European Journal of Taxonomy 886: 1–92
https://doi.org/10.5852/ejt.2023.886.2201
ISSN 2118-9773
www.europeanjournaloftaxonomy.eu
2023 · Cardiel J.M. *et al.*

Monograph

Catalogue and red list of *Acalypha* L. (Euphorbiaceae) from South America

José María CARDIEL [1,*], Pablo MUÑOZ-RODRÍGUEZ [2], Álvaro GONZÁLEZ-BERDASCO [3] & Iris MONTERO-MUÑOZ [4]

[1,3] Departamento de Biología, Facultad de Ciencias, Universidad Autónoma de Madrid, calle Darwin 2, Madrid, 28049, Spain.
[1] Centro de Investigación en Biodiversidad y Cambio Global (CIBC-UAM), Universidad Autónoma de Madrid, calle Darwin 2, Madrid, 28049, Spain.
[2] Department of Biology, University of Oxford, South Parks Road, OX1 3RB, UK.
[2] Departamento de Biodiversidad, Ecología y Evolución, Universidad Complutense de Madrid, Ciudad Universitaria, Madrid, 28040, Spain.
[4] Real Jardín Botánico, RJB-CSIC, Plaza de Murillo 2, Madrid, 28014, Spain.

[*] Corresponding author: jm.cardiel@uam.es
[2] Email: pablo.munoz@ucm.es
[3] Email: alvarogb61@gmail.com
[4] Email: imontero@rjb.csic.es

Abstract. A checklist with preliminary conservation assessments of native South American species of *Acalypha* is presented. This work is supported by the study of ca 6500 herbarium specimens and an in-depth literature review. As a result, 87 species (83 native and four introduced) and eight subspecies are accepted, and a further 395 names are considered synonyms. Geographical distribution, habitat, and altitudinal range for all species are also indicated. Brazil is the richest country in number of species of *Acalypha* (40), followed by Peru (32), Bolivia (29), Colombia and Ecuador—including Galapagos Islands—(24), Venezuela (18), Argentina (17), Paraguay (13), Guyana (8), Uruguay (5), French Guiana (4), and Suriname (3). The presence of the genus *Acalypha* in Chile is reported for the first time, alongside new country records of *A. poiretii* in Peru and *A. venezuelica* in Guatemala. The specimens previously identified as *A. plicata* from Colombia and Venezuela, are here considered belonging to *A. cuspidata.* The red list provided follows IUCN criteria and includes 39 species and three subspecies, 47% of total native species of *Acalypha* in South America: 16 species and one subspecies Critically Endangered (nine of them probably extinct), 15 species and two subspecies Endangered, and eight species Vulnerable.

Keywords. Biodiversity, checklist, conservation assessment, IUCN, threatened species.

Cardiel J.M., Muñoz-Rodríguez P., González-Berdasco Á. & Montero-Muñoz I. 2023. Catalogue and red list of *Acalypha* L. (Euphorbiaceae) from South America. *European Journal of Taxonomy* 886: 1–92. https://doi.org/10.5852/ejt.2023.886.2201

Introduction

Acalypha L. is, with ca 500 accepted species, the third largest genus in the family Euphorbiaceae Juss. after *Euphorbia* L. (ca 2000 species.) and *Croton* L. (ca 1200 species) (Riina *et al.* 2013; Berry *et al.* 2005). *Acalypha* comprises mainly small trees, shrubs and subshrubs, and also some herbs. Species of *Acalypha* grow in a wide variety of habitats, predominantly in lowland tropical and subtropical rainforests and montane forest, but appear also in savannahs, seasonal forest, dry forest, and shrublands, ranging from sea level to ca 4000 metres (Cardiel & Muñoz-Rodríguez 2012).

Species of *Acalypha* are easily recognised by their simple, alternate, stipulate leaves; small, unisexual, monochlamydeous flowers with sepals, usually grouped in spicate inflorescences (sometimes racemose or panicle-like); male flowers 4-merous with pendulous anthers, vermiform at anthesis; female flowers usually sessile with calyx 3(–5) partite, showy laciniate styles, and subtending bracts usually becoming foliaceous in fruit. The pendant anthers that become twisted after dehiscence; the small, finely sculptured pollen grains with brevicolporate apertures, and the presence and variability of epidermal crystals, appear to be synapomorphies of the genus within Euphorbiaceae (Nowicke & Takahashi 2002; Sagun *et al.* 2006; Cardiel *et al.* 2020; Levin *et al.* 2022).

Acalypha has traditionally been classified in the Euphorbiaceae subfamily Acalyphoideae Beilschm., which includes 99 genera and 1865 species (Hayden & Hayden 2000; Wurdack *et al.* 2005). Studies using DNA barcodes strongly support the monophyly of Acalyphoideae (e.g., Wurdack *et al.* 2005), but the relationship between groups within the subfamily is not well understood and further studies are needed. Nevertheless, all studies to date retrieve a strongly supported monophyletic *Acalypha* (Tokuoka 2007; Wurdack & Davis 2009; Levin *et al.* 2022). The most recent proposal for an infrageneric classification of *Acalypha* (Levin *et al.* 2022) includes four subgenera: three subgenera already recognised in the previous classification by Pax & Hoffmann (1924)—*Acalypha*, *Androcephala* Pax & K.Hoffm., and *Linostachys* (Klotzsch ex Schltdl.) Pax & K.Hoffm.—and a fourth one, *Hypandrae* (Müll.Arg.) Hurus, proposed by Levin and colleagues based on molecular data. Only the subgenera *Acalypha* and *Linostachys* are present in the American continent, whereas *Androcephala* and *Hypandrae* are restricted to Africa.

Acalypha has a predominantly pantropical distribution, with about 16 herbaceous species reaching cooler temperate regions in the northern hemisphere. The greatest morphological diversity is found in Africa, where the genus most likely originated (Levin *et al.* 2005)—only on this continent are the four currently recognized subgenera present—whereas the largest number of species is found in the Americas with more than half of the species in the genus. The Americas are home to ca 254 species of *Acalypha* (Ulloa-Ulloa *et al.* 2017), compared to only 65 species in mainland Africa (Cardiel & Montero-Muñoz 2018), 49 in the West Indian Ocean Region—including Madagascar—(Montero-Muñoz 2021; Montero-Muñoz *et al.* 2022), 28 in the Malesian Region (Sagun *et al.* 2010), 18 in China (Huaxing & Gilbert 2008), eight in Australia (Foster 1994), and 16 in the Pacific Ocean islands (Cardiel *et al.* 2022a).

The last global taxonomic study of *Acalypha* dates back a century (Pax & Hoffmann 1924) and included 390 species. Since then, 160 species and 36 subspecies or varieties new to science have been described (Cardiel *et al.* 2022a), and Pax and Hoffmann's work is now outdated. More recent studies have focussed on *Acalypha* at a regional or national scale (see below), and many species and geographical regions still need a comprehensive taxonomic study.

Although some species are well known, many species remain poorly known, especially in continental Africa, Western and Southern Asia, and in the Pacific islands. In the American continent, comprehensive revisions are still pending for Mexico and the Caribbean Region, where recent global checklists of vascular plants record ca 110 and 40 species of *Acalypha* respectively (Acevedo-Rodríguez & Strong 2012; Villaseñor 2016). In contrast, the genus is better known in the United States, several Central

American countries, and South America. In the United States, 18 mainly herbaceous species have been recorded, with one of them, *Acalypha rhomboidea* Raf., also present in south-eastern Canada (Levin 2016). In Central America, with ca 50 species, the genus has been treated in the national floras of Costa Rica (Burger & Huft 1995), Guatemala (Standley & Steyermark 1949), Nicaragua (Levin 2001), and Panama (Webster 1968; Webster & Huft 1988), and in the national catalogues or checklist of Belize (Balick *et al.* 2000), El Salvador (Calderon & Standley 1941) and Honduras (Nelson 2008).

In South America, *Acalypha* knowledge has increased steadily during the last 25 years through national and regional floristic treatments and checklists, and through taxonomic revisions and synopses of the genus, including recent studies by the authors of this paper. Relevant works have been published for Argentina (Bacigalupo & Mulgura 1999; Cardiel & Muñoz-Rodríguez 2015), Bolivia (Cardiel *et al.* 2013b; Cardiel 2014), Brazil (Cardiel 2010; Cardiel *et al.* 2022b), Colombia (Cardiel 1995a; Murillo 2004), continental Ecuador (Webster 1999; Cardiel & Muñoz-Rodríguez 2012), Galapagos Islands (Seberg 1984), Guianas (Gillespie 1993, 1997), Paraguay (Cardiel & Muñoz-Rodríguez 2015), Peru (Cardiel *et al.* 2013b), the South Cone (Berry 2007; Zuloaga *et al.* 2019), Uruguay (Cardiel & Muñoz-Rodríguez 2015), and Venezuela (Cardiel 1999b; Armbruster *et al.* 2007; Hokche *et al.* 2008; Levin 1999, 2008). The checklist of American vascular plants by Ulloa-Ulloa *et al.* (2017) listed 112 species of *Acalypha* from South America (excluding the Galapagos Islands). Other relevant studies for South American species of *Acalypha* are the nomenclatural revision of *Acalypha* sect. *Communes*—a group of species widely distributed in the South American South Cone (Cardiel *et al.* 2013a)—, and the global review of *Acalypha* subgenus *Linostachys* (Muñoz-Rodríguez *et al.* 2014).

Here, we present the first continental-level checklist of *Acalypha* of South America, report preliminary conservation assessments of all native species, and provide a red list of threatened species. This work is the result of three decades of taxonomic work on South American species of *Acalypha*, started in the early 1990s in Colombia and completed with the publication of a revision of the Brazilian species in 2022. We present updated information of all South American species, with synonyms, general distribution, habitat and habit, as well as indicate species that are known from only one or very few specimens and are in urgent need of taxonomic study.

Material and methods

This work is based on the review of the most recent literature on *Acalypha* in South America and the study of ca 6500 South American herbarium collections of *Acalypha* (ca 15 000 specimens) from the following 120 herbaria: AAU, ALCB, ASE, B, BAF, BAH, BBS, BHCB, BM, BOTU, BR, C, CAS, CAY, CEN, CEPEC, CESJ, CGE, CGMS, COL, COR, CORD, CPAP, CRI, CTES, DAV, EAC, EAFM, ESA, F, FLOR, FUEL, FURB, G, GB, G-DC, GH, HAS, HBG, HCF, HEPH, HERBAM, HFSL, HJ, HPBR, HRCB, HSB, HSJRP, HST, HTSA, HUA, HUEFS, HUEM, HUESB, HUFU, HVASF, IAC, ICN, INPA, IPA, IRAI, JAUM, JE, JOI, JPB, K, L, LD, LE, LIL, LPB, LZ, M, MA, MAC, MAUAM, MBM, MBML, MEDEL, MEXU, MFS, MO, MOSS, NY, P, PACA, PEUFR, PSO, QAP, QCA, QCNE, RB, RON, ROST, S, SALLE, SEL, SI, SP, SPF, SPFW, SPSF, TEPB, U, UB, UC, UEC, UESC, UFACPZ, UFP, UFRN, UPCB, UPS, US, USM, VEN, VIES, W, WAG, and WU. Acronyms of herbaria according to Index Herbariorum (Thiers continuously updated). Physical or digital specimens were examined as well as the protologues and type specimens of almost all the species and their synonyms. Several type specimens were also studied through JSTOR Global Plants website (https://plants.jstor.org/).

Data resources

All information gathered for this work, including the detailed information of all the specimens studied, is available online at the regularly updated *Acalypha Taxonomic Information System* website, www.acalypha.es (Cardiel *et al.* 2022a). Voucher specimens are listed for each species in this article,

and the complete dataset, including information about ca 35 000 *Acalypha* specimens worldwide, is available on the project website. The complete South American specimen dataset is also available on GBIF, https://doi.org/10.15468/yhsqkx (Cardiel 2020).

Structure of the catalogue

We list accepted species in alphabetical order, including author and original publication. For each species, we provide a list of all homotypic and heterotypic synonyms, in chronological order of publication. We include a complete list of names associated with American species of *Acalypha* in Appendix 1. We also indicate: the habit of the species (tree, shrub, subshrub, or herb), and whether it is native or likely introduced. We indicate the general geographical distribution, the habitat and altitudinal range, and the distribution in South America (listing the countries where there are records). We provide one voucher collection from each country where the species inhabits (when possible, a representative collection with duplicates in several herbaria). When less than five collections are known, we list all of them. Follows, for each species, a list of selected references that provide more detailed and updated information. Finally, for the native species, we provide a provisional conservation status. This information is based on specimens we have studied and identified first hand. We include any other relevant information, if required, in the remarks section.

Habitat, vegetation types and conservation assessments

Habitat typology and vegetation types follow the biogeographical regions defined by Griffith *et al.* (1998), and specifically level I and level II of their proposed ecological classification. For the species on the Galapagos Islands, we follow the habitat description provided by Seberg (1984).

Preliminary conservation assessments indicate the IUCN category and the criteria and sub-criteria followed, whereas detailed information and justifications are included in Appendix 2. Conservation assessments are based on the IUCN Red List Categories and Criteria (IUCN 2017). We calculated area of occupancy (AOO) and extent of occurrence (EOO) with GeoCAT, a geospatial conservation assessment tool (Bachman *et al.* 2011; http://geocat.kew.org/), using a 2 × 2 km grid cell size as recommended by IUCN (2012, 2017).

Results

We list 87 accepted species and eight subspecies of *Acalypha* from South America. Of them, 83 are native and four are cultivated or naturalised. We also list 395 synonyms, including 31 nomen nudum and 19 invalidly published names (Appendix 1). Five other species are considered doubtful and excluded. Following the subgeneric classification by Levin *et al.* (2022), 78 species belong to subgenus *Acalypha*, and nine species belong to subg. *Linostachys* (*A. castroviejoi* Cardiel, *A. chocoana* Cardiel, *A. inaequilatera* Cardiel, *A. longipetiolata* Cardiel, *A. muelleriana* Urb., *A. mutisii* Cardiel, *A. platyphylla* Müll.Arg., *A. salicifolia* Müll.Arg., and *A. villosa* Jacq.). All species of *Linostachys* are native, and they represent 32% of the 28 accepted species of *Linostachys* according to Muñoz-Rodríguez *et al.* (2014).

Acalypha is present in all the First Level Ecoregions proposed and mapped by Griffith *et al.* (1998) except Southern Andes and Monte-Patagonian (Table 1). The largest number of species of *Acalypha* is in the Eastern Highlands ecoregion (31 species), followed by Northern Andes (28), and Central Andes (28); the ecoregions with the lowest number of species are Gran Chaco (9) and Pampas (7). Among the Second Level Ecoregions, Atlantic Forest has the greatest diversity of species of *Acalypha* (23), followed by Northern Andean Highlands (20), Yungas (18), and Cerrado (17).

South American species of *Acalypha* appear from sea level up to 4100 m, but they more frequently inhabit lowland areas: 68 species are found from sea level to 1000 m, and 46 species grow from 1000 to 2000 m.

Table 1 (continued on next page). Native South American species of *Acalypha* L. by ecoregions (level I ecoregions are given in bold, level II ecoregions are in regular font). Ecoregions according to Griffith *et al.* (1998). Endemic species of each level II ecoregion are given in bold, endemic species of each level I ecoregion are indicated by asterisk.

Ecoregion	Species	
Northern Andes		
Caribe / Pacific Lowland Plains and Hills	*A. alopecuroidea*	***A. longipetiolata***
	A. arvensis	*A. macrostachya*
	A. carrascoana	*A. mutisii*
	A. chocoana	*A. schiedeana*
	A. cuneata	***A. subcastrata***
	*A. cuspidata**	***A. tenuifolia***
	A. delicata	*A. villosa*
	A. diversifolia	
Venezuelan Coastal Andes	*A. alopecuroidea*	*A. cuspidata**
	A. arvensis	*A. villosa*
Northern Andean Highlands	*A. arvensis*	*A. mutisii*
	A. castroviejoi	***A. padifolia***
	*A. cuspidata**	***A. platyphylla***
	A. dictyoneura	*A. salicifolia*
	A. diversifolia	*A. schiedeana*
	A. glandulosa	*A. setosa*
	A. inaequilatera	***A. stellata***
	A. infesta	***A. venezuelica***
	A. macrostachya	*A. villosa*
	A. muelleriana	***A. websteri***
Central Andes		
Central High Andes	***A. argomuelleri***	*A. lycioides**
	A. aronioides	***A. pedemontana***
	A. beckii	***A. peruviana***
	A. boliviensis	***A. reflexa***
	A. hibiscifolia	*A. salicifolia*
	A. infesta	
Yungas	*A. arvensis*	*A. poiretii*
	A. communis* subsp. *saltensis	***A. psamofila***
	A. cuneata	***A. salicina***
	A. diversifolia	***A. schreiteri***
	*A. lycioides**	***A. simplicistyla***
	A. machiensis	*A. stachyura*
	A. macrostachya	***A. stenoloba***
	A. neeana	*A. stricta*
	A. plicata	*A. villosa*
Amazonian-Orinocan Lowland		
Amazon Irregular Plains and Piedmont	*A. cuneata*	***A. schultesii***
	A. diversifolia	*A. stachyura*
	A. macrostachya	*A. stricta*
	*A. scandens**	*A. villosa*
Guianan Moist Shield	*A. cuneata*	*A. macrostachya*
	A. diversifolia	*A. scandens**

Table 1 (continued). Native South American species of *Acalypha* L. by ecoregions (level I ecoregions are given in bold, level II ecoregions are in regular font). Ecoregions according to Griffith *et al.* (1998). Endemic species of each level II ecoregion are given in bold, endemic species of each level I ecoregion are indicated by asterisk.

Ecoregion	**Species**	
Amazon and Coastal Lowlands	***A. acuminata***	*A. diversifolia*
	A. arvensis	*A. poiretii*
	A. cuneata	
Eastern Highlands		
Guianan Highlands	*A. villosa*	
Cerrados	*A. amblyodonta* *	*A. diversifolia*
	A. amphigyne	*A. gracilis*
	A. arvensis	*A. hassleriana*
	A. brasiliensis subsp. *brasiliensis* *	*A. multicaulis*
	A. brasiliensis subsp. *psilophylla* *	*A. poiretii*
	A. chorisandra	*A. senilis*
	A. clausenii *	*A. variabilis*
	A. communis subsp. *apicalis*	*A. velamea*
	A. communis subsp. *communis*	*A. villosa*
	A. digynostachya	
Caatinga	*A. amblyodonta* *	*A. multicaulis*
	A. brasiliensis	*A. poiretii*
	A. inselbergensis	*A. villosa*
Atlantic Forests	***A. accedens***	***A. klotzschii***
	A. almadinensis	*A. macrostachya*
	A. amblyodonta *	***A. macularis***
	A. arvensis	***A. martiana***
	A. brasiliensis* subsp. *asterotricha	*A. multicaulis*
	A. brasiliensis subsp. *brasiliensis* *	***A. peckoltii***
	A. brasiliensis subsp. *psilophylla* *	***A. pohliana***
	A. clausenii *	*A. poiretii*
	A. digynostachya	***A. radicans***
	A. dimorpha	***A. uleana***
	A. diversifolia	*A. variabilis*
	A. gracilis	*A. villosa*
	A. herzogiana	
Gran Chaco		
Western Dry Chaco	*A. communis* subsp. *comminis*	*A. variabilis*
	A. herzogiana	
Humid Chaco	***A. chaquensis***	*A. gracilis*
	A. communis subsp. *apicalis*	*A. hassleriana*
	A. communis subsp. *communis*	*A. multicaulis*
	A. communis* subsp. *paraguariensis	*A. senilis*
	A. digynostachya	*A. variabilis*
Pampas		
Northern Rolling Pampas	***A. apetiolata***	*A. senilis*
	A. communis* subsp. *tracheliifolia	*A. variabilis*
	A. multicaulis	*A. velamea*
	A. sehnemii	

Nineteen species appear above 2000 m above sea level, and five (*A. argomuelleri* Briq., *A. aronioides* Pax & K.Hoffm., *A. padifolia* Kunth, *A. peruviana* Müll.Arg., and *A. plicata* Müll.Arg.) grow above 3000 m in the high Andes of Bolivia, Ecuador, and Peru. To our knowledge, the specimen collected at the highest altitude (in America or elsewhere) is one *A. plicata* found in the municipality of Quime, in the Bolivian Andes, at 4100 m.

Most South American species of *Acalypha* are woody, mainly shrubs or subshrubs, although 18 species reach tree size (up to 12 m high in *A. platyphylla*, up to 10 m in *A. macrostachya* Jacq. and *A. peruviana*, and up to 8 m in *A. diversifolia* Jacq. and *A. stachyura* Pax). Nine species are herbs, and only one, *A. scandens* Benth., is a climbing bush.

In terms of conservation, our preliminary assessments indicate that 39 species and three subspecies are subject to some degree of threat (Appendix 2): 16 species and one subspecies are Critically Endangered (CR), nine of them probably extinct; 15 species and two subspecies are Endangered (EN), and eight species are Vulnerable (VU). Nine species and two subspecies are Near Threatened (NT), and 33 species and three subspecies are Less Concern (LC).

Catalogue of Acalypha of South America

Class Magnoliopsida Brongn.
Order Malpighiales Mart.
Family Euphorbiaceae Juss.
Genus ***Acalypha*** L.

1. ***Acalypha abingdonii*** Seberg

Nordic Journal of Botany 4 (2): 178 (Seberg 1984).

Voucher specimens

ECUADOR – **Galapagos Islands** • *Hamann, O. 1774*; MA, C.

