersema, J. H., Barrie, F. R., Greuter, W., Hawksworth, D. L., Herendeen, P. S., Knapp, S., Kusber, W.-H., Li, D.-Z., Marhold, K., May, T. W., McNeill, J., Monro, A. M., Prado, J., Price, M. J., & Smith, G. F. (2018). *International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017* (Regnum Vegetabile 159). Koeltz Botanical Books. https://doi.org/10.12705/Code.2018

van der Werff, H., & Nishida, S. (2010). *Yasunia* (Lauraceae), a new genus with two species from Ecuador and Peru. *Novon: A Journal for Botanical Nomenclature*, *20*(4), 493-502. https://doi.org/10.3417/2010030

van der Werff, H. (2013a). Two new species of *Tachigali* (Leguminosae) from Brazil and Peru. *Kew Bulletin, 68*, 295-299.

van der Werff, H. (2013b). Studies in Andean *Ocotea* (Lauraceae) II. Species with hermaphrodite

flowers and densely pubescent lower leaf surfaces, occurring above 1000 meters in altitude. *Novon*, 22(3), 336-370.

van der Werff, H. (2014). Studies in Andean *Ocotea* (Lauraceae) III. Species with hermaphroditic flowers and moderately pubescent or glabrous leaves occurring above 1000 m in altitude. *Novon, 23*(3), 336-380.

Vásquez, R. (2009). Sinopsis del género *Sloanea* L. (Elaeocarpaceae) en el Perú. *Arnaldoa*, *16*(2), 37-63.

Vásquez, R., & Rojas, R. (2009). Una nueva especie de *Chrysochlamys* (Clusiaceae: Clusioideae: Clusieae) del Perú. *Arnaldoa*, *16*(2), 23-28.

Vázquez-García, J. A., Muñiz-Castro, M. A., De Castro-Arce, E., Murgia, R., Nuño, A. T., & Cházaro-B., M. J. (2012). Twenty new Neotropical tree species of *Magnolia* (Magnoliaceae). In E. Salcedo, E. Hernández, J. A. Vázquez-García, T. Escoto-García, & N. Díaz-Echevarría (Eds.), *Recursos Forestales del Occidente de México: Diversidad, Producción, Manejo, Aprovechamiento y Conservación* (pp. 91-130). Universidad de Guadalajara, CUCBA-CUCEI.

Vásquez, R., & Monteagudo, A. L. (2013). Una nueva especie de *Hasseltia* (Salicaceae) del Perú. *Arnaldoa*, *20*(2), 253-258.

Vásquez, R., Rojas, R. D. P., Monteagudo, A. L., Valenzuela, L., & Huamantupa, I. (2018). *Catálogo de los árboles del Perú*. Revista Q'EUÑA.

Velarde, O. (1968). Catálogo de isótipos de la colección de plantas peruanas de A. Weberbauer que se conserva en el herbario de la Universidad Agraria del Perú. *Raimondiana*, *1*, 89-104.

Velarde, O. (1969). Catálogo de isótipos de la colección de plantas peruanas de A. Weberbauer que se conserva en el herbario de la Universidad Agraria del Perú. *Raimondiana*, *2*, 115-147.

Villanueva, R., Fernandez, R., & Pillaca, L. (2020). Two new species of *Aphelandra* (Acanthaceae) with a rugose corolla from central Peru. *Phytotaxa*, *459*(3), 197-208. https://doi.org/10.11646/phytotaxa.459.3.1

Villanueva, R., Wasshausen, D., & Fernandez, R. (2021). *Dicliptera mercedesiae*, a new species of the genus *Dicliptera* (Acanthaceae) from Peru. *Phytotaxa*, *518*(1), 36-44. https://doi.org/10.11646/phytotaxa.518.1.4

Vizoso, M. (2019). *Catalogación, análisis y validación de los tipos nomenclaturales del herbario de la Universidad de Granada* [Tesis doctoral, Universidad de Granada]. Universidad de Granada.

White, D. M. (2020). A new variety of *Erythroxylum ulei* from the Cordillera Escalera of Peru (*Archerythroxylum*, Erythroxylaceae). *Phytotaxa, 449*(3), 279-286. https://doi.org/10.11646/phytotaxa.449.3.6

Williams, L. O. (1965). Tropical American plants, VI. *Fieldiana: Botany*, *31*(2), 11-48.

Willis, F., Moat, J., & Paton, A. (2003). Defining a role for herbarium data in Red List assessments: A case study of *Plectranthus* from eastern and southern tropical Africa. *Biodiversity & Conservation*, *12*, 1537-1552. https://doi.org/10.1023/A:1023679329093

Willis, C., Ellwood, E., Primack, R., Davis, C., Pearson, K., Gallinat, A., Yost, J., Nelson, G., Mazer, S., Rossington, N., Sparks, T., & Soltis, P. (2017). Old plants, new tricks: Phenological research using herbarium specimens. *Trends in Ecology & Evolution*, *32*(7), 531-546. https://doi.org/10.1016/j.tree.2017.03.015

Wurdack, K. J., & Farfan-Rios, W. (2017). *Incadendron*: A new genus of Euphorbiaceae tribe Hippomaneae from the sub-Andean cordilleras of Ecuador and Peru. *PhytoKeys*, *85*, 69-86. https://doi.org/10.3897/phytokeys.85.14757