Habit

Subshrub. Native.

Habitat

Dry season deciduous steppe forest, alt. 0–350(–540) m.

Distribution

Galapagos Islands.

Reference

Seberg (1984).

Provisional conservation status

CR B2ab(ii,iii,iv).

2. ***Acalypha accedens*** Müll.Arg.

Linnaea 34 (1): 35 (Müller Argoviensis 1865).

≡ *Ricinocarpus accedens* (Müll.Arg.) Kuntze; =*Acalypha weddelliana* Baill. ≡ *R. weddellianus* (Baill.) Kuntze; = *A. estrellana* Baill.; = *A. brachyandra* Baill. ≡ *A. accedens* var. *brachyandra* (Baill.) Müll. Arg. ≡ *R. brachyandrus* (Baill.) Kuntze; = *A. tenuiramea* Müll.Arg. ≡ *R. tenuirameus* (Müll.Arg.) Kuntze; = *A. accedens* var. *viridis* Müll.Arg.; = *A. omissa* Pax & K.Hoffm.

Voucher specimens

BRAZIL – **Minas Gerais** • *Krieger, P.L. 8856*; CESJ, ESA, RB, UB.

Habit

Shrub. Native.

Habitat

Eastern Highlands: Atlantic Forests, alt. 10–600 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

EN B2ab(ii,iii).

3. ***Acalypha acuminata*** Benth.

Hooker's Journal of Botany and Kew Garden Miscellany 6: 329 (Bentham 1854).

≡ *Ricinocarpus acuminatus* (Benth.) Kuntze.

Voucher specimens

BRAZIL – **Amazonas** • *Krukoff, B.A. 8416*; K, MO, NY, P.

Habit

Shrub or small tree to 5 m high. Native.

Habitat

Amazonian-Orinocan Lowland: Amazon and Coastal Lowlands, alt. 200–300 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

LC.

4. ***Acalypha almadinensis*** A.A.C. Sousa

Systematic Botany 44 (2): 346 (Cordeiro de Sousa *et al.* 2019).

Voucher specimens

BRAZIL – **Minas Gerais** • *Lombardi, J.A. 5765*; BHCB • *Salino, A. 9033*; BHCB, SP. – **Bahia** • *Jardim, J.G. 986*; CEPEC, SP.

Habit

Shrub. Native.

Habitat

Eastern Highlands: Atlantic Forests, alt. 490–800 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

CR B2ab(ii,iii,iv).

Remarks

This species is only known from the three aforementioned collections.

5. ***Acalypha alopecuroidea*** Jacq.

Collectanea 3: 196 (Jacquin 1789).

≡ *Ricinocarpus alopecuroides* (Jacq.) Kuntze; = *Acalypha aristata* Kunth ≡ *R. aristatus* (Kunth) Kuntze.

Voucher specimens

BRAZIL – **Goias** • *Gardner, G. 3976*; BM, K.

COLOMBIA – **Cundinamarca** • *Fernández Alonso, J.L. 8153*; COL, MA.

ECUADOR – **Guayas** • *Valverde, F.M. 334*; COL, US.

PERU – **San Martín** • *Klug, G. 4402*; BM, F, GH, K, MO, NY, S, US.

VENEZUELA – **Zulia** • *Steyermark, J.A 100207*; DAV, VEN.

Habit

Herb. Native in the Caribbean coast of Colombia and Venezuela, probably introduced in Brazil, Ecuador, and Peru.

Habitat

Northern Andes: Caribe/Pacific Lowland Plains and Hills, and Venezuelan Coastal Andes, alt. 0–500(–1100) m.

Distribution

Native of Central America and Caribbean Region, probably introduced in the United States and Northern and Central South America (Brazil, Colombia, Ecuador, Peru, and Venezuela).

References

Cardiel & Muñoz-Rodríguez (2012), Cardiel *et al.* (2013b, 2022b).

Provisional conservation status

LC.

6. ***Acalypha amblyodonta*** (Müll.Arg.) Müll.Arg.

Flora Brasiliensis 11 (2): 365 (Müller Argoviensis 1874).

≡ *Acalypha cuspidata* var. *amblyodonta* Müll.Arg. ≡ *Ricinocarpus amblyodontus* (Müll.Arg.) Kuntze; = *A. dupraeana* Baill.; = *A. dupraeana* var. *hilarii* Baill.; = *A. dupraeana* var. *gaudichaudii* Baill. ≡ *A. amblyodonta* var. *gaudichaudii* (Baill.) Müll.Arg.; = *A. cuspidata* var. *oxyodonta* Müll.Arg. ≡ *A. oxyodonta* (Müll.Arg.) Müll.Arg. ≡ *R. oxyodontus* (Müll.Arg.) Kuntze; = *A. amblyodonta* var. *villosa* Müll.Arg.; = *A. amblyodonta* var. *repanda* Müll.Arg.; = *A. amblyodonta* var. *hispida* Müll. Arg.; = *A. lagoensis* var. *grandifolia* Chodat & Hassl.

Voucher specimens

ARGENTINA – **Salta** • *Maruñak, V. 481*; MO, P.

BOLIVIA – **Santa Cruz** • *Nee, M. 47820*; MA, NY.

BRAZIL – **São Paulo** • *Bernacci, L.C. 1495*; HRCB, IAC, MAUAM, SP, UEC.

PARAGUAY – **Alto Paraguay** • *Hassler, E. 2383*; BM, GH, K, NY, P, W.

Habit

Subshrub or shrub. Native.

Habitat

Eastern Highlands: Cerrados, Caatinga, and Atlantic Forests, alt. 200–1000(–1500) m.

Distribution

Argentina, Bolivia, Brazil, Paraguay, and Peru.

References

Cardiel (2010), Cardiel *et al.* (2013b, 2022b).

Provisional conservation status

LC.

7. ***Acalypha amphigyne*** S.Moore

Transactions of the Linnean Society of London, *Botany* 4: 467 (Moore 1895).

Voucher specimens

BRAZIL – **Mato Grosso** • *Moore, S. 1024*; BM, K, NY.

Habit

Subshrub. Native.

Habitat

Eastern Highlands: Cerrados (Pantanal), alt. 120 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

CR B2ab(ii,iii,iv) (probably EX).

Remarks

This species is only known from the aforementioned type collection of 1891 (*Moore, S. 1024*).

8. ***Acalypha apetiolata*** Allem & J.L.Waechter

Revista Brasileira de Biologia 37: 85 (Allem & Waechter 1977).

Voucher specimens

BRAZIL – **Rio Grande do Sul** • *Gonzatti, F. 3358*; RB • *Senna, R.M. 1145*; HAS • *Rambo, B. s.n.*; MO • *Schaefer, J. s.n.*; RB.

Habit

Shrub. Native.

Habitat

Pampas: Northern Rolling Pampas, alt. 700–1000 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

EN B2ab(ii,iii).

Remarks

This species is only known from the four aforementioned collections.

9. ***Acalypha argomuelleri*** Briq.

Annuaire du Conservatoire et du Jardin Botaniques de Genève 4: 229 (Briquet 1900).

= *Acalypha buddleifolia* Pax & K.Hoffm.

Voucher specimens

PERU – **Cajamarca** • *Mostacero, J. 930*; AAU, F, NY.

Habit

Shrub. Native.

Habitat

Central Andes: Central High Andes, alt. 2000–2800 m.

Distribution

Peru.

Reference

Cardiel *et al.* (2013b).

Provisional conservation status

VU B1ab(i,iii).

10. ***Acalypha aronioides*** Pax & K.Hoffm.

Das Pflanzenreich (Engler): 147, 16 (Heft 85): 113 (Pax & Hoffmann 1924).

= *Acalypha divaricata* Müll.Arg. nom. illeg.; ≡ *Ricinocarpus divaricatus* (Müll.Arg.) Kuntze.

Voucher specimens

PERU – **Huancavelica** • *Hutchinson, P.C. 1688*; F, G, GH, K, M, NY, S, UC, US, USM.

Habit

Shrub. Native.

Habitat

Central Andes: Central High Andes, alt. 2400–3800 m.

Distribution

Peru.

Reference

Cardiel *et al.* (2013b).

Provisional conservation status

NT.

11. ***Acalypha arvensis*** Poepp.

Nova Genera ac Species Plantarum quas in Regno Chilensi Peruviano 3: 21 (Poeppig 1841).

≡ *Ricinocarpus arvensis* (Poepp.) Kuntze; = *Acalypha pavoniana* Müll.Arg. ≡ *A. arvensis* var. *pavoniana* (Müll.Arg.) Müll.Arg.

Voucher specimens

BOLIVIA – **Beni** • *Guareco, I. 605*; MA, LPB.

BRAZIL – **Acre** • *Prance, G.T. 7722*; NY.

COLOMBIA – **Magdalena** • *Smith, H.H. 1450*; BM, COL, F, G, GH, K, L, MA, MO, NY, P, S, U, US.

ECUADOR – **Cotopaxi** • *Dodson, C.H. 12024*; QCNE, MO, SEL.

FRENCH GUIANA – **Cayenne** • *Feuillet, C. 1701*; CAY, U.

GUYANA – **Unknown locality** • *Anonymous s.n.*; G-DC[G00324853].

PERU – **Loreto** • *Klug, G. 1648*; BM, F, GH, MO, NY, S.

SURINAME – **Paramaribo** • *Lindeman, J.C. 6558*; U.

VENEZUELA – **Amazonas** • *Cardiel, J.M. 1195*; MA, VEN.

Habit

Herb. Native.

Habitat

Northern Andes: Caribe/Pacific Lowland Plains and Hills, Venezuelan Coastal Andes, and Northern Andean Highlands; Central Andes: Yungas; Amazonian-Orinocan Lowland: Amazon Lowlands; Eastern Highlands: Cerrados and Atlantic Forests, alt. 0–1500(–2000) m.

Distribution

Widely distributed from the south-eastern United States to central South America (Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Peru, Suriname, and Venezuela).

References

Cardiel & Muñoz-Rodríguez (2012), Cardiel *et al.* (2013b, 2022b).

Provisional conservation status

LC.

12. ***Acalypha baurii*** B.L.Rob. & Greenm.

American Journal of Science 50: 144 (Robinson & Greenman 1895).

≡ *Acalypha sericea* var. *baurii* (B.L.Rob. & Greenm.) G.L.Webster; = *A. sericea* var. *indefessus* G.L.Webster.

Voucher specimen

ECUADOR – **Galapagos Islands** • *Werff, H.H. van der 1417*; U.

Habit

Subshrub. Native.

Habitat

Mesophytic, evergreen forest and steppe forest, alt. (100–)400–1350 m.

Distribution

Galapagos Islands.

Reference

Seberg (1984).

Provisional conservation status

EN B1ab(i,iii,iv)+B2ab(ii,iii,iv).

13. ***Acalypha beckii*** Cardiel

Nordic Journal of Botany 24 (2): 169 (Cardiel 2006).

Voucher specimens

BOLIVIA – **Chuquisaca** • *Beck, S. 8871*; DAV, LPB, MA.

Habit

Shrub. Native.

Habitat

Central Andes: Central High Andes, alt. 2650 m.

Distribution

Bolivia.

Reference

Cardiel *et al.* (2013b).

Provisional conservation status

CR B2ab(ii,iii,iv).

Remarks

This species is only known from the aforementioned type collections of 1984 (*Beck, S. 8871*).

14. ***Acalypha boliviensis*** Müll.Arg.

Linnaea 34 (1): 162 (Müller Argoviensis 1865).

≡ *Ricinocarpus boliviensis* (Müll.Arg.) Kuntze.

Voucher specimens

ARGENTINA – **San Luis** • *Hunziker, A.T. 11737*; CORD, MA, MBM.

BOLIVIA – **La Paz** • *Mandon, G. 1070*; F, GH, K, M, MA, MO, NY, P, S.

Habit

Herb or subshrub. Native.

Habitat

Central Andes: Central High Andes, alt. 1500–2800 m.

Distribution

Argentina and Bolivia.

Reference

Cardiel *et al.* (2013b).

Provisional conservation status

NT.

15. ***Acalypha brasiliensis*** Müll.Arg. nom. cons.

Linnaea 34 (1): 37 (Müller Argoviensis 1865).

≡ *Ricinocarpus brasiliensis* (Müll.Arg.) Kuntze; = *Acalypha subsana* Mart. ex Colla nom. rej.; = *A. brasiliensis* var. *mollis* Müll.Arg.; = *A. dupraeana* var. *arciana* Baill. nom. illeg. superfl.; = *A. arciana* Müll.Arg. ≡ *R. arcianus* (Müll.Arg.) Kuntze.

Habit

Shrub. Native.

Habitat

Eastern Highlands: Cerrados, Caatinga and Atlantic Forests, alt. 0–1000(–1400) m.

Distribution

Argentina and Brazil.

References

Cardiel & Muñoz-Rodríguez (2015), Cardiel *et al.* (2022b).

Provisional conservation status

LC.

Remarks

Acalypha brasiliensis is a morphologically complex species of which numerous infraspecific taxa have been described; three subspecies are currently recognised (Cardiel *et al.* 2022b).

15.1. ***Acalypha brasiliensis*** subsp. ***asterotricha*** (Müll.Arg.) Cardiel & A.A.C.Sousa

Plant Systematics Evolution 308: 16 (Cardiel *et al.* 2022b).

≡ *Acalypha brasiliensis* f. *obtusa* Müll.Arg. ≡ *A. brasiliensis* var. *obtusa* (Müll.Arg.) Müll.Arg.; = *A. brasiliensis* f. *cordata* Müll.Arg. ≡ *A. brasiliensis* var. *cordata* (Müll.Arg.) Müll.Arg.; = *A. seminuda* Müll.Arg.; = *A. brasiliensis* var. *maxima* Müll.Arg.

Voucher specimen

BRAZIL – **Bahia** • *Salzmann, P. 486:* G-DC.

Habit

Shrub. Native.

Habitat

Eastern Highlands: Atlantic Forests, alt. 0–100 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

CR B2ab(ii,iii,iv).

15.2. ***Acalypha brasiliensis*** subsp. ***brasiliensis***

Voucher specimens

BRAZIL – **Bahia** • *Blanchet, J.S. 1350*; BM, G.

Habit

Shrub. Native.

Habitat

Eastern Highlands: Atlantic Forests, alt. 500–700 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

EN B2ab(ii,iii).

15.3. ***Acalypha brasiliensis*** subsp. ***psilophylla*** (Müll.Arg.) Cardiel & A.A.C.Sousa

Plant Systematics Evolution 308: 17 (Cardiel *et al.* 2022b).

≡ *Acalypha brasiliensis* var. *psilophylla* Müll.Arg.; = *A. dupraeana* var. *sylvicola* Baill.; = *A. major* Salzm. ex Baill. ≡ *A. weddelliana* var. *major* (Salzm. ex Baill.) Müll.Arg.; = *A. brevibracteata* Müll.Arg.; = *A. brasiliensis* var. *longipes* Müll.Arg.; = *A. brasiliensis* var. *brevipes* Müll.Arg.; = *A. brasiliensis* var. *glabrata* Müll.Arg.; = *A. noronhae* Ridl.; = *A. brasiliensis* var. *angustifolia* Pax & K.Hoffm.; = *A. fragilis* Pax & K.Hoffm.

Voucher specimens

ARGENTINA – **Misiones** • *Meyer*, *T. 5515*; F, GH.

BRAZIL – **Bahia** • *Queiroz, L.P. de 985*; CESJ, HUESF.

Habit

Shrub. Native.

Habitat

Eastern Highlands: Cerrados, Caatinga, and Atlantic Forests, alt. 0–1000 (–1400) m.

Distribution

Argentina and Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

LC.

16. ***Acalypha carrascoana*** Cardiel

Anales del Jardín Botánico de Madrid 52: 153 (Cardiel 1995b).

Voucher specimens

COLOMBIA – **Cesar** • *Haught, O. 2333*; COL, F, GH, MA, NY, US.

VENEZUELA – **Guarico** • *Davidse, G. 4177*; L, MEXU, MO, VEN. – **Nueva Esparta** • *Bernardi, A.L.* 2496; NY.

Habit

Herb. Native.

Habitat

Northern Andes: Caribe/Pacific Lowland Plains and Hills, alt. 400 m.

Distribution

Disjunct distribution in Mexico and Northern South America (Colombia and Venezuela).

References

Cardiel (1995a, 1999b), Cardiel & Muñoz-Rodríguez (2013).

Provisional conservation status

EN B2ab(ii,iii).

Remarks

This species is only known in South America from the three aforementioned collections.

17. ***Acalypha castroviejoi*** Cardiel

Brittonia 46 (3): 205 (Cardiel 1994).

Voucher specimens

COLOMBIA – **Santander** • *Killip, E.P. 19358*; GH, MA, NY, U, US.

Habit

Shrub. Native.

Habitat

Northern Andes: Northern Andean Highlands, alt. 1500 m.

Distribution

Colombia.

References

Cardiel (1995a), Muñoz-Rodríguez *et al.* (2014).

Provisional conservation status

CR B2ab(ii,iii,iv) (probably EX).

Remarks

This species is only known from the aforementioned type collection of 1927 (*Killip, E.P. 19358*).

18. ***Acalypha chaquensis*** Cardiel & I.Montero

Phytotaxa 356 (2): 160 (Cardiel *et al.* 2018).

Voucher specimens

ARGENTINA – **Chaco** • *Cristóbal, C.L. 1543*; F, G. – **Corrientes** • *Meza Torres, E.I. 601*; HUEFS.

PARAGUAY– **Alto Paraguay** • *Schinini, A. 17839*; MO.

Habit

Herb or subshrub. Native.

Habitat

Gran Chaco: Humid Chaco, alt. 50–200 m.

Distribution

Argentina and Paraguay.

Reference

Cardiel *et al.* (2018).

Provisional conservation status

VU D2.

Remarks

This species is only known from the three aforementioned collections.

19. ***Acalypha chocoana*** Cardiel

Brittonia 46 (3): 201 (Cardiel 1994).

Voucher specimens

COLOMBIA – **Chocó** • *Duke, J.A. 9895(3)*; GH, MO, NY.

Habit

Shrub or small tree. Native.

Habitat

Northern Andes: Caribe/Pacific Lowland Plains and Hills, alt. 100 m.

Distribution

Colombia.

Reference

Muñoz-Rodríguez *et al.* (2014).

Provisional conservation status

VU D2.

Remarks

Only known from the aforementioned type collection of 1967 (*Duke, J.A. 9895(3)*).

20. ***Acalypha chorisandra*** Baill.

Adansonia 5: 235 (Baillon 1865).

≡ *Ricinocarpus chorisandrus* (Baill.) Kuntze.

Voucher specimen

BRAZIL – **Minas Gerais** • *Saint-Hilaire, A. de B1-1069*; P.

Habit

Shrub. Native.

Habitat

Eastern Highlands: Cerrados, alt. 500–600 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

CR B2ab(ii,iii,iv) (probably EX).

Remarks

This species is only known from the aforementioned type collection of 1916 (*Saint-Hilaire, A. de B1-1069*).

21. ***Acalypha clausenii*** (Turcz.) Müll.Arg.

Linnaea 34 (1): 51 (Müller Argoviensis 1865).

≡ *Odonteilema claussenii* Turcz. ≡ *Ricinocarpus claussenii* (Turcz.) Kuntze.

Voucher specimen

BRAZIL – **Minas Gerais** • *Irwin, H.S. 25867*; K, MO, NY, UB.

Habit

Herb or subshrub. Native.

Habitat

Eastern Highlands: Cerrados and Atlantic Forests, alt. 400–1250 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

NT.

22. ***Acalypha communis*** Müll.Arg. nom. cons.

Linnaea 34 (1): 23 (Müller Argoviensis 1865).

≡ *Ricinocarpus communis* (Müll.Arg.) Kuntze; = *Acalypha hirsuta* Mart. ex Colla nom. rej.; = *A. communis* var. *tomentosa* Müll.Arg.; = *A. cuprea* Herzog.

Habit

Subshrub or shrub. Native.

Habitat

Central Andes: Yungas; Amazonian-Orinocan Lowland: Amazon Irregular Plains and Piedmont; Eastern Highlands: Cerrados; Gran Chaco: Western Dry Chaco and Humid Chaco; Pampas: Northern Rolling Pampas, alt. 100–1200(–2000) m.

Distribution

Argentina, Bolivia, Brazil, Paraguay, and Uruguay.

References

Cardiel *et al.* (2013a, 2022b).

Provisional conservation status

LC.

Remarks

Acalypha communis is a morphologically complex species that includes numerous infraspecific taxa; five subspecies are currently recognised (Cardiel *et al.* 2013). Some specimens of *A. communis* present mixed characters that make it difficult to assign them to the accepted subspecies. Probably these subspecies can hybridise in areas where they coexist, but further study is required.

22.1. ***Acalypha communis*** subsp. ***apicalis*** (N.E.Br.) Cardiel & P.Muñoz

Taxon 62 (6): 1299 (Cardiel *et al.* 2013a).

≡ *Acalypha apicalis* N.E.Br.; = *A. communis* var. *guaranitica* Chodat & Hassl.; = *A. communis* f. *longipetiolata* Chodat & Hassl.; = *A. communis* f. *grandifolia* Chodat & Hassl.; = *A. communis* var. *hirtiformis* Pax & K.Hoffm.

Voucher specimens

ARGENTINA – **Misiones** • *Bernardi, L. 18873*; BM, F, MO.

BRAZIL – **Maranhão** • *Eiten, G. 10198*; K, SP, UB.

PARAGUAY – **Canindeyú** • *Hassler, E. 5705*; BM, GH, MA, NY, W.

Habit

Subshrub or shrub. Native.

Habitat

Eastern Highlands: Cerrados; Gran Chaco: Humid Chaco, alt. (100–)200–400(–1000) m.

Distribution

Argentina, Brazil, and Paraguay.

References

Cardiel *et al.* (2013a, 2022b).

Provisional conservation status

LC.

22.2. ***Acalypha communis*** subsp. ***communis***

= *Acalypha communis* var. *tomentella* Müll.Arg.; = *A. communis* var. *puberula* Müll.Arg.; = *A. communis* var. *obscura* Müll.Arg.; = *A. communis* var. *intermedia* Müll.Arg.; = *A. agrestis* Morong ex Britton ≡ *A. communis* var. *agrestis* (Morong ex Britton) Chodat & Hassl.

Voucher specimens

ARGENTINA – **Misiones** • *Montes, J.E. 27731*; F, K, NY.

BOLIVIA – **Santa Cruz** • *Seidel, R. 371:* MA, LPB.

BRAZIL – **Goiás** • *Aparecida da Silva, M. 4583*; RB, SP.

PARAGUAY – **Paraguarí** • *Zardini, E.M. 4598*; F, MO.

Habit

Subshrub or shrub. Native.

Habitat

Eastern Highlands: Cerrados; Gran Chaco: Western Dry Chaco and Humid Chaco, alt. 100–500(–1200) m.

Distribution

Argentina, Bolivia, Brazil, and Paraguay.

References

Cardiel *et al.* (2013a, 2022b).

Provisional conservation status

LC.

22.3. ***Acalypha communis*** subsp. ***paraguariensis*** (Chodat & Hassl.) Cardiel & P.Muñoz

Taxon 62 (6): 1301 (Cardiel *et al.* 2013a).

≡ *Acalypha paraguariensis* Chodat & Hassl.; = *A. communis* var. *salicifolia* Pax & K.Hoffm.

Voucher specimens

ARGENTINA – **Corrientes** • *Krapovickas, A. 23803*; G, P.

PARAGUAY – **Alto Paraguay** • *Hassler, E. 2576*; BM, K, W.

Habit

Subshrub or shrub. Native.

Habitat

Gran Chaco: Humid Chaco, alt. 100–200 m.

Distribution

Argentina and Paraguay.

References

Cardiel *et al.* (2013a), Cardiel & Muñoz-Rodríguez (2015).

Provisional conservation status

EN B1ab(i,iii,iv).

22.4. ***Acalypha communis*** subsp. ***saltensis*** (Pax & K.Hoffm.) Cardiel & P.Muñoz

Taxon 62 (6): 1301 (Cardiel *et al.* 2013a).

≡ *Acalypha communis* var. *saltensis* Pax & K.Hoffm.; = *A. friesii* Pax & K.Hoffm.

Voucher specimens

ARGENTINA – **Salta** • *Meyer, T. 3650*; LIL, NY.

BOLIVIA – **Chuquisaca** • *Serrano, M. 1537*; LPB, MA.

Habit

Subshrub or shrub. Native.

Habitat

Central Andes: Yungas, alt. (500–)800–1400(–2000) m.

Distribution

Argentina and Bolivia.

References

Cardiel *et al.* (2013a), Cardiel & Muñoz-Rodríguez (2015).

Provisional conservation status

NT.

22.5. ***Acalypha communis*** subsp. ***tracheliifolia*** (Pax & K.Hoffm.) Cardiel & P.Muñoz

Taxon 62 (6): 1301 (Cardiel *et al.* 2013a).

≡ *Acalypha tracheliifolia* Pax & K.Hoffm.

Voucher specimens

ARGENTINA – **Entre Ríos** • *Bacigalupo, N.M. 1579*; MO.

BRAZIL – **Rio Grande do Sul** • *Rambo, B. 41357*; S.

URUGUAY – **Florida** • *Rosengurtt, B. 5845*; MA, MO.

Habit

Subshrub or shrub. Native.

Habitat

Pampas: Northern Rolling Pampas, alt. 100–200 m.

Distribution

Argentina, Brazil, and Uruguay.

References

Cardiel *et al.* (2013a, 2022b).

Provisional conservation status

NT.

23. ***Acalypha cuneata*** Poepp.

Nova Genera ac Species Plantarum quas in Regno Chilensi Peruviano 3: 21 (Poeppig 1841).

≡ *Ricinocarpus cuneatus* (Poepp.) Kuntze ≡ *Acalypha obovata* var. *cuneata* (Poepp.) J.F.Macbr.; = *A. obovata* Benth. ≡ *A. cuneata* var. *obovata* (Benth.) Müll.Arg.; = *A. eggersii* Pax & K.Hoffm.; = *A. erosa* Rusby; = *A. juruana* Ule.

Voucher specimens

BOLIVIA – **La Paz** • *Beck, S. 8545*; DAV, LPB, MO, NY.

BRAZIL – **Rondônia** • *Cid-Ferreira, C.A. 4983*; K, MO, NY, RB.

COLOMBIA – **Antioquia** • *Barkley, F.A. 18C336*; BM, MEDEL.

ECUADOR – **Napo** • *Zaruma, J. 381*; F, MO, QCA, QCNE.

PERU – **Madre de Dios** • *Gentry, A.H. 27284*; AAU, MO, NY.

VENEZUELA – **Yaracuy** • *Agostini, G. 1758*; DAV, F, MO, NY, VEN.

Habit

Shrub or small tree to 8 m high. Native.

Habitat

Northern Andes: Caribe/Pacific Lowland Plains and Hills; Central Andes: Yungas; Amazonian-Orinocan Lowland: Amazon Irregular Plains and Piedmont, Guianan Shield Moist Forests, and Amazon and Coastal Lowlands, alt. (10–)100–1200(–1800) m.

Distribution

Central America, Caribe, and Northern South America (Bolivia, Brazil, Colombia, Ecuador, Peru, and Venezuela).

References

Cardiel (1995a), Cardiel & Muñoz-Rodríguez (2012), Cardiel *et al.* (2013b, 2022b).

Provisional conservation status

LC.

24. ***Acalypha cuspidata*** Jacq.

Plantarum Rariorum Horti Caesarei Schoenbrunnensis Descriptiones et Icones 2: 63, tab. 243 (Jacquin 1797).

≡ *Ricinocarpus cuspidatus* (Jacq.) Kuntze; = *Acalypha vestita* Benth.; = *A. asterifolia* Rusby; = *A. tenuipes* Pax & K.Hoffm.; = *A. santae-martae* Pax & K.Hoffm.

Voucher specimens

COLOMBIA – **Magdalena** • *Smith, H.H. 429*; BM, G, LE, MA.

ECUADOR – **Guayas** • *Madsen, J.E. 63938*; AAU, MA, QCA, QCNE.

PERU – **Tumbes** • *Weberbauer, A. 7662*; F, NY, US.

VENEZUELA– **Distrito Capital** • *Pittier, H. 13367*; G, GH, M, MO, NY, US.

Habit

Subshrub or shrub. Native.

Habitat

Northern Andes: Caribe/Pacific Lowland Plains and Hills, Venezuelan Coastal Andes, and Northern Andean Highlands, alt. 30–1000(–1300) m.

Distribution

Mexico, Caribe, and Northern South America (Colombia, Ecuador, Peru, and Venezuela).

References

Cardiel (1995a), Cardiel & Muñoz-Rodríguez (2012), Cardiel *et al.* (2013b).

Provisional conservation status

LC.

Remarks

The specimens previously identified as A*calypha plicata* from Colombia and Venezuela by Cardiel (1995a, 1999b), are here considered belonging to *A. cuspidata*. See the Remarks for this species.

25. ***Acalypha delicata*** Cardiel

Nordic Journal of Botany 24 (2): 167 (Cardiel 2006).

Voucher specimens

PERU – **Tumbes** • *Weberbauer, A. 7641*; F, NY.

Habit

Shrub. Native.

Habitat

Northern Andes: Pacific Lowland Plains and Hills, alt. 800–900 m.

Distribution

Peru.

Reference

Cardiel *et al.* (2013b).

Provisional conservation status

CR B2ab(ii,iii,iv) (probably EX).

Remarks

This species is only known from the aforementioned type collection of 1927 (*Weberbauer, A. 7641*).

26. ***Acalypha dictyoneura*** Müll.Arg.

Linnaea 34 (1): 12 (Müller Argoviensis 1865).

≡ *Ricinocarpus dictyoneurus* (Müll.Arg.) Kuntze; = *Acalypha dictyoneura* f. *reducta* Müll.Arg. ≡ *A. dictyoneura* var. *reducta* (Müll.Arg.) J.F.Macbr.; = *A. stellipila* Pax & K.Hoffm.; *A. pilocardia* Gilli.

Voucher specimens

ECUADOR – **Napo** • *Balslev, H. 10362*; AAU, C, COL, F, MO, NY, QCA, SEL, US.

PERU – **Cajamarca** • *Sagástegui, A. 9128*; DAV, MO.

Habit

Shrub or small tree. Native.

Habitat

Northern Andes: Northern Andean Highlands, alt. (1000–)1500–2800 m.

Distribution

Ecuador and Peru.

References

Cardiel & Muñoz-Rodríguez (2012), Cardiel *et al.* (2013b).

Provisional conservation status

LC.

27. ***Acalypha digynostachya*** Baill.

Adansonia 5: 233 (Baillon 1865).

≡ *Ricinocarpus digynostachyus* (Baill.) Kuntze; = *Acalypha striolata* Lingelsh.

Voucher specimens

ARGENTINA – **Misiones** • *Arbo, M.M. 5959*; K, F, GH, MO.

BRAZIL – **Paraná** • *Ribas, O.S. 5545*; HUEFS, MBM.

PARAGUAY – **Itapúa** • *Fernández Casas, F.J. 3701*; MA, MO, NY.

Habit

Shrub. Native.

Habitat

Eastern Highlands: Cerrados and Atlantic Forests; Gran Chaco: Humid Chaco, alt. (5–)300–1100 m.

Distribution

Argentina, Brazil, and Paraguay.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

LC.

28. ***Acalypha dimorpha*** Müll.Arg.

Flora Brasiliensis 11 (2): 355 (Müller Argoviensis 1874).

≡ *Ricinocarpus dimorphus* (Müll.Arg.) Kuntze.

Voucher specimens

BRAZIL – **Minas Gerais** • *Leoni, L.S. 2846*; RB • *Warming, J.E.B. 1566*; C. – **Rio de Janeiro** • *Warming, J.E.B. 1558 p.p.*; G.

Habit

Subshrub. Native.

Habitat

Eastern Highlands: Atlantic Forests, alt. 0–1000 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

EN B2ab(ii,iii).

Remarks

This species is only known from the three aforementioned collections.

29. ***Acalypha diversifolia*** Jacq.

Plantarum Rariorum Horti Caesarei Schoenbrunnensis Descriptiones et Icones 2: 63, tab. 244. (Jacquin 1797).

≡ *Acalypha leptostachya* f. *diversifolia* (Jacq.) Müll.Arg. ≡ *Ricinocarpus diversifolius* (Jacq.) Kuntze; = *A. leptostachya* Kunth ≡ *A. diversifolia* var. *leptostachya* (Kunth) Müll.Arg.; = *A. popayanensis* Kunth ≡ *A. leptostachya* var. *popayanensis* (Kunth) Müll.Arg.; = *A. microgyna* Poepp.; = *A. samydifolia* Poepp. ≡ *R. samydifolius* (Poepp.) Kuntze; = *A. ulmifolia* Benth.; = *A. spicigera* Seem.; = *A. leptostachya* var. *carpinifolia* Poepp. ex Müll.Arg. ≡ *A. diversifolia* var. *carpinifolia* (Poepp. ex Müll.Arg.) Müll. Arg.; = *A. diversifolia* var. *squarrosa* Müll.Arg.; = *A. diversifolia* Rusby; = *A. inaequalis* Rusby; = *A. alchorneoides* Rusby; = *A. salicioides* Rusby; = *A. diversifolia* var. *caloneura* Pax & K.Hoffm.; = *A. vermifera* Rusby.

Voucher specimens

BOLIVIA – **La Paz** • *Bang, M. 1591*; BM, F, GH, K, M, MA, MO, NY, S, US.

BRAZIL – **Minas Gerais** • *Araújo, G.M. 1054*; HUFU, SP.

COLOMBIA – **Valle del Cauca** • *Barkley, F.A. 18VC022*; COL, MO, US.

ECUADOR – **El Oro** • *Albert, L. 736*; MO, QCA, SEL.

FRENCH GUIANA – **Saul Region** • *Skog, L.E. 7190*; B, CAY, F, NY, U, US.

GUYANA – **Rupununi District** • *Jansen-Jacobs, M.J. 2948*; B, CAY, F, NY, U, US.

PERU – **San Martín** • *Belshaw, C.M. 3276*; F, GH, K, U, NY, SI, US.

SURINAME – **Sipaliwini** • *Bosbeheer, L. 9618*; F, GH, U.

VENEZUELA – **Mérida** • *Breteler, F.J. 3279*; COL, F, G, NY, RB, S, U, UPS.

Habit

Shrub or small tree to 8 m high. Native.

Habitat

Northern Andes: Caribe/Pacific Lowland Plains and Hills and Northern Andean Highlands; Central Andes: Yungas; Amazonian-Orinocan Lowland: Amazon Irregular Plains and Piedmont, Guianan Shield Moist Forests, and Amazon and Coastal Lowlands; Eastern Highlands: Cerrados and Atlantic Forests, alt. 0–2000(–2400) m.

Distribution

Widely distributed in Southern Mexico, Central America, and Northern South America (Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Peru, Suriname, and Venezuela).

References

Cardiel (1995a), Cardiel & Muñoz-Rodríguez (2012), Cardiel *et al.* (2013b, 2022b).

Provisional conservation status

LC.

30. ***Acalypha glandulosa*** Cav.

Anales de Historia Natural, *Madrid* 2: 141 (Cavanilles 1800).

≡ *Ricinocarpus glandulosus* (Cav.) Kuntze

Voucher specimens

COLOMBIA – **Boyacá** • *Cardiel, J.M. 1104*; COL, MA.

Habit

Subshrub or shrub. Native.

Habitat

Northern Andes: Northern Andean Highlands, alt. 2000–2500 m.

Distribution

Disjunct distribution in Mexico and Northern South America (Colombia).

References

Cardiel (1992), Cardiel & Muñoz-Rodríguez (2013), Villaseñor (2016).

Provisional conservation status

EN B1ab(i,iii)+B2ab(ii,iii).

31. ***Acalypha gracilis*** Spreng.

Systema vegetabilium 4 (2): 315 (Sprengel 1827).

≡ *Ricinocarpus gracilis* (Spreng.) Kuntze; = *Acalypha gracilis* var. *fruticulosa* Müll.Arg.; = *A. divaricata* Klotzsch ex Baill. ≡ *A. gracilis* var. *divaricata* (Baill.) Pax & K.Hoffm.; = *A. gracilis* var. *pubescens* Müll.Arg.

Voucher specimens

ARGENTINA – **Buenos Aires** • *Cabrera, A.L. 2024*; F, GH, NY.

BRAZIL – **São Paulo** • *Cordeiro, I. 1318*; ESA, HRCB, MAUAM, SP, UEC.

PARAGUAY – **Guairá** • *Soria, N. 2920*; MA, NY.

URUGUAY – **Artigas** • *Rosengurtt, B. B-3764*; GH.

Habit

Herb or subshrub. Native.

Habitat

Eastern Highlands: Cerrados and Atlantic Forests; Gran Chaco: Humid Chaco, alt. (30–)300–1000(–1550) m.

Distribution

Argentina, Brazil, Paraguay, and Uruguay.

References

Cardiel & Muñoz-Rodríguez (2015), Cardiel *et al.* (2022b).

Provisional conservation status

LC.

32. ***Acalypha hassleriana*** Chodat

Bulletin de l'Herbier Boissier, sér. 2, 5: 606 (Chodat & Hassler 1905).

= *Acalypha glandulosa* var. *brevistachya* Chodat & Hassl.; = *A. glandulosa* Chodat & Hassl. ≡ *A. hassleriana* var. *glandulosa* (Chodat & Hassl.) Pax & K.Hoffm.

Voucher specimens

BRAZIL – **Maranhão** • *Eiten, G. 4295*; SP.

PARAGUAY – **Canindeyú** • *Hassler, E. 5678*; G, K, P.

Habit

Herb or subshrub. Native.

Habitat

Eastern Highlands: Cerrados; Gran Chaco: Humid Chaco, alt. 100–590 m.

Distribution

Brazil and Paraguay.

References

Cardiel (2010), Cardiel *et al.* (2013a, 2022b).

Provisional conservation status

EN B2ab(ii,iii).

33. ***Acalypha herzogiana*** Pax & K.Hoffm

Mededeelingen van's Rijks-Herbarium 40: 24 (Pax 1921).

= *Acalypha nitschkeana* Pax & K.Hoffm.

Voucher specimens

ARGENTINA – **Misiones** • *Molfino, J.F. s.n.*; BAF.

BOLIVIA – **La Paz** • *Beck, S. 27697*; LPB, MA.

BRAZIL – **Paraná** • *Dombrowski, L.T. 2950*; MBM, P.

PARAGUAY – **Paraguarí** • *Arbo, M.M. 1768*; C, K, MO.

Habit

Herb. Native.

Habitat

Eastern Highlands: Atlantic Forests; Gran Chaco: Western Dry Chaco, alt. 200–600 m.

Distribution

Argentina, Bolivia, Brazil, and Paraguay.

References

Steinmann & Levin (2011), Cardiel *et al.* (2013b, 2022b).

Provisional conservation status

NT.

Remarks

In addition to the wild specimens of *Acalypha herzogiana*, also appear specimens of a cultivar of this species, usually from gardens or urban areas. This cultivar is of uncertain origin and is characterised by

the showy terminal pistillate inflorescences formed by numerous densely clustered, ebracteate, pistillate flowers. It was studied by Steinmann & Levin (2011), who hypothesised that it is the result of homeotic mutation resulting in the stamens being replaced by styles.

34. ***Acalypha hibiscifolia*** Britton ex Rusby

Memoirs of the Torrey Botanical Club 4 (3): 257 (Rusby 1895).

= Acalypha buchtienii Pax.

Voucher specimens

BOLIVIA – **La Paz** • *Beck, S. 16874*; DAV, LPB, MA.

PERU – **Cusco** • *Cook, O.F. 1043*; US.

Habit

Shrub. Native.

Habitat

Central Andes: Central High Andes, alt. (700–)1000–2000 m.

Distribution

Bolivia and Peru.

Reference

Cardiel *et al.* (2013b).

Provisional conservation status

LC.

35. ***Acalypha hispida*** Burm.f.

Flora Indica: 303, pl. 61, fig. 1 (Burman 1768).

Voucher specimens

BRAZIL – **Rio de Janeiro** • *Nadruz, M. 174*; RB.

COLOMBIA – **Chocó** • *Córdoba, W.A. 313*; COL, HUA, MO.

ECUADOR – **Pichincha** • *Kvist, L.P. 40725*; AAU, QCA, QCNE.

PERU – **Madre de Dios** • *Timaná, M. 3702*; MO.

VENEZUELA – **Bolívar** • *Pittier, H. 7778*; G, GH, US.

Habit

Shrub. Introduced.

Distribution

Native to the Melanesia or Malesia (Sagun *et al.* 2010), introduced as ornamental throughout the tropics, and sometimes naturalised. South America (Brazil, Colombia, Ecuador, Peru, and Venezuela).

Reference

Sagun *et al.* (2010).

36. ***Acalypha inaequilatera*** Cardiel

Brittonia 46 (3): 203 (Cardiel 1994).

Voucher specimens

COLOMBIA – **Boyacá** • *Goudot, M.J. s.n.*; K, P.

Habit

Shrub or perhaps small tree. Native.

Habitat

Northern Andes: Northern Andean Highlands, alt. 800 m.

Distribution

Colombia.

References

Cardiel (1995a), Muñoz-Rodríguez *et al.* (2014).

Provisional conservation status

CR B2ab(ii,iii,iv) (probably EX).

Remarks

This species is only known from the aforementioned type collection of 1844 (*Goudot, M.J. s.n*).

37. ***Acalypha indica*** L.

Species Plantarum 2: 1003 (Linnaeus 1753).

Voucher specimens

FRENCH GUIANA – **Cayenne** • *Broadway, W.E. 93*; GH, NY, US.

Habit

Herb or subshrub. Introduced.

Distribution

Native to the Paleotropic, adventitious in Caribbean Islands and Northern South America (French Guiana).

Reference

Cardiel & Montero-Muñoz (2018).

38. ***Acalypha infesta*** Poepp.

Nova Genera ac Species Plantarum quas in Regno Chilensi Peruviano 3: 21 (Poeppig 1841).

≡ *Ricinocarpus infestus* (Poepp.) Kuntze; = *Acalypha infestans* Müll.Arg.; = *A. infestans* var. *stenoloba* Müll.Arg.; = *A. infestans* var. *rotundifolia* Müll.Arg.; = *A. forbesii* S.Moore.

Voucher specimens

BOLIVIA – **La Paz** • *Buchtien, O. 3246*; NY.

COLOMBIA – **Cauca** • *De Benavides, O. 4846*; COL, PSO.

ECUADOR – **Pichincha** • *Cerón, C.E. 81371*; QAP.

PERU – **Lima** • *Mathews, A. 435*; BM, GH, K.

Habit

Herb. Native.

Habitat

Northern Andes: Northern Andean Highlands; Central Andes: Central High Andes, alt. (600–)1500–2800 m.

Distribution

Bolivia, Colombia, Ecuador, and Peru.

References

Cardiel & Muñoz-Rodríguez (2012), Cardiel *et al.* (2013b).

Provisional conservation status

LC.

Remarks

In addition to the wild montane specimens, *Acalypha infesta* appears as probably adventitious near sea level in the city of Lima and surroundings, in Peru. Recently, we are also informed about the presence of *A. infesta* in the Valparaiso Region, Chile; it is associated with avocado and olive crops (Virginia Irribarra & Robinson Burgos, Servicio Agrícola y Ganadero de la Región de Valparaíso, pers. com.). We confirm the identification through field photos while waiting to have herbarium vouchers. This is the first record of the presence of *Acalypha* in Chile.

39. ***Acalypha inselbergensis*** Cardiel & I.Montero

Phytotaxa 356 (2): 162 (Cardiel *et al.* 2018).

Voucher specimens

BRAZIL – **Pernambuco** • *Krause, L. 276*; LZ, PEUFR, RB, ROST, S.

Habit

Shrub. Native.

Habitat

Eastern Highlands: Caatinga, alt. 200–700 m.

Distribution

Brazil.

References

Marciel-Júnior *et al.* (2020), Cardiel *et al.* (2022b).

Provisional conservation status

LC.

Remarks

Acalypha inselbergensis was described based on a single collection found on a granitic rocky outcrop (inselberg) in northeastern Brazil. However, very shortly afterwards, it was discovered that this species is widely distributed in the Caatinga Domain of Brazilian northeast, and up to 27 different collections are currently known (Marciel-Júnior *et al.* 2020).

40. ***Acalypha klotzschii*** Baill.

Adansonia 5: 231 (Baillon 1865).

= *Acalypha prunifolia* Nees & Mart. ≡ *Ricinocarpus prunifolius* (Nees & Mart.) Kuntze.

Voucher specimens

BRAZIL – **Minas Gerais** • *Strier, K.B. 1197*; NY.

Habit

Shrub. Native.

Habitat

Eastern Highlands: Atlantic Forests, alt. 150–420 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

EN B2ab(ii,iii).

41. ***Acalypha lanceolata*** Willd.

Species Plantarum 4: 524 (Willdenow 1805).

Voucher specimens

GUYANA – **Demerara-Mahaica** • *Hitchcock, A.S. 16700*; GH, K, NY, US.

Habit

Herb. Introduced.

Distribution

Native to the Paleotropic; adventitious in Northern South America (Guyana).

Reference

Sagun *et al.* (2010).

42. ***Acalypha longipetiolata*** Cardiel

Anales del Jardín Botánico de Madrid 57 (1): 57 (Cardiel 1999a).

Voucher specimens

VENEZUELA – **Falcón** • *Liesner, R. 7603*; MO, VEN.

Habit

Shrub. Native.

Habitat

Northern Andes: Caribe/Pacific Lowland Plains and Hills, alt. 600 m.

Distribution

Venezuela.

References

Cardiel (1999b), Muñoz-Rodríguez *et al.* (2014).

Provisional conservation status

CR B2ab(ii,iii,iv).

Remarks

This species is only known from the aforementioned type collections of 1979 (*Liesner, R. 7603*).

43. ***Acalypha lycioides*** Pax & K.Hoffm.

Mededeelingen van's Rijks-Herbarium 40: 24 (Pax 1921).

Voucher specimens

ARGENTINA – **La Rioja** • *Hunziker, A.T. 14428*; CORD, MA.

BOLIVIA – **Santa Cruz** • *Nee, M. 46687*; K, NY, U.

PERU – **Apurímac** • *Vargas, C. 10003*; MO.

Habit

Shrub. Native.

Habitat

Central Andes: Central High Andes and Yungas, alt. (500–)1000–2800 m.

Distribution

Argentina, Bolivia, and Peru.

Reference

Cardiel *et al.* (2013b).

Provisional conservation status

LC.

44. ***Acalypha machiensis*** Cardiel & P. Muñoz

Brittonia 64 (4): 365 (Cardiel & Muñoz-Rodríguez 2012).

Voucher specimens

BOLIVIA – **Cochabamba** • *Beck, S. 28576*; LPB, MA.

Habit

Shrub. Native.

Habitat

Central Andes: Yungas, alt. 480 m.

Distribution

Bolivia.

Reference

Cardiel *et al.* (2013b).

Provisional conservation status

VU D2.

Remarks

This species is only known from the aforementioned type collection of 2002 (*Beck, S. 28576*).

45. ***Acalypha macrostachya*** Jacq.

Plantarum Rariorum Horti Caesarei Schoenbrunnensis Descriptiones et Icones 2: 63, tab. 245 (Jacquin 1797).

≡ *Ricinocarpus macrostachyus* (Jacq.) Kuntze; = *Acalypha hirsutissima* Willd. ≡ *A. macrostachya* var. *hirsutissima* (Willd.) Müll.Arg.; = *A. cuculata* Poir.; = *A. sidaefolia* Kunth ≡ *A. macrostachya* var.

sidaefolia (Kunth) Müll.Arg.; = *A. macrophylla* Kunth ≡ *A. macrostachya* f. *macrophylla* (Kunth) Müll.Arg. ≡ *A. macrostachya* var. *macrophylla* (Kunth) Müll.Arg.; = *A. caudata* Kunth; = *A. tristis* Poepp. ≡ *A. macrostachya* var. *tristis* (Poepp.) Müll.Arg.; = *A. callosa* Benth. ≡ *R. callosus* (Benth.) Kuntze; = *A. caucana* Müll.Arg. ≡ *R. caucanus* (Müll.Arg.) Kuntze; = *A. heterodonta* var. *psiloclada* Müll.Arg.; = *A. neogranatensis* Müll.Arg. ≡ *R. neogranatensis* (Müll.Arg.) Kuntze; = *A. heterodonta* var. *hirsuta* Müll.Arg.; = *A. heterodonta* var. *trichoclada* Müll.Arg.; = *A. tarapotensis* Müll.Arg. ≡ *R. tarapotensis* (Müll.Arg.) Kuntze; = *A. lehmanniana* Pax; = *A. foliosa* Rusby; = *A. williamsii* Rusby [1912]; = *A. amplifolia* Rusby; = *A. heteromorpha* Rusby.

Voucher specimens

BOLIVIA – **La Paz** • *Beck, S. 24724*; MA, LPB.

BRAZIL – **São Paulo** • *Kuhlmann, M. 1481*; NY, P, SP.

COLOMBIA – **Meta** • *Cuatrecasas, J. 4553*; COL, F, US.

ECUADOR – **Napo** • *Cerón, C.E. 3688*; AAU, GB, F, MO, NY, QCNE.

GUYANA – **Barima-Waini** • *Pipoly, J.J. 8118*; US, CAY.

PERU – **Junín** • *Killip, E.P. 23441*; F, GH, NY, US.

VENEZUELA – **Barinas** • *Breteler, F.J. 3736*; G, F, MO, NY, S, U, UPS, US.

Habit

Shrub or small tree to 10 m high. Native.

Habitat

Northern Andes: Caribe/Pacific Lowland Plains and Hills and Northern Andean Highland; Central Andes: Yungas; Amazonian-Orinocan Lowland: Amazon Irregular Plains and Piedmont and Guianan Shield Moist Forests; Eastern Highlands: Atlantic Forests, alt. (10–)100–2000(–2800) m.

Distribution

Widely distributed in Mexico, Caribe, Central America, and South America (Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, and Venezuela).

References

Cardiel (1995a), Cardiel & Muñoz-Rodríguez (2012), Cardiel *et al.* (2013b, 2022b).

Provisional conservation status

LC.

46. ***Acalypha macularis*** Pax & K.Hoffm.

Das Pflanzenreich (Engler) 147, 16 (Heft 85): 138 (Pax & Hoffmann 1924).

= *Acalypha ampliata* Pax & K.Hoffm.

Voucher specimens

BRAZIL – **Minas Gerais** • *Glaziou, A.F.M. 13190*; BR, F, G, K, P.

Habit

Subshrub. Native.

Habitat

Eastern Highlands: Atlantic Forests, alt. 0–50 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

EN B2ab(ii,iii).

47. ***Acalypha martiana*** Müll.Arg.

Flora Brasiliensis 11 (2): 359 (Müller Argoviensis 1874).

≡ *Ricinocarpus martianus* (Müll.Arg.) Kuntze; = *Acalypha aspericocca* Pax & K.Hoffm.

Voucher specimens

BRAZIL – **Minas Gerais** • *Glaziou, A.F.M. 7824*; C, G, K, P.

Habit

Shrub. Native.

Habitat

Eastern Highlands: Atlantic Forests, alt. 100–600 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

EN B2ab(ii,iii).

48. ***Acalypha muelleriana*** Urb.

Symbolae Antillanae: *seu fundamenta florae Indiae occidentalis* 1: 338 (Urban 1899).

= *Linostachys urticifolia* Klotzsch ex Schltdl.; = *Acalypha colombiana* Cardiel.

Voucher specimens

COLOMBIA – **Meta** • *Philipson, W.R. 1864*; BM, COL.

VENEZUELA – **Yaracuy** • *Steyermark, J.A. 105301*; DAV, F, MO, NY, VEN.

Habit

Shrub or small tree. Native.

Habitat

Northern Andes: Northern Andean Highlands, alt. (100–)500–1000 m.

Distribution

Central America and Northern South America (Colombia and Venezuela).

Reference

Muñoz-Rodríguez *et al.* (2014).

Provisional conservation status

LC.

49. ***Acalypha multicaulis*** Müll.Arg. nom. cons. prop. in prep.

Linnaea 34 (1): 53 (Müller Argoviensis 1865).

≡ *Ricinocarpus multicaulis* (Müll.Arg.) Kuntze; = *Acalypha pruriens* Nees & Mart. *nom. rej. prop*. ≡ *R. pruriens* (Nees & Mart.) Kuntze; = *A. ruderalis* Mart. ex Colla *nom. rej. prop.*; = *A. tenuicaulis* Baill.; = *A. multicaulis* var. *tomentella* Müll.Arg.; = *A. lagoensis* Müll.Arg.; Kuntze; = *A. multicaulis* var. *tenuispica* Pax & K.Hoffm.; = *A. multicaulis* var. *glabrescens* Pax & K.Hoffm.

Voucher specimens

ARGENTINA – **Entre Ríos** • *Burkart, A. 20613*; MO, SI.

BRAZIL – **Ceará** • *Barros, F. 1782*; MAUAM, SP.

PARAGUAY – **Paraguarí** • *Fiebrig, K. 898*; BM, F, GH, K.

URUGUAY – **Paraguarí** • *Legrand, C.D. 329*; F.

Habit

Subshrub or shrub. Native.

Habitat

Eastern Highlands: Cerrados, Caatinga, and Atlantic Forests; Gran Chaco: Humid Chaco; Pampas: Northern Rolling Pampas, alt. (40–)200–1000(–1200) m.

Distribution

Argentina, Bolivia, Brazil, Paraguay, and Uruguay.

References

Cardiel *et al.* (2013b, 2022b), Cardiel & Muñoz-Rodríguez (2015).

Provisional conservation status

LC.

Remarks

A proposal to conserve the name *Acalypha multicaulis* against *A. pruriens* and *A. ruderalis* has been recently presented (Cardiel *et al.* 2023).

50. ***Acalypha mutisii*** Cardiel

Anales del Jardín Botánico de Madrid 48: 17 (Cardiel 1990).

Voucher specimens

COLOMBIA – **Cundinamarca** • *Fernández Alonso, J.L. 8108*; COL, MA.

Habit

Shrub. Native.

Habitat

Northern Andes: Caribe/Pacific Lowland Plains and Hills, and Northern Andean Highlands, alt. 250–850 m.

Distribution

Colombia.

References

Cardiel (1995a), Muñoz-Rodríguez *et al.* (2014).

Provisional conservation status

VU B1ab(i,iii).

51. ***Acalypha neeana*** Cardiel & P.Muñoz

Brittonia 64 (4): 363 (Cardiel & Muñoz-Rodríguez 2012).

Voucher specimens

BOLIVIA – **Santa Cruz** • *Nee, M. 44687*; MA, MO, NY.

Habit

Shrub. Native.

Habitat

Central Andes: Yungas, alt. 1550 m.

Distribution

Bolivia.

Reference

Cardiel *et al.* (2013b).

Provisional conservation status

VU D2.

Remarks

This species is only known from the aforementioned type collection of 1994 (*Nee, M. 44687*).

52. ***Acalypha padifolia*** Kunth

Nova Genera et Species Plantarum 2: 97 (Bonpland *et al.* 1817).

≡ *Ricinocarpus padifolius* (Kunth) Kuntze = *Acalypha ruiziana* Müll.Arg. ≡ *R. ruizianus* (Müll.Arg.) Kuntze; = *A. macrodonta* Müll.Arg. ≡ *R. macrodontus* (Müll.Arg.) Kuntze; = *A. erythrostachya* Müll.Arg. ≡ *R. erythrostachyus* (Müll.Arg.) Kuntze; = *A. andina* Müll.Arg.; = *A. tunguraguae* Pax & K.Hoffm.; = *A. coriifolia* Pax & K.Hoffm.; = *A. schimpffii* Diels.

Voucher specimens

BOLIVIA – **La Paz** • *Brooke, W. 6884*; BM, F.

COLOMBIA – **Boyacá** • *Cardiel, J.M. 1102*; COL, MA.

ECUADOR – **Pichincha** • *Asplund, E. 6324*; G, S, UPS, US.

PERU – **Lambayeque** • *Hutchinson, P.C. 3445*; F, GH, K, M, MO, NY, US.

Habit

Shrub or small tree to 3 m high. Native.

Habitat

Northern Andes: Northern Andean Highlands, alt. (1000–)1500–2600(–3300) m.

Distribution

Bolivia, Colombia, Ecuador, and Peru.

References

Cardiel (1995a), Cardiel & Muñoz-Rodríguez (2012), Cardiel *et al.* (2013b).

Provisional conservation status

LC.

53. ***Acalypha parvula*** Hook.f.

Transactions of the Linnean Society of London 20: 185 (Hooker 1847).

≡ *Ricinocarpus parvulus* (Hook.f.) Kuntze; = *Acalypha velutina* Hook.f. ≡ *A. parvula* f. *velutina* (Hook.f.) Müll.Arg.; = *A. strobilifera* Hook.f. ≡ *A. parvula* var. *strobilifera* (Hook.f.) Müll.Arg.; = *A. reniformis* Hook.f. ≡ *A. parvula* var. *reniformis* (Hook.f.) Müll.Arg.; = *A. cordifolia* Hook.f. ≡ *A. parvula* var. *cordifolia* (Hook.f.) Müll.Arg.; = *A. flaccida* Hook.f. ≡ *A. parvula* var. *flaccida* (Hook.f.) Müll. Arg.; = *A. cordifolia* Andersson; = *A. spicata* Andersson; = *A. sericea* Andersson ≡ *A. parvula* f. *sericea* (Andersson) Müll.Arg.; = *A. diffusa* Andersson ≡ *A. parvula* f. *diffusa* (Andersson) Müll. Arg.; = *A. parvula* var. *procumbens* Müll.Arg.; = *A. parvula* var. *pubescens* Müll.Arg.; = *A. adamsii* B.L.Rob.; = *A. chathamensis* B.L.Rob. ≡ *A. parvula* var. *chathamensis* (B.L.Rob.) G.L.Webster.; = *A. albemarlensis* B.L.Rob.; = *A. hookeri* J.F.Macbr.

Voucher specimen

ECUADOR – **Galapagos Islands** • *Andersson, N.J. 199*; UPS.

Habit

Herb or subshrub. Native.

Habitat

In arid and transition zone, alt. 0–1450 m.

Distribution

Galapagos Islands.

Reference

Seberg (1984).

Provisional conservation status

NT

54. ***Acalypha peckoltii*** Müll.Arg.

Flora Brasiliensis 11 (2): 365 (Müller Argoviensis 1874).

≡ *Ricinocarpus peckoltii* (Müll.Arg.) Kuntze.

Voucher specimens

BRAZIL – **Rio de Janeiro** • *Peckolt, T. 206*; BR, G.

Habit

Shrub. Native.

Habitat

Eastern Highlands: Atlantic Forests, alt. 50–100 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

CR B2ab(ii,iii,iv) (probably EX).

Remarks

This species is only known from the aforementioned type collection made before 1870 (*Peckolt, T. 206*).

55. ***Acalypha pedemontana*** Cardiel & I.Montero

Phytotaxa 356 (2): 163 (Cardiel *et al.* 2018).

Voucher specimens

BOLIVIA – **Santa Cruz** • *Nee, M. 55110*; MA, MO, NY.

Habit

Herb or subshrub. Native.

Habitat

Central Andes: Central High Andes, alt. 790 m.

Distribution

Bolivia.

Reference

Cardiel *et al.* (2018).

Provisional conservation status

VU D2.

Remarks

This species is only known from the aforementioned type collection of 2007 (*Nee, M. 55110*).

56. ***Acalypha peruviana*** Müll.Arg.

Linnaea 34 (1): 17 (Müller Argoviensis 1865).

≡ *Ricinocarpus peruvianus* (Müll.Arg.) Kuntze; = *Acalypha bullata* Müll.Arg. ≡ *R. bullatus* (Müll. Arg.) Kuntze; = *R. controversus* Kuntze ≡ *A. controversa* (Kuntze) K.Schum.; = *A. subbullata* Pax & K.Hoffm.

Voucher specimens

BOLIVIA – **Santa Cruz** • *Vargas, I. 2943*; MA, NY.

PERU – **Ayacucho** • *Killip, E.P. 22379*; F, GH, NY, US.

Habit

Shrub or small tree up to 10 m high. Native.

Habitat

Central Andes: Central High Andes, alt. (1500–)2000–3150 m.

Distribution

Bolivia and Peru.

Reference

Cardiel *et al.* (2013b).

Provisional conservation status

LC.

57. ***Acalypha platyphylla*** Müll.Arg.

Linnaea 34 (1): 6 (Müller Argoviensis 1865).

≡ *Ricinocarpus platyphyllus* (Müll.Arg.) Kuntze; = *Acalypha subandina* Ule.

Voucher specimens

COLOMBIA – **Huila** •*Fosberg, F.R. 19920*; K, S, US.

ECUADOR – **Napo** • *Balslev, H. 2600*; B, F, GH, MO, NY, QCA, QCNE, S, US.

PERU – **Loreto** • *Ule, E.H.G. 6840*; G, GH, F, K, L, MA.

Habit

Shrub or small tree to 12 m high. Native.

Habitat

Northern Andes: Northern Andean Highlands, alt. (1000–)1400–2500 m.

Distribution

Colombia, Ecuador, and Peru.

References

Cardiel (1995a), Cardiel & Muñoz-Rodríguez (2012), Muñoz-Rodríguez *et al.* (2014).

Provisional conservation status

LC.

58. ***Acalypha plicata*** Müll.Arg.

Prodromus Systematis Naturalis Regni Vegetabilis 15 (2): 855 (Müller Argoviensis 1866).

≡ *Ricinocarpus plicatus* (Müll.Arg.) Kuntze; = *Acalypha cordifolia* Griseb.; = *A. cordifolia* var. *polyadenia* Griseb.; = *A. flabellifera* Rusby; = *R. cuspidatus* var. *glandulosus* Kuntze; = *A. fulva* I.M.Johnst.

Voucher specimens

ARGENTINA – **Jujuy** • *Eyerdam, W.J. 22349*; GH, K, MO.

BOLIVIA – **Cochabamba** • *Beck, S. 7398*; DAV, MA, LPB.

PERU – **Cajamarca** • *Sagástegui, A. 7919*; GH, MO, NY, US.

Habit

Subshrub or shrub. Native.

Habitat

Central Andes: Yungas, alt. (600–)1200–3500(–4100) m.

Distribution

Argentina, Bolivia, and Peru.

References

Cardiel (1995a), Cardiel *et al.* (2013b).

Provisional conservation status

LC.

Remarks

The specimens previously identified as *Acalypha plicata* from Colombia and Venezuela by Cardiel (1995b, 1999b), are here considered belonging to *A. cuspidata*. *Acalypha plicata* is restricted to the Andes of Argentina, Bolivia and Peru, and can be recognized by its conspicuous long glandular trichomes covering young branches, leaves, and inflorescences; *A. cuspidata* (restricted to Colombia and Venezuela) presents small glandular trichomes on inflorescences and sometimes sparse on young branches. The specimen *K. Graf 543* (NY) from Quime, Bolivia, found at 4100 m altitude, is the highest known collection of *Acalypha* in South America and worldwide.

59. ***Acalypha pohliana*** Müll.Arg.

Flora Brasiliensis 11 (2): 360 (Müller Argoviensis 1874).

≡ *Ricinocarpus pohlianus* (Müll.Arg.) Kuntze.

Voucher specimens

BRAZIL – **Rio de Janeiro** • *Pohl, J.B.E. 3430*; F, G, W.

Habit

Subshrub or shrub. Native.

Habitat

Eastern Highlands: Atlantic Forests, alt. 100 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

CR B2ab(ii,iii,iv) (probably EX).

Remarks

This species is only known from the aforementioned type collection of ca 1817 (*Pohl, J.B.E. 3430*).

60. ***Acalypha poiretii*** Spreng.

Systema vegetabilium 3: 879 (Sprengel 1826).

= *Acalypha indica* Vell.; = *A. rhombifolia* Baill.; = *A. paupercula* Pax & K.Hoffm.

Voucher specimens

ARGENTINA – **Chaco** • *Venturi, S. 10203*; BM, MO, NY.

BOLIVIA – **Chuquisaca** • *Wood, J.R.I. 19305*; K, HSB.

BRAZIL – **Bahia** • *Fonseca, M.R. 1300*; HUEFS, NY.

FRENCH GUIANA – **Cayenne** • *Broadway, W.E. 39*; GH, NY.

GUYANA – **Unknown locality** • *Hansock 180.A*; K.

PERU – **Cusco** • *Gay, M. Cl. s.n.*; P.

VENEZUELA – **Falcón** • *Wingfield, R. 7335*; K.

Habit

Herb. Native.

Habitat

Central Andes: Yungas; Amazonian-Orinocan Lowland: Amazon and Coastal Lowlands; Eastern Highlands: Cerrados, Caatinga and Atlantic Forests, alt. 5–1500(–2300) m.

Distribution

Widely distributed in North America, Caribbean Islands, Central America, and South America; adventive in mainland Africa (Sierra Leone and Ghana), the Mascarene Islands, and Southeast Asia (Radcliffe-Smith 1978; Cardiel & Montero-Muñoz 2018; Montero-Muñoz *et al.* 2018). South America (Argentina, Bolivia, Brazil, French Guiana, Guyana, Peru, and Venezuela).

References

Cardiel & Muñoz-Rodríguez (2015), Cardiel *et al.* (2022b).

Provisional conservation status

LC.

Remarks

Acalypha poiretii is reported here for the first time from Peru (Cusco) based on the collection *Gay*, *M.Cl. s.n.*; P[P04838744].

61. ***Acalypha psamofila*** Cardiel, M.Nee & P.Muñoz

Anales del Jardín Botánico de Madrid 70 (2): 164 (Cardiel *et al.* 2013b).

Voucher specimens

BOLIVIA – **Santa Cruz** • *Nee, M. 38990*; LPB, MA, MO, NY.

Habit

Herb or subshrub. Native.

Habitat

Central Andes: Yungas, alt. 350–500 m.

Distribution

Bolivia.

Reference

Cardiel *et al.* (2013b).

Provisional conservation status

NT.

62. ***Acalypha radicans*** Müll.Arg.

Linnaea 34 (1): 39 (Müller Argoviensis 1865).

≡ *Ricinocarpus radicans* (Müll.Arg.) Kuntze.

Voucher specimen

BRAZIL – **Rio de Janeiro** • *Cordeiro, I. 3583*; SPF • *Ule, E.H.G. 4786*; B. – **Unknown locality** • *Sellow, F. s.n.*; K[K001206653].

Habit

Herb or subshrub. Native.

Habitat

Eastern Highlands: Atlantic Forests, alt. 25 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

CR B2ab(ii,iii,iv).

Remarks

This species is only known from the three aforementioned collections.

63. ***Acalypha reflexa*** Müll.Arg.

Linnaea 34 (1): 33 (Müller Argoviensis 1865).

≡ *Ricinocarpus reflexus* (Müll.Arg.) Kuntze; = *Acalypha mandonii* Müll.Arg. ≡ *R. mandonii* (Müll.Arg.) Kuntze; = *A. soratensis* Pax & K.Hoffm.

Voucher specimens

BOLIVIA – **La Paz** • *Beck, S. 11112*; DAV, LPB, MA.

PERU – **Cajamarca** • *Cowan, C.P. 4398*; DAV, F, NY.

Habit

Shrub. Native.

Habitat

Central Andes: Central High Andes, alt. 1900–2900 m.

Distribution

Bolivia and Peru.

Reference

Cardiel *et al.* (2013b).

Provisional conservation status

NT.

64. ***Acalypha salicifolia*** Müll.Arg.

Flora 47: 438 (Müller Argoviensis 1864).

≡ *Ricinocarpus salicifolius* (Müll.Arg.) Kuntze; = *Acalypha macbridei* I.M.Johnst.

Voucher specimens

ECUADOR – **Napo** • *Cerón, C.E. 2193*; F, GB, MO, NY, QCNE.

PERU – **Loreto** • *Mexia, Y. 6213*; BM, F, GH, K, NY, S, U, US.

Habit

Shrub or small tree to 7 m high. Native.

Habitat

Northern Andes: Northern Andean Highlands; Central Andes: Central High Andes, alt. (300–)700–1500 (–1750) m.

Distribution

Ecuador and Peru.

References

Cardiel & Muñoz-Rodríguez (2012), Muñoz-Rodríguez *et al.* (2014).

Provisional conservation status

LC.

65. ***Acalypha salicina*** Hutch. ex Cardiel

Nordic Journal of Botany 22 (5): 627 (Cardiel 2003).

Voucher specimens

PERU – **Puno** • *Gentry, A.H. 76917*; MA, MO.

Habit

Shrub. Native.

Habitat

Central Andes: Yungas, alt. 150–1100 m.

Distribution

Peru.

Reference

Cardiel *et al.* (2013b).

Provisional conservation status

VU B1ab(i,iii).

66. ***Acalypha scandens*** Benth.

Hooker's Journal of Botany and Kew Garden Miscellany 6: 329 (Bentham 1854).

≡ *Ricinocarpus scandens* (Benth.) Kuntze.

Voucher specimens

BOLIVIA – **Beni** • *Guareco, I. 594*; LPB, MA.

BRAZIL – **Pará** • *Spruce, R. 781*; MO, NY.

COLOMBIA – **Amazonas** • *Cardiel, J.M. 253*; COL, MA.

ECUADOR – **Napo** • *Cerón, C.E. 5186*; AAU, MO, QCNE.

GUYANA – **Northwest District** • *De La Cruz, J.S. 1319*; GH, NY.

PERU – **San Martín** • *Belshaw, C.M. 3222*; F, GH, K, MO, NY, US.

SURINAME – **Sipaliwini** • *Boon, H.A. 1060*; U.

VENEZUELA – **Delta Amacuro** • *Steyermark, J.A. 87745*; COL, MO, US.

Habit

Shrub (usually climbing). Native.

Habitat

Amazonian-Orinocan Lowland: Amazon Irregular Plains and Piedmont and Guianan Shield Moist Forests, alt. (20–)100–500(–900) m.

Distribution

Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, and Venezuela.

References

Cardiel (1995a), Cardiel & Muñoz-Rodríguez (2012), Cardiel *et al.* (2013b, 2022b).

Provisional conservation status

LC.

67. ***Acalypha schiedeana*** Schltdl.

Linnaea 7: 384 (Schlechtendal 1832).

= *Acalypha schiedeana* var. *macrodonta* Müll.Arg.; = *A. schiedeana* f. *angustifolia* Müll.Arg.; = *A. subscandens* Rusby; = *A. ecuadorica* Pax & K.Hoffm.

Voucher specimens

COLOMBIA – **Cundinamarca** • *Fernández Alonso, J.L. 5349*; COL, MA.

ECUADOR – **Manabí** • *Sparre, B. 19644*; GB, GH, S.

VENEZUELA – **Zulia** • *Bunting, G.S. 11735*; MO, NY.

Habit

Shrub or small tree to 3 m high. Native.

Habitat

Northern Andes: Caribe/Pacific Lowland Plains and Hills and Northern Andean Highlands, alt. 0–1200 m.

Distribution

Mexico, Central America, and Northern South America (Colombia, Ecuador, and Venezuela).

References

Cardiel (1999b), Cardiel & Muñoz-Rodríguez (2012).

Provisional conservation status

LC.

68. ***Acalypha schreiteri*** Lillo ex Lourteig & O'Donell

Lilloa 8: 327 (Lourteig & O'Donell 1942).

Voucher specimens

ARGENTINA – **Catamarca** • *Brücher, O. s.n.*; S • *Jorgensen, P. 1202*; GH • *Jorgensen, P. 1807*; MO. – **Salta** • *Novara, L.J. 10160*; G, S.

Habit

Shrub. Native.

Habitat

Central Andes: Yungas, alt. 1500–1800 m.

Distribution

Argentina.

Reference

Cardiel & Muñoz-Rodríguez (2015).

Provisional conservation status

EN B2ab(ii,iii).

Remarks

This species is only known from the four aforementioned collections.

69. ***Acalypha schultesii*** Cardiel

Anales del Jardín Botánico de Madrid 52: 155 (Cardiel 1994).

Voucher specimens

COLOMBIA – **Amazonas** • *Schultes, R.E. 46-250*; F.

PERU – **Loreto** • *Spichiger 1074*; G, MO, NY • *Vásquez, R. 13376*; MO.

Habit

Herb. Native.

Habitat

Amazonian-Orinocan Lowland: Amazon Irregular Plains and Piedmont, alt. 150–200 m.

Distribution

Colombia and Peru.

Reference

Cardiel *et al.* (2013b).

Provisional conservation status

EN B1ab(i,iii)+B2ab(ii,iii).

Remarks

This species is only known from the three aforementioned collections.

70. ***Acalypha sehnemii*** Allem & Irgang

Boletín de la Sociedad Argentina de Botánica 17: 305 (Allem & Irgang 1976).

Voucher specimen

BRAZIL – **Rio Grande do Sul** • *Rambo, B. s.n.*; MO.

Habit

Subshrub. Native.

Habitat

Pampas: Northern Rolling Pampas, alt. 465 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

CR B2ab(ii,iii,iv) (probably EX).

Remarks

This species is only known from the aforementioned type collection of 1942 (*Rambo, B. s.n.*).

71. ***Acalypha senilis*** Baill.

Adansonia 5: 228 (Baillon 1865).

≡ *Ricinocarpus senilis* (Baill.) Kuntze; = *Acalypha rotundifolia* Herter.

Voucher specimens

ARGENTINA – **Corrientes** • *Pedersen, T.M. 13431*; C, NY, MO.

BRAZIL – **Rio Grande do Sul** • *Sacco, J.C. 467*; FLOR, RB.

PARAGUAY – **Itapúa** • *Zardini, E.M. 51579*; AS, M, MAUAM, MO.

URUGUAY – **Río Negro** • *Gibert, E. 208*; K, P.

Habit

Herb or subshrub. Native.

Habitat

Eastern Highlands: Cerrados; Gran Chaco: Humid Chaco; Pampas: Northern Rolling Pampas, alt. 50–500 m.

Distribution

Argentina, Brazil, Paraguay, and Uruguay.

References

Cardiel *et al.* (2013a, 2022b), Cardiel & Muñoz-Rodríguez (2015).

Provisional conservation status

LC.

72. ***Acalypha setosa*** A.Rich.

Historia Física Política y Natural de la Isla de Cuba 11: 204 (Richard 1850).

≡ *Ricinocarpus setosus* (A.Rich.) Kuntze.

Voucher specimens

COLOMBIA – **Huila** • *Fernández Alonso, J.L. 6724*; COL, MA.

VENEZUELA – **Distrito Capital** • *DeWolf, G.P. 1987*; GH, H, K.

Habit

Herb. Native.

Habitat

Northern Andes: Northern Andean Highlands, alt. (50–)300–1000 m.

Distribution

Widely distributed in Mexico, Central America, Caribbean Islands, and Northern South America: Colombia and Venezuela. Introduced in the United States (Levin 2016).

References

Cardiel (1995a, 1999b).

Provisional conservation status

LC.

73. ***Acalypha simplicistyla*** Cardiel

Nordic Journal of Botany 22 (5): 629 (Cardiel 2003).

Voucher specimens

PERU – **San Martín** • *Chrostowski, M.S.* 70-396; MO • *Ferreyra*, *R. 7943*; US • *Schunke*, *J. 4347*; COL, F, G, GH, MA, MO, US.

Habit

Shrub. Native.

Habitat

Central Andes: Yungas, alt. 400–1000 m.

Distribution

Peru.

Reference

Cardiel *et al.* (2013b).

Provisional conservation status

EN B1ab(i,iii)+B2ab(ii,iii).

Remarks

This species is only known from the three aforementioned collections.

74. ***Acalypha stachyura*** Pax

Repertorium Specierum Novarum Regni Vegetabilis 7: 110 (Lingelsheim *et al.* 1909).

= *Acalypha macrophylla* Ule; = *A. ulei* Radcl.-Sm. & Govaerts.

Voucher specimens

BOLIVIA – **Beni** • *Beck, S. 16723*; DAV, MO, NY.

BRAZIL – **Amazonas** • *Krukoff, B.A. 4876*; K, MO, NY, U.

COLOMBIA – **Caquetá** • *Gentry, A.H. 9159*; COL, MO, S.

ECUADOR – **Napo** • *Asplund, E. 8867*; MO, NY, QCA, US.

PERU – **Loreto** • *Mexia, Y. 6168*; BM F, GH, K, MO, NY, S, U, US.

Habit

Shrub or small tree to 7 m high. Native.

Habitat

Central Andes: Yungas; Amazonian-Orinocan Lowland: Amazon Irregular Plains and Piedmont, alt. (50–)100–1000(–1500) m.

Distribution

Bolivia, Brazil, Colombia, Ecuador, and Peru.

References

Cardiel (1995a), Cardiel & Muñoz-Rodríguez (2012), Cardiel *et al.* (2013b, 2022b).

Provisional conservation status

LC.

75. ***Acalypha stellata*** Cardiel

Novon 10 (4): 362 (Cardiel 2000).

Voucher specimens

ECUADOR – **Chimborazo** • *Ollgaard, B. 9023*; AAU, C, MO, NY.

Habit

Shrub. Native.

Habitat

Northern Andes: Northern Andean Highlands, alt. 800–1100 m.

Distribution

Ecuador.

Reference

Cardiel & Muñoz-Rodríguez (2012).

Provisional conservation status

EN B2ab(ii,iii).

76. ***Acalypha stenoloba*** Müll.Arg.

Flora 55: 41 (Müller Argoviensis 1872).

= *Acalypha capillaris* Rusby; = *Ricinocarpus gracilis* var. *arboreus* Kuntze; = *A. lechleri* Britton ex Rusby; = *A. grandispicata* Britton ex Rusby; = *A. brittonii* Rusby; = *A. lucida* Rusby; = *A. eugenifolia* Rusby; = *A. baenitzii* Pax; = *A. ovata* Pax & K.Hoffm.; = *A. douilleana* Rusby.

Voucher specimens

BOLIVIA – **La Paz** • *Bang, M. 2368*; BM, C, F, G, K, M, MO, NY, US.

PERU – **Junín** • *Killip, E.P. 24641*; F, GH, NY, US.

Habit

Shrub or small tree. Native.

Habitat

Central Andes: Yungas, alt. (250–)500–2100(–2500) m.

Distribution

Bolivia and Peru.

Reference

Cardiel *et al.* (2013b).

Provisional conservation status

LC.

77. ***Acalypha stricta*** Poepp.

Nova Genera ac Species Plantarum quas in Regno Chilensi Peruviano 3: 21 (Poeppig 1841).

≡ *Ricinocarpus strictus* (Poepp.) Kuntze ; = *Acalypha urostachya* Baill. ≡ *R. urostachyus* (Baill.) Kuntze; = *A. benensis* Britton ex Rusby; = *A. tomentosula* Ule; = *A. mapirensis* Pax; = *A. mapirensis* var. *scabra* Pax & K.Hoffm.; = *A. mapirensis* var. *pubescens* Pax & K.Hoffm.; = *A. variegata* Rusby; = *A. bopiana* Rusby.

Voucher specimens

BOLIVIA – **La Paz** • *Bang, M. 217*; BM, C, G, GH, K, M, MA, NY, S, US.

BRAZIL – **Acre** • *Daly, D.C. 8233*; MO, NY.

PERU – **San Martín** • *Belshaw, C.M. 3189*; F, GH, K, MO, NY, U, US.

Habit

Shrub or small tree to 5 m high. Native.

Habitat

Central Andes: Yungas; Amazonian-Orinocan Lowland: Amazon Irregular Plains and Piedmont, alt. 100–1500(–2500) m.

Distribution

Bolivia, Brazil, and Peru.

References

Cardiel *et al.* (2013b, 2022b).

Provisional conservation status

LC.

78. ***Acalypha subcastrata*** F.Aresch.

Plantae sub Itinere Navis Bellicae Eugeniae (Areschoug 1910).

Voucher specimens

ECUADOR – **Napo** • *Abbott, J.R. 15559*; QCNE, SEL.

PERU – **Cajamarca** • *Hutchinson, P.C. 3521*; K, M, MO, NY, P.

Habit

Herb. Native.

Habitat

Northern Andes: Pacific Lowland Plains and Hills, alt. (0–)150–500(–1200) m.

Distribution

Ecuador and Peru.

References

Cardiel & Muñoz-Rodríguez (2012), Cardiel *et al.* (2013b).

Provisional conservation status

NT.

79. ***Acalypha tenuifolia*** Müll.Arg.

Prodromus Systematis Naturalis Regni Vegetabilis 15 (2): 863 (Müller Argoviensis 1866).

≡ *Ricinocarpus tenuifolius* (Müll.Arg.) Kuntze.

Voucher specimens

VENEZUELA – **Distrito Capital** • *Pittier, H. 10333*; G, GH, NY, US.

Habit

Shrub or small tree. Native.

Habitat

Northern Andes: Caribe/Pacific Lowland Plains and Hills, alt. 400–1400 m.

Distribution

Venezuela.

Reference

Cardiel (1999b).

Provisional conservation status

NT.

80. ***Acalypha uleana*** L.B.Sm. & Downs

Phytologia 22 (2): 90 (Smith 1971).

Voucher specimens

BRAZIL – **Santa Catarina** • *Ule, E.H.G. s.n.*; HBG, MO, US.

Habit

Subshrub. Native.

Habitat

Eastern Highlands: Atlantic Forests, alt. 1300 m.

Distribution

Brazil.

Reference

Cardiel *et al.* (2022b).

Provisional conservation status

CR B2ab(ii,iii,iv) (probably EX).

Remarks

This species is only known from the aforementioned type specimens of 1891 (*Ule, E.H.G. s.n.*).

81. ***Acalypha variabilis*** Klotzsch ex Baill.

Adansonia 5: 226 (Baillon 1865).

= *Acalypha hirta* Spreng.; = *A. virgata* Vell.; = *A. betuloides* Klotzsch ex Baill.; = *A. variabilis* var. *albescens* Baill.; = *A. variabilis* var. *angustifolia* Baill.; = *A. variabilis* var. *elliptica* Baill.; = *A. variabilis* var. *longifolia* Baill.; = *A. variabilis* var. *urticoides* Klotzsch ex Baill.; = *A. cordobensis* Müll.Arg. ≡ *Ricinocarpus cordobensis* (Müll.Arg.) Kuntze; = *A. cordobensis* var. *rotundata* Griseb. ≡ *A. communis* var. *rotundata* (Griseb.) Pax & K.Hoffm.; *A. communis* f. *hirsutissima* Chodat & Hassl.; *A. humilis* Pax & K.Hoffm.

Voucher specimens

ARGENTINA – **Chaco** • *Aguilar, R.M. 511*; F, K, NY.

BOLIVIA – **Santa Cruz** • *Beck, S. 25594*; LPB, MA.

BRAZIL – **São Paulo** • *Harley, R.M. 28530*; HUEFS, HUESB, K.

PARAGUAY – **Paraguarí** • *Hassler, E. 2986*; BM, F, GH, K, MA, NY, W.

URUGUAY – **Flores** • *Rosengurtt, B. B-644*; F, GH.

Habit

Herb or subshrub. Native.

Habitat

Eastern Highlands: Cerrados and Atlantic Forests; Gran Chaco: Western Dry Chaco and Humid Chaco; Pampas: Northern Rolling Pampas, alt. 500–1000(–1600) m.

Distribution

South America: Argentina, Bolivia, Brazil, Paraguay, and Uruguay.

References

Cardiel *et al.* (2013a, 2022b), Cardiel & Muñoz-Rodríguez (2015).

Provisional conservation status

LC.

82. ***Acalypha velamea*** Baill.

Adansonia 5: 228 (Baillon 1865).

≡ *Ricinocarpus vellameus* (Baill.) Kuntze; = *Acalypha communis* var. *brevipes* Müll.Arg. ≡ *A. brevipes* (Müll.Arg.) Müll.Arg. ≡ *R. brevipes* (Müll.Arg.) Kuntze; = *A. communis* f. *decumbens* Müll.Arg.; = *A. communis* var. *pallida* Müll.Arg.; *A. communis* var. *brevipetiolata* Chodat & Hassl.

Voucher specimens

ARGENTINA – **Corrientes** • *Keller, H. 14239*; CTES.

BRAZIL – **Goiás** • *Irwin, H.S. 7368*; NY.

PARAGUAY – **Amambay** • *Hassler, E. 8313*; BM, NY.

Habit

Shrub. Native.

Habitat

Eastern Highlands: Cerrados; Pampas: Northern Rolling Pampas, alt. 500–1000 m.

Distribution

Argentina, Brazil, and Paraguay.

References

Cardiel *et al.* (2013a, 2022b), Cardiel & Muñoz-Rodríguez (2015).

Provisional conservation status

LC.

83. ***Acalypha venezuelica*** Cardiel

Anales del Jardín Botánico de Madrid 57 (1): 59 (Cardiel 1999a).

Voucher specimens

VENEZUELA – **Falcón** • *Van der Werff, H. 7467*; F, NY, U. – **Mérida** • *Aristeguieta, L. 7862*; F. • *Bernardi, A.L. 419*; NY. • *Bernardi, A.L. 481*; NY.

Habit

Shrub. Native.

Habitat

Northern Andes: Northern Andean Highlands, alt. 1200–1400 m.

Distribution

Disjunct distribution in Guatemala and Northern South America (Venezuela).

Reference

Cardiel (1999b).

Provisional conservation status

EN B1ab(i,iii)+B2ab(ii,iii).

Remarks

This species is only known in South America from the four aforementioned collections. *Acalypha venezuelica* is also reported here for the first time in Guatemala (Zapaca), based on the specimen: *P.C. Standley 73825*, G[G00405440].

84. ***Acalypha villosa*** Jacq.

Enumeratio Systematica Plantarum 32 (Jacquin 1760).

≡ *Ricinocarpus villosus* (Jacq.) Kuntze; = *Acalypha carthagenensis* Jacq. ≡ *R. carthagenensis* (Jacq.) Kuntze; = *Gymnalypha jacquini* Griseb.; = *A. linostachya* Baill.; = *A. villosa* var. *intermedia* Müll. Arg.; = *A. villosa* var. *tomentosa* Müll.Arg.; = *A. villosa* f. *paniculata* Müll.Arg. ≡ *A. villosa* var. *paniculata* (Müll.Arg.) Pax & K.Hoffm.; = *A. villosa* var. *trichopoda* Müll.Arg.; = *A. subvillosa* Müll. Arg. ≡ *R. subvillosus* (Müll.Arg.) Kuntze; = *A. williamsii* Rusby [1920] nom. inval.; = *A. karsteniana* Pax & K.Hoffm.; = *A. villosa* var. *latiuscula* Pax & K.Hoffm.; = *A. rusbyi* Dorr.

Voucher specimens

ARGENTINA – **Salta** • *Meyer, T. 4864*; BM, F.

BOLIVIA – **La Paz** • *Buchtien, O. 3809*; F, GH, NY, US.

BRAZIL – **Ceará** • *Gardner, G. 1838*; G, K, NY.

COLOMBIA – **Norte de Santander** • *Barkley, F.A. 18NS095*; COL, MEDEL, US.

ECUADOR – **Los Ríos** • *Dodson, C.H. 5845*; AAU, MO, SEL, US.

GUYANA – **Potaro-Siparuni** • *Hahn, W. 5713*; CAY, NY, U, US.

PARAGUAY – **Amambay** • *Hassler, E. 7859*; BM, F, GH, K, MO, NY, W.

PERU – **Amazonas** • *Hutchinson, P.C. 4450*; F, GH, K, M, MO, NY, US.

VENEZUELA – **Barinas** • *Breteler, F.J. 4249*; COL, F, G, M, NY, S, U, US.

Habit

Shrub or small tree to 5 m high. Native.

Habitat

Northern Andes: Caribe/Pacific Lowland Plains and Hills, Venezuelan Coastal Andes, and Northern Andean Highlands; Central Andes: Yungas; Amazonian-Orinocan Lowland: Amazon Irregular Plains and Piedmont; Eastern Highlands: Guianan Highlands, Cerrados, Caatinga and Atlantic Forests, alt. 50–1500(–2300) m.

Distribution

Widely distributed from Mexico to South America (Argentina, Bolivia, Brazil, Colombia, Ecuador, Guyana, Paraguay, Peru, and Venezuela).

References

Cardiel (1995a), Muñoz-Rodríguez *et al.* (2014), Cardiel *et al.* (2022b).

Provisional conservation status

LC.

85. ***Acalypha websteri*** Cardiel

Novon 10 (4): 360 (Cardiel 2000).

Voucher specimens

ECUADOR – **Chimborazo** • *Asplund, E. 15425*; S. *Asplund, E. 15427*; S. – **Pichincha** • *Holm-Nielsen, L. 16968*; AAU, QCA.

Habit

Shrub. Native.

Habitat

Northern Andes: Northern Andean Highlands, alt. 1200 m.

Distribution

Ecuador.

Reference

Cardiel & Muñoz-Rodríguez (2012).

Provisional conservation status

CR B2ab(ii,iii,iv).

Remarks

This species is only known from the three aforementioned collections.

86. ***Acalypha wigginsii*** G.L.Webster

Madroño 20: 261 (Webster 1970).

Voucher specimen

ECUADOR – **Galapagos Islands** • *Werff, H.H. van der 1669*; U.

Habit

Subshrub. Native.

Habitat

In fern-sedge-zone, alt. 700–865 m.

Distribution

Galapagos Islands.

Reference

Seberg (1984).

Provisional conservation status

CR B2ab(ii,iii,iv).

87. ***Acalypha wilkesiana*** Müll.Arg.

Prodromus Systematis Naturalis Regni Vegetabilis 15 (2): 817 (Müller Argoviensis 1866).

Voucher specimens

BOLIVIA – **La Paz** • *Solomon, J.C. 14276*; LPB, MO.

BRAZIL – **São Paulo** • *Coe Teixeira, B. 261*; SP.

COLOMBIA – **Valle del Cauca** • *Duque, J.M. 4372*; COL.

ECUADOR – **Imbabura** • *Cerón, C.E. 7158*; QCNE, MO.

GUYANA – **Northwest District** • *De La Cruz, J.S. 3801*; F, GH, NY.

PARAGUAY – **Central** • *Pérez, B. 1034*; MO.

PERU – **Loreto** • *Williams, L. 2010*; F, US.

VENEZUELA – **Bolívar** • *López-Palacios, S. 4344*; NY.

Habit

Shrub. Introduced.

Distribution

Native to the Melanesian Island of Fiji (Sagun *et al.* 2010); introduced as ornamental throughout the tropics and frequently naturalised. South America (Bolivia, Brazil, Colombia, Ecuador, Guyana, Paraguay, Peru, and Venezuela).

References

Sagun *et al.* (2010), Cardiel *et al.* (2022b).

Excluded species

Acalypha brachyclada Müll.Arg.

Prodromus Systematis Naturalis Regni Vegetabilis 15 (2): 862 (Müller Argoviensis 1866).

We only know the type collection of this species (*Herb. Pavón s.n.*; G-DC[G00324470] and G[G00383643]). Although the protologue indicated as origin "In Peruvia aut in Mexico", only Mexico appears on the label of the type specimens, so this species probably comes from Mexico as pointed out Cardiel *et al.* (2013b).

Acalypha contermina Müll.Arg.

Linnaea 34 (1): 46 (Müller Argoviensis 1865).

We only know the type collection of this species (*Herb. Pavón s.n.*; G-DC[G00324653] and G[G00383632]). The labels of these specimens indicate as origin "In Peruvia" as also appears in the protologue, but probably they do not come from Peru but from Mexico (Cardiel *et al.* 2013b). This plant seems morphologically very close to some Mexican species, still little known.

Acalypha cuprea Herzog

Repertorium Specierum Novarum Regni Vegetabilis 7: 60 (Herzog 1909).

Acalypha cuprea was described from Bolivia and the type specimen (*Herzog 429*) was probably destroyed in the Berlin herbarium fire of 1945. It is probably a synonym of *A. communis* (Cardiel *et al.* 2013b).

Acalypha jubifera Rusby

Descriptions of Three Hundred New Species of South American Plants: 48 (Rusby 1920).

Acalypha jubifera was described from Bolivia and the type specimen (*M. Bang s.n.*) is missing. The original description does not provide enough information to ascertain its identity (Cardiel *et al.* 2013b).

Acalypha riedeliana Baill.

Adansonia 5: 231 (Baillon 1865).

Acalypha riedeliana was described based on a plant grown from seed in the Paris botanical garden (Cardiel *et al.* 2022b). The original description indicates its Brazilian origin, but the study of the type specimen (*L. Riedel s.n.* P[P00645419]) indicates that it corresponds to *A. integrifolia* Willd. only known species from Mauritius and Reunion Islands, in the Western Indian Ocean Region (Montero-Muñoz 2021).

Discussion

Despite a massive increase in data accumulation and important technological developments, our knowledge of tropical plant diversity is still fragmentary. Around 2000 plant species new to science are described every year (RBG Kew 2016), and it has been estimated that at least 9000 tree species—supposedly well-known organisms—are still undescribed (Cazzolla Gatti *et al.* 2022). In addition, lack of comprehensive studies has resulted in widespread identification errors, with estimates of 50% of tropical plant specimens in the world's herbaria having an incorrect name (Goodwin *et al.* 2015). Using these data in a study of any kind, for example to produce conservation assessments, has a direct impact on the results of that study and therefore on our understanding of the natural world. On the other hand, a good taxonomic framework enables accurate, extensive biodiversity studies. However, most tropical plant groups are lacking comprehensive taxonomic studies. In fact, 90% of tropical plant species are so poorly known that they are essentially invisible to any conservation efforts (Feeley & Silman 2011; Feeley 2015).

This paper presents an up-to-date, critically reviewed, and annotated catalogue of *Acalypha* of South America with preliminary conservation assessments of all native species. The 87 species and eight subspecies recognized in this work represent approximately 20% of all species of *Acalypha* known worldwide and 36% of species known in the Americas. In total, 395 names (80% of all names recorded) are considered synonyms. This synonymy rate is in line with values reported in other megadiverse genera such as *Ipomoea* L. (Wortley & Scotland 2004; Muñoz-Rodríguez *et al.* 2019). Forty-one species accepted in the most recent checklist of American plants (Ulloa-Ulloa *et al.* 2017) are here treated as synonyms or excluded.

In its natural distribution, *Acalypha* is recorded in all South American countries except Chile (Table 2, Figs 1–2), with the southernmost collection found at the mouth of La Plata River in Argentina, 34º49′ S latitude (a specimen of *A. gracilis*). This is also the southern limit in the distribution of the genus worldwide. The richest countries in number of species are Brazil (40 species), Peru (32), Bolivia (29), and Colombia (24). In terms of endemism, Brazil is the country with the highest number of endemic species, with 43% of species of *Acalypha* recorded from Brazil being endemic to the country. Brazil is followed by Bolivia, Colombia and Peru (17% each).

Of the 87 species recorded in South America, 83 are native and four are non-native species of Paleotropical origin. Specifically, *Acalypha hispida* and *A. wilkesiana* are widely cultivated as ornamental plants and sometimes naturalised, whereas *A. indica* and *A. lanceolata*, two widespread weeds, have only been recorded once (from the Guyana coast) and it is unknown whether other populations exist elsewhere. Seventy of the 83 native species (84.3%) are restricted to South America, whereas two species are also present in Central America (*Acalypha muelleriana* and *A. venezuelica*), two in Central America and the Caribbean Region (*A. alopecuroides* and *A. cuneata*), two in North America (*A. carrascoana* and *A. glandulosa*), and seven are widespread on the American continent (*A. arvensis*, *A. cuspidata*, *A. diversifolia*, *A. macrostachya*, *A. schiedeana*, *A. setosa*, and *A. poiretii*). It is worth noting the disjunct distribution of three South American species: *A. carrascoana* and *A. glandulosa* are found in the north of Colombia and Venezuela, and also in Central Mexico (Cardiel 1992; Cardiel & Muñoz-Rodríguez 2013), whereas *A. venezuelica*, until now only known from Venezuela, is reported here for the first time from Guatemala. Although these disjunct distributions could reflect lack of collections in the areas in between, we think that they are most likely the result of seed dispersal. Disjunct distributions between Mexico and northern South America are well documented (e.g., Solbrig 1972; Simon *et al.* 2011), also in the Euphorbiaceae family (Martínez-Gordillo & Morrone 2005; van Ee & Berry 2011) and in *Acalypha*, e.g., *A. glandulosa*, known from Central Mexico and the Colombian Andes (cf. Cardiel 1992).

Acalypha diversifolia, *A. macrostachya*, and *A. villosa* are the three most common and widely distributed species, representing around half of all known herbarium collections. In contrast, 15 species are only

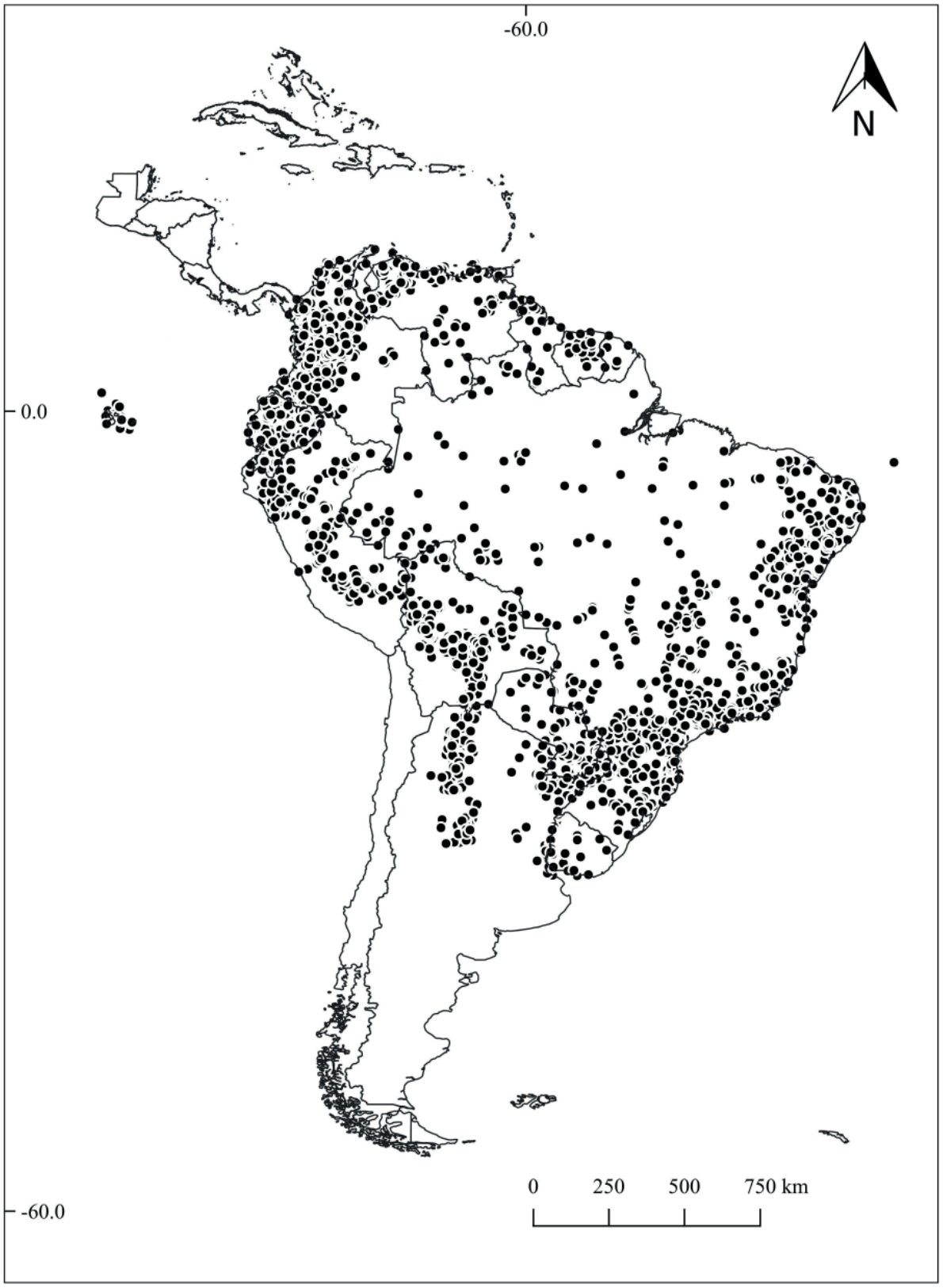

Fig. 1. Distribution of *Acalypha* L. in South America. Black dots represent georeferenced *Acalypha* herbarium collections studied by us.

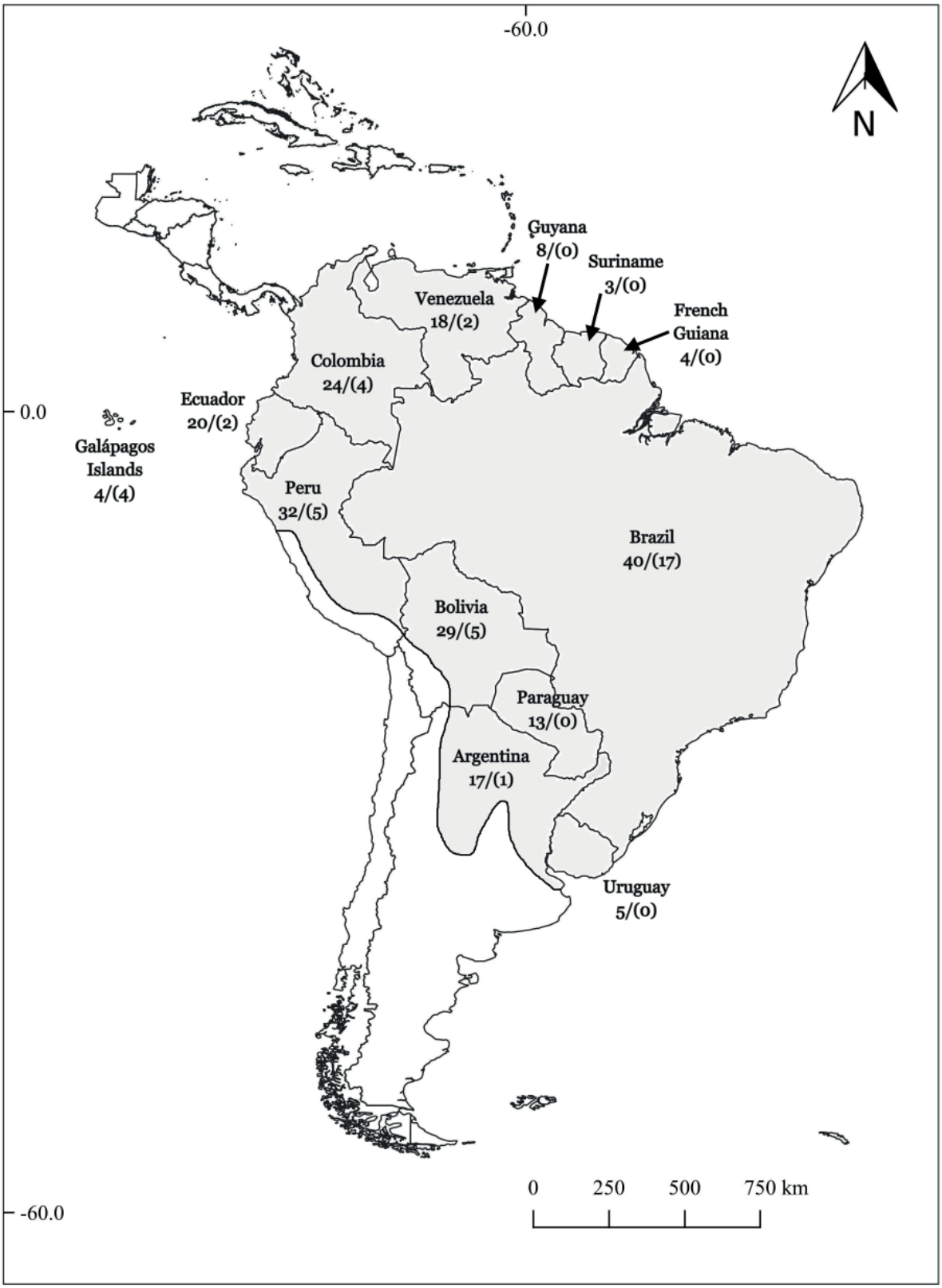

Fig. 2. Number of species of *Acalypha* L. in South America by country. In brackets: the number of endemic species in each country.

Table 2 (continued on next page). South American species of *Acalypha* L. by country. Country endemics in bold.

Argentina		
A. amblyodonta	*A. communis* subsp. *saltensis*	*A. plicata*
A. boliviensis	*A. communis* subsp. *tracheliifolia*	*A. poiretii*
A. brasiliensis subsp. *psilophylla*	*A. digynostachya*	***A. schreiteri***
A. chaquensis	*A. gracilis*	*A. senilis*
A. communis subsp. *apicalis*	*A. herzogiana*	*A. variabilis*
A. communis subsp. *communis*	*A. lycioides*	*A. velamea*
A. communis subsp. *paraguariensis*	*A. multicaulis*	*A. villosa*
Colombia		
A. alopecuroidea	*A. glandulosa*	*A. platyphylla*
A. arvensis	*A. hispida*	*A. scandens*
A. carrascoana	***A. inaequilatera***	*A. schiedeana*
A. castroviejoi	*A. infesta*	*A. schultesii*
A. chocoana	*A. macrostachya*	*A. setosa*
A. cuneata	*A. muelleriana*	*A. stachyura*
A. cuspidata	***A. mutisii***	*A. villosa*
A. diversifolia	*A. padifolia*	*A. wilkesiana*
Bolivia		
A. amblyodonta	*A. infesta*	*A. poiretii*
A. arvensis	*A. lycioides*	***A. psamofila***
A. beckii	***A. machiensis***	*A. reflexa*
A. boliviensis	*A. macrostachya*	*A. scandens*
A. communis subsp. *communis*	*A. multicaulis*	*A. stachyura*
A. communis subsp. *saltensis*	***A. neeana***	*A. stenoloba*
A. cuneata	*A. padifolia*	*A. stricta*
A. diversifolia	***A. pedemontana***	*A. variabilis*
A. herzogiana	*A. peruviana*	*A. villosa*
A. hibiscifolia	*A. plicata*	*A. wilkesiana*
Brazil		
A. accedens	*A. communis* subsp. *tracheliifolia*	***A. peckoltii***
A. acuminata	*A. cuneata*	***A. pohliana***
A. almadinensis	*A. digynostachya*	*A. poiretii*
A. alopecuroidea	***A. dimorpha***	***A. radicans***
A. amblyodonta	*A. diversifolia*	*A. scandens*
A. amphigyne	*A. gracilis*	***A. sehnemii***
A. apetiolata	*A. hassleriana*	*A. senilis*
A. arvensis	*A. herzogiana*	*A. stachyura*
A. brasiliensis subsp. *asterotricha*	*A. hispida*	*A. stricta*
A. brasiliensis subsp. *brasiliensis*	***A. inselbergensis***	***A. uleana***
A. brasiliensis subsp. *psilophylla*	***A. klotzschii***	*A. variabilis*
A. chorisandra	*A. macrostachya*	*A. velamea*
A. clausenii	***A. macularis***	*A. villosa*
A. communis subsp. *apicalis*	***A. martiana***	*A. wilkesiana*
A. communis subsp. *communis*	*A. multicaulis*	
Ecuador (including Galapagos Islands*)		
A. abingdonii*	*A. hispida*	*A. schiedeana*
A. alopecuroidea	*A. infesta*	*A. stachyura*
A. arvensis	*A. macrostachya*	*A. stellata*
A. baurii*	*A. padifolia*	*A. subcastrata*

Table 2 (continued). South American species of *Acalypha* L. by country. Country endemics in bold.

Ecuador (including Galapagos Islands*)		
A. cuneata	***A. parvula****	*A. villosa*
Ecuador (including Galapagos Islands*)		
A. cuspidata	*A. platyphylla*	***A. websteri***
A. dictyoneura	***A. salicifolia***	***A. wigginsii****
A. diversifolia	*A. scandens*	*A. wilkesiana*
French Guiana		
A. arvensis	*A. indica*	*A. poireti*
A. diversifolia		
Guyana		
A. arvensis	*A. macrostachya*	*A. villosa*
A. diversifolia	*A. poiretii*	*A. wilkesiana*
A. lanceolata	*A. scandens*	
Paraguay		
A. amblyodonta	*A. digynostachya*	*A. senilis*
A. chaquensis	*A. gracilis*	*A. variabilis*
A. communis subsp. *apicalis*	*A. hassleriana*	*A. velamea*
A. communis subsp. *communis*	*A. herzogiana*	*A. villosa*
A. communis subsp. *paraguariensis*	*A. multicaulis*	*A. wilkesiana*
Peru		
A. alopecuroidea	*A. hispida*	*A. salicina*
A. amblyodonta	*A. infesta*	*A. scandens*
A. argomuelleri	*A. lycioides*	*A. schultesii*
A. aronioides	*A. macrostachya*	***A. simplicistyla***
A. arvensis	*A. padifolia*	*A. stachyura*
A. cuneata	***A. peruviana***	*A. stenoloba*
A. cuspidata	*A. platyphylla*	*A. stricta*
A. delicata	*A. plicata*	*A. subcastrata*
A. dictyoneura	*A. poiretii*	*A. villosa*
A. diversifolia	*A. reflexa*	*A. wilkesiana*
A. hibiscifolia	*A. salicifolia*	
Suriname		
A. arvensis	*A. diversifolia*	*A. scandens*
Uruguay		
A. communis subsp. *tracheliifolia*	*A. multicaulis*	*A. variabilis*
A. gracilis	*A. senilis*	
Venezuela		
A. alopecuroidea	*A. hispida*	*A. schiedeana*
A. arvensis	***A. longipetiolata***	*A. setosa*
A. carrascoana	*A. macrostachya*	***A. tenuifolia***
A. cuneata	*A. muelleriana*	*A. venezuelica*
A. cuspidata	*A. poiretii*	*A. villosa*
A. diversifolia	*A. scandens*	*A. wilkesiana*

known from the type collection (*A. amphigyne*, *A. beckii*, *A. castroviejoi*, *A. chocoana*, *A. chorisandra*, *A. delicata*, *A. inaequilatera*, *A. longipetiolata*, *A. machiensis*, *A. neeana*, *A. peckoltii*, *A. pedemontana*, *A. pohliana*, *A. sehnemii*, and *A. uleana*) and a further 11 species are known from less than five collections (*Acalypha almadinensis*, *A. apetiolata*, *A. carrascoana*, *A. chaquensis*, *A. dimorpha*, *A. radicans*, *A. schreiteri*, *A. schultesii*, *A. simplicistyla*, *A. venezuelica*, and *A. websterii*). Additional field work in

the areas where some of these species grow would be essential to further assess their extent of distribution and conservation status. As an example, six out of the 15 species only known from the type specimen have recently been described and based on relatively recent collections (*Acalypha beckii*, *A. chocoana*, *A. longipetiolata*, *A. machiensis*, *A. neeana*, and *A. pedemontana*) and thus it can be expected that additional plants will be found in the future. The other nine species known from a single collection, however, are only known from collections dating back a century (*A. castroviejoi*, *A. delicata*, and *A. sehnemii*), 150 years (*A. chorisandra*, *A. amphigyne*, *A. uleana*, and *A. peckoltii*) or almost two centuries (*A. inaequilatera* and *A. pohliana*). The habitats in which these species were found have been deeply disturbed by human activities, and it is possible these species are now extinct.

Our preliminary conservation assessment indicates that 47% of all South American native species are threatened. Atlantic Forests, the habitat with the highest number of species of *Acalypha*, are also the region with the highest number of threatened species (almost 50% of species present in this region), followed by Northern Andes (35%), Caribbean/Pacific Lowland Plains and Hills (33%), and Yungas (27%). Importantly, three of the four species known from the Galapagos Islands are endangered: *A. baurii* Endangered and *A. abingdonii* and *A. wigginsii* Critically Endangered. The fourth species, *A. parvula*, is Near Threatened. To the best of our knowledge, none of the species reported as threatened in this study is the object of conservation programmes or actions. Information in this paper should facilitate the proposal of conservation measures for threatened species of *Acalypha* in South America.

Taxonomic knowledge of *Acalypha* in South America has gradually increased in the last decades. This paper is the latest in a series of publications (cited throughout the paper) that have contributed to creating a robust taxonomic framework for studies of *Acalypha*. Our results include the description of 30 species and subspecies new to science (ca 7% of all *Acalypha* species known worldwide), the publication of revisions, synopses or monographs for all South American countries; extensive nomenclatural re-arrangements; and the publication of morphological descriptions, identification keys, and maps (both in paper and online).

Future studies on American *Acalypha* should consider an in-depth revision of the species in the Caribbean and, especially, in Mexico. This is possibly the centre of diversity of the genus but most native species are poorly known and in need of study. Similarly, the lack of comprehensive phylogenetic studies hinders evolutionary studies and, possibly, also the identification of cryptic species. Recent molecular phylogenetic studies (Sagun *et al.* 2010; Levin *et al.* 2022) provide a starting point for future analyses. However, these studies dominantly treat Old World species, whereas the evolutionary relationships of most American species of *Acalypha* remains unexplored.

Acknowledgements

We kindly thank the curators and staff of the numerous herbaria visited and those who sent material on loan for facilitating the study of their specimens, their kindness and speediness; especial thanks are due to Arne Anderberg and Jens Klakenberg (S), Carmen Ulloa Ulloa and Peter M. Jørgensen (MO), Caroline Loup and Cécile Aupic (P), Bruno Wallnöfer (W), Gill Challen (K), Ib Friis (C), Hans-Joachim Esser (M), Maria Peña-Chocarro (BM), Laurent Gautier (G), Javier Fuertes, Leopoldo Medina, Francisco Pando, and Mauricio Velayos (MA), Robert Vogt (B), and Scott A. Mori (NY). Thanks are also due to the numerous researchers who provided us with information, help, and advice; especially thanks to Stephan Beck from the Instituto de Ecologia, La Paz, Bolivia; Paul E. Berry, from the University of Michigan, United States; Carlos E. Cerón Martínez, from the Universidad Central del Ecuador; Inês Cordeiro, and Otávio Luis Marques da Silva, from the Instituto de Pesquisas Ambientais de São Paulo, Brazil; Ana Angelica Cordeiro de Sousa and Maria Beatriz Rossi Caruzo from the Universidade Federal de São Paulo, Brazil; André Laurênio de Melo from the Universidade Federal Rural de Pernambuco, Brazil; Geoffrey A. Levin from Canadian Museum of Nature, Canada; Michael Nee from New York Botanical Garden, United States; Ramona Oviedo Prieto from the Cuba National Herbarium; Franco Ezequiel Chiarini, from the Instituto

Multidisciplinario de Biología Vegetal, Córdoba, Argentina, and Virginia Irribarra and Robinson Burgos from the Servicio Agrícola y Ganadero de la Región de Valparaíso, Chile.

This study was funded by Spanish Government, through the research project EUI 2008-0388, and by the Universidad Autónoma de Madrid (Spain) and the Regional Government (Comunidad de Madrid), through the research project CCG07-UAM/AMB-1453. This research has received support from the SYNTHESYS Project (http://www.synthesys.info/; FR-TAF 6307, DE-TAF 3319, and SE-TAF 5590) that is financed by the European Community Research Infrastructure Action under the FP7 "Capacities" Program.

References

Acevedo-Rodríguez P. & Strong M.T. 2012. Catalogue of seed plants of the West Indies. *Smithsonian Contributions to Botany* 98: 1–1192. https://doi.org/10.5479/si.0081024X.98.1

Allem C.A. & Irgang B.E. 1976. Nuevas especies de Euphorbiaceae de América del Sur, I. *Boletín de la Sociedad Argentina de Botánica* 17: 301–306.

Allem C.A. & Waechter J.L. 1977. Nuevas especies de Euphorbiaceae de América del Sur. II. *Revista Brasileira de Biologia* 37: 83–90.

Areschoug F.W.C. 1910. Plantae sub itinere navis bellicae Eugeniae anno 1852 a N.J. Andersson circa Guayaquil collectae. *Kongliga Svenska Fregatten Eugenies Resa Omkring Jorden 1851–1853.* 1910: 115–142.

Armbruster W.S., Berry P.E., Esser H.J., Gillespie L.J., Hayden W.J., Heald S.V., Levin G.A., Punt W., Secco R. de S. & Webster G.L. 2007. Euphorbiaceae. *In*: Funk V.A., Berry P.E., Alexander S., Hollowell T.H. & Kelloff C.L. (eds) *Checklist of the Plants of the Guiana Shield (Venezuela*: *Amazonas*, *Bolivar*, *Delta Amacuro*, *Guyana*, *Surinam*, *French Guiana Vol 55*: 290–300. Contributions from the United States National Herbarium, Department of Botany, National Museum of Natural History, Washington, DC.

Bacigalupo N.M. & Mulgura M.E. 1999. *Acalypha*. *In*: Zuloaga F.O. & Morrone O. (eds) *Catálogo de las Plantas vasculares de la República Argentina Vol. 2*: 590–592. Missouri Botanical Garden Press, St. Louis.

Bachman S., Moat J., Hill A.W., de la Torre J. & Scott B. 2011. Supporting Red List threat assessments with GeoCAT: geospatial conservation assessment tool. *ZooKeys* 150: 117–126. https://doi.org/10.3897/zookeys.150.2109

Baillon H.E. 1865. Species euphorbiacearum. Euphorbiacées américaines I: Amérique Austro-Orientale (Brésil, Uruguay, Paraguay, Patagonie, etc.). *Adansonia* 5: 221–240.

Balick M.J., Nee M.H. & Atha D.E. 2000. Checklist of the vascular plants of Belize with common names and uses. *Memoirs of the New York Botanical Garden* 85: 1–246.

Bentham G. 1854. On the North Brazilian Euphorbiaceae in the collections of Mr. Spruce. *In*: Hooker W.J. (ed.) *Hooker's Journal of Botany and Kew Garden Miscellany Vol. 6*: 321–332. Lovell Reeve, Henrietta Street, Covent Garden, London.

Berry P.E. 2007. *Acalypha*. *In*: Zuloaga F.O., Morrone O. & Belgrano M.J. (eds) *Catálogo de las Plantas Vasculares del Cono Sur (Argentina*, *Sur de Brasil*, *Chile*, *Paraguay y Uruguay) Pteridophyta*, *Gymnospermae y Monocotyledonae Vol. 1*: 2010–2014. Missouri Botanical Garden Press, St. Louis.

Berry P.E., Hipp A.L., Wurdack K.J., Van Ee B. & Riina R. 2005. Molecular phylogenetics of the giant genus *Croton* and tribe *Crotoneae* (Euphorbiaceae sensu stricto) using ITS and trnL-trnF DNA sequence data. *American Journal of Botany* 92: 1520–1534. https://doi.org/10.3732/ajb.92.9.1520

Bonpland A.J.A., Humboldt F.W.H.A. & Kunth C.S. 1817. *Acalypha*. *In*: *Nova Genera et Species Plantarum. Lutetiae Parisiorum Vol. 2*: 92–98.

Briquet J.I. 1900. Espèces nouvelles ou peu connues de l'herbier Delessert. *Annuaire du Conservatoire & du Jardin Botaniques de Genève* 4: 213–243.

Burger W. & Huft J.M. 1995. *Acalypha*. *In*: Burger W. (ed.) Flora Costaricensis. *Fieldiana, Botany* 36: 46–56. https://doi.org/10.5962/bhl.title.2536

Burmann N.L. 1768. *Nicolai Laurentii Burmanni Flora Indica: cui accedit Series Zoophytorum Indicorum, nec non Prodromus Florae Capensis*. Apud Cornelium Haek, Amstelaedami [Amsterdam]. https://doi.org/10.5962/bhl.title.60581

Calderon S. & Standley P.C. 1941. *Flora salvadoreña. Lista preliminar de Plantas de El Salvador*, *2ª Ed*. Imprenta Nacional, San Salvador.

Cardiel J.M. 1990. Dos nuevas especies de *Acalypha* (Euphorbiaceae) de Colombia. *Anales del Jardín Botánico de Madrid* 48 (1): 15–23.

Cardiel J.M. 1992. *Acalypha glandulosa* Cav. (Euphorbiaceae), novedad para la flora colombiana. *Anales del Jardín Botánico de Madrid* 50 (2): 262–264.

Cardiel J.M. 1994. A synopsis of the Colombian species of *Acalypha* subgenus *Linostachys* (Euphorbiaceae). *Brittonia* 46 (3): 200–207. https://doi.org/10.2307/2807233

Cardiel J.M. 1995a. *Acalypha* (Euphorbiaceae). *Flora de Colombia. Monografía nº 15*. Universidad Nacional de Colombia y Real Jardín Botánico-CSIC, Madrid.

Cardiel J.M. 1995b. Las especies herbáceas de *Acalypha* (Euphorbiaceae) de Colombia. *Anales del Jardín Botánico de Madrid* 52 (2): 151–157.

Cardiel J. M. 1999a. Two new species of *Acalypha* L. (Euphorbiaceae) from Venezuela. *Anales del Jardín Botánico de Madrid* 57 (1): 57–62. https://doi.org/10.3989/ajbm.1999.v57.i1.189

Cardiel J.M. 1999b. Contribuciones a la Flora de Venezuela: Revisión del género *Acalypha* (Euphorbiaceae). *Acta Botanica Venezuelica* 22 (2): 255–324.

Cardiel J.M. 2000. Nuevas especies y sinónimos de *Acalypha* L. (Euphorbiaceae) de Ecuador. *Novon* 10: 360–365. https://doi.org/10.2307/3392986

Cardiel J.M. 2003. Two new species of *Acalypha* L. (Euphorbiaceae) from Peru. *Nordic Journal of Botany* 22 (5): 627–631. https://doi.org/10.1111/j.1756-1051.2002.tb01919.x

Cardiel J.M. 2006. Two new species of *Acalypha* (Euphorbiaceae) from Peru and Bolivia. *Nordic Journal of Botany* 24 (2): 167–172. https://doi.org/10.1111/j.1756-1051.2004.tb00831.x

Cardiel, J.M. 2010. *Acalypha*. *In*: Forzza R.C., Baumgratz J.F.A, Bicudo C.E.M., Carvalho Jr. A.A., Costa A., Costa D.P., Hopkins M., Leitman P.M., Lohmann L.G., Costa Maia L., Martinelli G., Menezes M., Morim M.P., Nadruz Coelho M.A., Peixoto A.L., Rubens Pirani J., Prado J., Queiroz L.P., Souza V.C., Renato Stehmann J., Sylvestre L.S., Walter B.M.T. & Zappi D. (eds) *Catálogo de Plantas e Fungos do Brasil 2*: 963–964. Andrea Jakobsson Estúdio, Instituto de Pesquisas Jardim Botânico do Rio de Janeiro, Rio de Janeiro.

Cardiel J.M. 2014. *Acalypha*. *In*: Jørgensen P.M., Nee M.H. & Beck S.G. (eds) *Catálogo de las Plantas Vasculares de Bolivia Vol I*: 587–589. Monographs in Systematic Botany from the Missouri Botanical Garden 127. Missouri Botanical Garden Press, St. Louis.

Cardiel J.M. 2020. Universidad Autónoma de Madrid, Biología, *Acalypha*. Dep. Biology, Univ. Autónoma de Madrid. Occurrence dataset https://doi.org/10.15468/yhsqkx, accessed via GBIF.org on 8 Dec. 2022.

Cardiel J.M. & Montero-Muñoz I. 2018. Synopsis of *Acalypha* (Euphorbiaceae) of West Tropical Africa, including Cameroon, Chad, Equatorial Guinea, Gabon, and São Tomé and Príncipe. *Plant Systematics and Evolution* 304: 93–110. https://doi.org/10.1007/s00606-017-1453-4

Cardiel J.M. & Muñoz-Rodríguez P. 2012. Synopsis of *Acalypha* (Euphorbiaceae) of continental Ecuador. *PhytoKeys* 17: 1–17. https://doi.org/10.3897/phytokeys.17.3190

Cardiel J.M. & Muñoz-Rodríguez P. 2013. *Acalypha carrascoana* Cardiel (Euphorbiaceae) novelty for the flora of Mexico. *Botanica Complutensis* 37: 53–56. https://doi.org/10.5209/rev_BOCM.2013.v37.42269

Cardiel J.M. & Muñoz-Rodríguez P. 2015. Synopsis of *Acalypha* (Euphorbiaceae) of Argentina, Paraguay, and Uruguay. *Annals of the Missouri Botanical Garden* 101 (2): 384–405. https://doi.org/10.3417/2014006

Cardiel J.M., Muñoz-Rodríguez P. & Muñoz F. 2013a. Revised taxonomy and nomenclature of *Acalypha* sect. *communes* (Euphorbiaceae), a complex group of species widespread in the north of the Southern Cone. *Taxon* 62 (6): 1296−1304. https://doi.org/10.12705/626.11

Cardiel J.M., Nee M. & Muñoz-Rodríguez P. 2013b. Synopsis of *Acalypha* L. (Euphorbiaceae) of Peru and Bolivia, with description of a new species. *Anales del Jardín Botánico de Madrid* 70 (2): 152−177 https://doi.org/10.3989/ajbm.2366

Cardiel J.M., Montero-Muñoz I. & Sancho García I. 2018. Three new species of *Acalypha* (Euphorbiaceae, Acalyphoideae) from Argentina, Bolivia, Brazil and Paraguay. Phytotaxa 356 (2): 158–166. https://doi.org/10.11646/phytotaxa.356.2.5

Cardiel J.M., Montero-Muñoz I., Ortúñez E., Dorda E. & Sancho-García I. 2020. Epidermal crystals in *Acalypha* (Euphorbiaceae, Acalyphoideae) as a new taxonomic trait of the genus. *Plant Systematic and Evolution* 306: 83. https://doi.org/10.1007/s00606-020-01711-6

Cardiel J.M., Montero-Muñoz I., Muñoz-Rodríguez P., Dorda E. & Pardo de Santallana M. 2022a. *Acalypha Taxonomic Information System*. Available from: http://www.acalypha.es [accessed Dec. 2022].

Cardiel J.M., Cordeiro de Sousa A.A., Cordeiro I., Rossi M.B., Marques da Silva O.L., Muñoz-Rodríguez P., López A. & Montero-Muñoz I. 2022b. Updated synopsis of *Acalypha* L. (Euphorbiaceae, Acalyphoideae) from Brazil. *Plant Systematics and Evolution*. 308: 24. https://doi.org/10.1007/s00606-022-01816-0

Cardiel J.M., Muñoz-Rodríguez P. & Montero-Muñoz I. 2023. A proposal to conserve the name *Acalypha multicaulis* against *A. pruriens* and *A. ruderalis* (Euphorbiaceae). *Taxon* 72 (1): 210−211. https://doi.org/10.1002/tax.12867

Cavanilles A.J. 1800. Descripción del género *Bonplandia*, y de otras plantas. *Anales de Historia Natural*, *Madrid* 5 (2): 135–142.

Cazzolla Gatti R., Reich P.B., Gamarra J.G.P., Crowther T., Hui C., Morera A., Bastin J.-F., *et al.* 2022. The number of tree species on Earth. *Proceedings of the National Academy of Sciences* 119 (6): e2115329119. https://doi.org/10.1073/pnas.2115329119

Chodat R. & Hassler E. 1905. Plantae hasslerianae, soit énumération des plantes récoltées au Paraguay par le dr. Emile Hassler, de 1885 á-1902. *Bulletin de l'Herbier Boissier, sér. 2.* 5: 603–613.

Cordeiro de Sousa A.A., Cordeiro I., & Rossi Caruzo M.B. 2019. A New Species of *Acalypha* L. (Euphorbiaceae) from the Brazilian Atlantic Rain Forest. *Systematic Botany* 44v(2): 346–348. https://doi.org/10.1600/036364419X15562052252171

Foster P.I. 1994. A taxonomic revision of *Acalypha* L. (Euphorbiaceae) in Australia. *Austrobaileya* 4 (2): 209–226.

Feeley K. 2015. Are we filling the data void? An assessment of the amount and extent of plant collection Records and census data available for tropical South America. *PLoS ONE* 10 (4): e0125629. https://doi.org/10.1371/journal.pone.0125629

Feeley K. & Silman M.R. 2011. The data void in modeling current and future distributions of tropical species. *Global Change Biology* 17 (1): 626–30. https://doi.org/10.1111/j.1365-2486.2010.02239.x.

Gillespie L.J. 1993. Euphorbiaceae of the Guianas: Annotated species checklist and key to the genera. *Brittonia* 45 (1): 56–94. https://doi.org/10.2307/2806862

Gillespie L.J. 1997. Euphorbiaceae. *In*: Boggan J., Funk V., Kelloff C., Hoff M., Cremers G. & Feuillet C. (eds) *Checklist of Plants of the Guianas (Guyana*, *Surinam*, *French Guiana)*, *Ed. 2*: 100–103. Centre for the Study of Biological Diversity, University of Guyana, Georgetown.

Goodwin Z.A., Harris D.J., Filer D., Wood J.R.I. & Scotland R.W. 2015. Widespread mistaken identity in tropical plant collections. *Current Biology* 25: R1066–R1067. https://doi.org/10.1016/j.cub.2015.10.002

Griffith G.E., Omernik J.M. & Azevedo S.H. 1998. *Ecological Classification of the Western Hemisphere*. U.S. Environmental Protection Agency, Western Ecology Division, Corvallis, Oregon.

Hayden W.J. & Hayden S.M. 2000. Wood anatomy of Acalyphoideae (Euphorbiaceae). *International Association of Wood Anatomists Journal* 21: 213–235. https://doi.org/10.1163/22941932-90000246

Herzog T. 1909. XIV. Siphonogamae novae Bolivienses in itinere per Boliviam orientalem ab auctore lectae. *Repertorium Specierum Novarum Regni Vegetabilis* 7: 49–69. https://doi.org/10.1002/fedr.19090070402

Hokche O., Berry P.E. & Huber O. 2008. *Nuevo Catálogo de la Flora vascular de Venezuela*. Fundación Instituto Botánico de Venezuela, Caracas.

Hooker J.D. 1847. An enumeration of the plants of the Galapagos Archipelago; with descriptions of those which are new. *Transactions of the Linnean Society of London*, *Botany* 20: 163–234. https://doi.org/10.1111/j.1096-3642.1846.tb00416.x

Huaxing Q. & Gilbert M.G. 2008. *Acalypha* L. *In*: Wu Z., Raven P.H. & Deyuan H. (eds) *Flora of China*, *Vol. 11*: 251–255. Science Press, Beijing, & Missouri Bot. Garden Press, St Louis.

IUCN. 2012. *IUCN Red List Categories and Criteria*, *Version 3.1 (Second Edition)*. Gland, Switzerland and Cambridge.

IUCN. 2017. *Guidelines for Using the IUCN Red List Categories and Criteria. Version 13 (Ed. 1)*. Prepared by the Standards and Petitions Subcommittee. Gland, Switzerland and Cambridge, UK.

Jacquin N.J. 1760. *Enumeratio Systematica Plantarum*. Theodorum Haak, Lugduni Batavorum [Leiden]. https://doi.org/10.5962/bhl.title.100687

Jacquin N.J. 1789. *Collectanea ad Botanicam*, *Chemiam*, *et Historiam Naturalem Spectantia*, *cum Figuris. Vol. III*. Ex Officina Wappleriana, Vindobonae [Vienna].

Jacquin N.J. 1797. *Plantarum Rariorum Horti Caesarei Schoenbrunnensis Descriptiones et Icones Vol. 2*. C.F. Wappler, Viennae [Vienna]. https://doi.org/10.5962/bhl.title.332

Levin G.A. 1999. *Acalypha*. *In*: Berry P.E., Yatskievych K. & Holst B.K. (eds) *Flora of the Venezuelan Guayana*, *Vol. 5*: 81–85. Missouri Botanical Garden Press, St. Louis.

Levin G.A. 2001. *Acalypha*. *In*: Stevens W.D., Ulloa C., Pool A. & Montiel O.M. (eds) *Flora de Nicaragua. Introducción*, *Gimnospermas y Angiospermas (Acanthaceae-Euphorbiaceae)*, *Vol 85*: 842–852. Missouri Botanical Garden Press, St. Louis.

Levin G.A. 2008. *Acalypha*. *In*: Hokche O., Berry P.E. & Huber O. (eds) *Nuevo Catálogo de la Flora Vascular de Venezuela*. Fundación Instituto Botánico de Venezuela Dr. Tobías Lasser, Caracas.

Levin G.A. 2016. *Acalypha* (Euphorbiaceae). *In*: *Flora of North America (North of Mexico). Magnoliophyta*: *Vitaceae to Garryaceae 12*: 162–172. Oxford University Press.

Levin G.A., Steinmann V.W. & Sagun V.G. 2005. Phylogeny and biogeography of *Acalypha* (Euphorbiaceae). *Abstracts of the XVII International Botanical Congress*: 68. Vienna, Austria.

Levin G.A., Cardinal-McTeague W.M., Steinmann V.W. & Sagun V.G. 2022. Phylogeny, classification, and character evolution of *Acalypha* (Euphorbiaceae: Acalyphoideae). *Systematic Botany* 47 (2): 477–497. https://doi.org/10.1600/036364422X16512572275034

Lingelsheim A., Pax F.A., Winkler H. 1909. Plantae novae bolivianae II. *Repertorium Specierum Novarum Regni Vegetabilis* 7: 107–114.

Linnaeus C. 1753. *Species Plantarum*. Laurentii Salvi, Holmiae [Stockholm].

Lourteig A. & O'Donell C.A. 1942. *Acalypheae argentinae* (Euphorbiaceae). *Lilloa* 7: 273–333.

Maciel-Júnior L., Cardiel J.M., Rossine Y., Athiê-Souza S.M. & Laurênio de Melo A. 2020. An update on *Acalypha inselbergensis* Cardiel & I.Montero (Euphorbiaceae): a recently described species from Brazil. *CheckList* 16 (4): 957−961. https://doi.org/10.15560/16.4.957

Martínez-Gordillo M. & Morrone J.J. 2005. Patrones de endemismo y disyunción de los géneros de Euphorbiaceae sensu lato: un análisis panbiogeográfico. *Boletín de la Sociedad Botánica de México* 77: 21–33. https://doi.org/10.17129/botsci.1710

Montero-Muñoz I. 2021. *Revisión taxonómica y biogeográfica del Género Acalypha L. (Euphorbiaceae) para la Región del Océano Índico Occidental*. PhD Thesis, Madrid, Universidad Autónoma de Madrid. Available from http://hdl.handle.net/10486/699412 [accessed 28 Jun. 2023].

Montero-Muñoz I., Levin G.A., Cardiel J.M. 2022. Four new species of *Acalypha* L. (Euphorbiaceae, Acalyphoideae) from Madagascar, with notes about their conservation status. *South African Journal of Botany* 146: 634–642. https://doi.org/10.1016/j.sajb.2021.11.052

Moore S.L.M. 1895. The phanerogamic botany of the Matto Grosso Expedition 1891–92. *Transactions of the Linnean Society of London*, *Botany* 4 (3): 265–516. https://doi.org/10.1111/j.1095-8339.1895.tb00046.x

Müller Argoviensis J. 1864. Neue Euphorbiaceen des Herbarium Hooker in Kew. *Flora* 47: 438–441.

Müller Argoviensis J. 1865. Euphorbiaceae. Vorläufige Mittheilungen aus dem für De Candolle Prodromus bestimmtem Manuscript über diese Familie. *Linnaea* 34 (1): 1–54.

Müller Argoviensis J. 1866. *Acalypha*. *In*: De Candolle A.P. (ed.) *Prodromus Systematis Naturalis Regni Vegetabilis. Vol 15 (2)*: 799−889. Treuttel et Würtz, Paris.

Müller Argoviensis J. 1872. Euphorbiacearum species novae. *Flora* 55: 41−48.

Müller Argoviensis J. 1874. *Acalypha*. *In*: von Martius C.F.P. (ed.) *Flora brasiliensis*, *Vol. 11 (2)*: 338–370. Munich, Vienna, Leipzig.

Muñoz-Rodríguez P., Cardiel J.M. & Atha D. 2014. *Acalypha* subgenus *Linostachys* (Euphorbiaceae, Acalyphoidae): a global review. *Phytotaxa* 166 (3): 199−221. https://doi.org/10.11646/phytotaxa.166.3.2

Muñoz-Rodríguez P., Carruthers T., Wood J.R.I., Williams B.R.M., Weitemier K., Kronmiller B., Goodwin Z., Sumadijaya A., Anglin N.L., Filer D., Harris D., Rausher M.D., Kelly S., Liston A. & Scotland R.W. 2019. A taxonomic monograph of *Ipomoea* integrated across phylogenetic scales. *Nature Plants* 5: 1136–1144. https://doi.org/10.1038/s41477-019-0535-4

Murillo J. 2004. Las Euphorbiaceae de Colombia. *Biota Colombiana* 5 (2): 183–200. Available from http://revistas.humboldt.org.co/index.php/biota/article/view/144 [accessed 28 Jun. 2023].

Nelson C. 2008. *Catálogo de las Plantas vasculares de Honduras. Espermatófitas*. Departamento de Biología, Universidad Nacional Autónoma de Honduras, Tegucigalpa.

Nowicke J.W. & Takahashi M. 2002. Pollen morphology, exine structure and systematics of Acalyphoideae (Euphorbiaceae), Part 41: Tribes Acalypheae pro parte (*Erythrococca*, *Claoxylon*, *Claoxylopsis*, *Mareya*, *Mareyopsis*, *Discoclaoxylon*, *Micrococca*, *Amyrea*, *Lobanilia*, *Mallotus*, *Deuteromallotus*, *Cordemoya*, *Cococceras*, *Trewia*, *Neotrewia*, *Rockinghamia*, *Octospermum*, *Acalypha*, *Lasiococca*, *Spathiostemon*, *Homonoia*), Plukenetieae (*Haematostemon*, *Astrococcus*, *Angostyles*, *Romanoa*, *Eleutherostigma*, *Plukenetia*, *Vigia*, *Cnesmone*, *Megistostigma*, *Sphaerostylis*, *Tragiella*, *Platygyna*, *Tragia*, *Acidoton*, *Pachystylidium*, *Dalechampia*), Omphaleae (*Omphalea*), and discussion and summary of the complete subfamily. *Review of Palaeobotany and Palynology* 121: 231–336. https://doi.org/10.1016/S0034-6667(02)00087-8

Pax F.A. 1921. Euphorbiaceae. *In*: Die von Dr. Th. Herzog auf seiner zweiten Reise durch Bolivien in den Jahren 1910 und 1911 gesammelten Pflanzen. *Mededeelingen van 's Rijks-Herbarium* 40: 18–29.

Pax F. & Hoffmann K. 1924. *Acalypha*. *In*: Engler A. (ed.) *Das Pflanzenreich, IV, 147–16 (heft 85)*: 1−231. Engelmann, Leipzig.

Poeppig E. 1841. *Acalypha*. *In*: Poeppig E. & Endlicher S. (eds) *Nova Genera ac Species Plantarum Vol. 3*: 21−22. Sumptibus F. Hofmeister, Lipsiae [Leipzig].

RBG Kew. 2016. *The State of the World's Plants Report 2016.* The Board of Trustees of the Royal Botanic Gardens, Kew, Richmond.

Richard A. 1850. *Acalypha*. *In*: De la Sagra R. (ed.) *Historia Física*, *Política y Natural de la Isla de Cuba*, *Tomo XI*: 203–205. Librería de Arthus Bertrand, Imprenta de Maulde y Renou, Paris.

Riina R., Peirson J.A., Geltman D.V., Molero J., Frajman B., Pahlevani A., Barres L., Morawetz J.J., Salmaki Y., Zarre S., Kryukov A., Bruyns P.V. & Berry P.E. 2013. A worldwide molecular phylogeny and classification of the leafy spurges, *Euphorbia* subgenus *Esula* (Euphorbiaceae). *Taxon* 62: 316–342. https://doi.org/10.12705/622.3

Robinson B.L. & Greenman J.M. 1985. On the flora of the Galápagos Islands, as shown by the collection of Dr. G. Baur. *American Journal of Science* 50: 135–149.

Rusby H.H. 1895. An enumeration of the plants collected in Bolivia by Miguel Bang, with descriptions of new genera and species. *Memoirs of the Torrey Botanical Club* 4 (3): 203–274.

Rusby H.H. 1920. *Descriptions of Three Hundred New Species of South American Plants*. Henry Hurd Rusby, New York. https://doi.org/10.5962/bhl.title.9316

Sagun V.G., Levin G.A. & van der Ham R.W.J.M. 2006. Pollen morphology and ultrastructure of *Acalypha* (Euphorbiaceae). *Review of Palaeobotany and Palynology* 140 (1–2): 123−143. https://doi.org/10.1016/j.revpalbo.2006.03.005

Sagun V.G., Levin G.A. & van Welzen P.C. 2010. Revision and phylogeny of *Acalypha* (Euphorbiaceae) in Malesia. *Blumea* 55: 21−60. https://doi.org/10.3767/000651910X499141

Schlechtendal D.F.L. 1832. De plantis mexicanis. *Linnaea* 7: 380−386.

Seberg O. 1984. Taxonomy and phylogeny of the genus *Acalypha* (Euphorbiaceae) in the Galápagos Archipelago. *Nordic Journal of Botany* 4 (2): 159–190. https://doi.org/10.1111/j.1756-1051.1984.tb01485.x

Simon R., Fuentes A.F. & Spooner D.M. 2011. Biogeographic implications of the striking discovery of a 4,000 kilometer disjunct population of the wild potato *Solanum morelliforme* in South America. *Systematic Botany* 36 (4): 1062−1067. https://doi.org/10.1600/036364411X605065

Smith L.B. 1971. Herbarium notes, III. *Phytologia* 22 (2): 87–91. https://doi.org/10.5962/bhl.part.26920

Solbrig O.T. 1972. The floristic disjunctions between the "Monte" in Argentina and the "Sonoran Desert" in Mexico and the United States. *Annals of the Missouri Botanical Garden* 59: 218–223. https://doi.org/10.2307/2394754

Sprengel C. 1827. *Systema vegetabilium*, *Vol. IV*, *Pars II*. Sumtibus Librariae Dieterichianae, Gottingae [Göttingen].

Standley P.C. & Steyermark J.A. 1949. *Acalypha*. *In*: Flora of Guatemala. *Fieldiana*, *Botany* 6: 28–47.

Steinmann V.W. & Levin G.A. 2011. *Acalypha herzogiana* (Euphorbiaceae), the correct name for an intriguing and commonly cultivated species. *Brittonia* 63: 500−504. https://doi.org/10.1007/s12228-011-9181-5

Thiers B. continuously updated. Index Herbariorum: A Global Directory of Public Herbaria and Associated Staff. New York Botanical Garden's Virtual Herbarium. Available from http://sweetgum.nybg.org/science/ih/ [accessed 26 Jun. 2023].

Tokuoka T. 2007. Molecular phylogenetic analysis of Euphorbiaceae sensu stricto based on plastid and nuclear DNA sequences and ovule and seed character evolution. *Journal of Plant Research* 120: 511–522. https://doi.org/10.1007/s10265-007-0090-3

Ulloa-Ulloa C., Acevedo-Rodríguez P., Beck S., Belgrano M.J., Bernal R., Berry P.E., Brako L., Celis M., Davidse G., Forzza R.C., Gradstein S.R., Hokche O., León B., León-Yáñez S., Magill R.E., Neill D.A., Nee M., Raven P.H., Stimmel H., Strong M.T., Villaseñor J.L., Zarucchi J.L., Zuloaga F.O. & Jørgensen P.M. 2017. An integrated assessment of the vascular plant species of the Americas. *Science* 358 (6370): 1614–1617. https://doi.org/10.1126/science.aao0398

Urban I. 1899. Species novae, praesertim portoricensis. *Symbolae Antillanae*: *seu Fundamenta florae Indiae occidentalis* 1: 291–482.

van Ee B. & Berry P.E. 2011. *Croton* section *pedicellati* (Euphorbiaceae), a novel New World group, and a new subsectional classification of *Croton* section *Lamprocroton*. *Systematic Botany* 36 (1): 88–98. https://doi.org/10.1600/036364411X553162

Villaseñor J.L. 2016. Checklist of the native vascular plants of Mexico. *Revista Mexicana de Biodiversidad* 87: 559–902. https://doi.org/10.1016/j.rmb.2016.06.017

Webster G.L. 1968. *Acalypha*. *In*: Woodson R.E. & Schery R.W. (eds) Flora of Panama. *Annals of the Missouri Botanical Garden* 54: 299–308.

Webster G.L. 1970. Notes on Galápagos Euphorbiaceae. *Madroño* 20 (5): 257–263.

Webster G.L. 1999. *Acalypha*. *In*: Jorgensen P.M. & León Yánez S. (eds) *Catalogue of the Vascular Plants of Ecuador*. Missouri Botanical Garden Press, St. Louis.

Webster G.L. & Huft M.J. 1988. Revised synopsis of Panamanian Euphorbiaceae. *Annals of the Missouri Botanical Garden* 75: 1087–1144. https://doi.org/10.2307/2399381

Willdenow C.L. 1805. *Acalypha*. *In*: *Species Plantarum 4 (1)*: 520–531. G.C. Nauk, Berolini [Berlin].

Wortley A.H., & Scotland R.W. 2004. Synonymy, sampling and seed plant numbers. *Taxon* 53: 478–480. https://doi.org/10.2307/4135625

Wurdack K.J. & Davis C.C. 2009. Malpighiales phylogenetics: Gaining ground on one of the most recalcitrant clades in the angiosperm tree of life. *American Journal of Botany* 96: 1551–1570. ttps://doi.org/10.3732/ajb.0800207

Wurdack K.J., Hoffmann P. & Chase M.W. 2005. Molecular phylogenetic analysis of uniovulate Euphorbiaceae (Euphorbiaceae sensu stricto) using plastid RBCL and TRNL-F DNA sequences. *American Journal of Botany* 92 (8): 1397–1420. https://doi.org/10.3732/ajb.92.8.1397

Zuloaga F.O., Belgrano M.J. & Zanotti C.A. 2019. Actualización del catálogo de las plantas vasculares del Cono Sur. *Darwiniana* 7 (2): 208−278. https://doi.org/10.14522/darwiniana.2019.72.861

Manuscript received: 23 August 2022
Manuscript accepted: 28 February 2023
Published on: 3 August 2023
Topic editor: Frederik Leliaert
Desk editor: Radka Rosenbaumová

Printed versions of all papers are also deposited in the libraries of the institutes that are members of the *EJT* consortium: Muséum national d'histoire naturelle, Paris, France; Meise Botanic Garden, Belgium; Royal Museum for Central Africa, Tervuren, Belgium; Royal Belgian Institute of Natural Sciences, Brussels, Belgium; Natural History Museum of Denmark, Copenhagen, Denmark; Naturalis Biodiversity Center, Leiden, the Netherlands; Museo Nacional de Ciencias Naturales-CSIC, Madrid, Spain; Leibniz Institute for the Analysis of Biodiversity Change, Bonn – Hamburg, Germany; National Museum of the Czech Republic, Prague, Czech Republic.

Appendix 1 (continued on next 11 pages). Published names associated with *Acalypha* L. in South America and accepted names in this paper.

Published names (accepted in bold)	**Accepted names in this paper**
***A. abingdonii* Seberg**	
***A. accedens* Müll.Arg.**	
A. accedens var. *brachyandra* (Baill.) Müll.Arg.	*A. accedens* Müll.Arg.
A. accedens var. *genuina* Müll.Arg. nom. inval.	*A. accedens* Müll.Arg.
A. accedens var. *viridis* Müll.Arg	*A. accedens* Müll.Arg.
***A. acuminata* Benth.**	
A. adamsii B.L.Rob.	*A. parvula* Hook.f.
A. agrestis Morong ex Britton	*A. communis* subsp. *communis*
A. albemarlensis B.L.Rob.	*A. parvula* Hook.f.
A. alchorneoides Rusby	*A. diversifolia* Jacq.
***A. almadinensis* A.A.C. Sousa**	
***A. alopecuroidea* Jacq.**	
***A. amblyodonta* (Müll.Arg.) Müll.Arg.**	
A. amblyodonta var. *gaudichaudii* (Baill.) Müll.Arg.	*A. amblyodonta* (Müll.Arg.) Müll.Arg.
A. amblyodonta var. *hispida* Müll.Arg.	*A. amblyodonta* (Müll.Arg.) Müll.Arg.
A. amblyodonta var. *repanda* Müll.Arg.	*A. amblyodonta* (Müll.Arg.) Müll.Arg.
A. amblyodonta var. *villosa* Müll.Arg.	*A. amblyodonta* (Müll.Arg.) Müll.Arg.
***A. amphigyne* S.Moore**	
A. ampliata Pax & K.Hoffm.	*A. macularis* Pax & K.Hoffm.
A. amplifolia Rusby	*A. macrostachya* Jacq.
A. andina Müll.Arg.	*A. padifolia* Kunth
***A. apetiolata* Allem & J.L.Waechter**	
A. apicalis N.E.Br.	*A. communis* subsp. *apicalis* (N.E.Br.) Cardiel & P.Muñoz
A. arciana Müll.Arg.	*A. brasiliensis* Müll.Arg.
***A. argomuelleri* Briq.**	
A. aristata Kunth	*A. alopecuroidea* Jacq.
***A. aronioides* Pax & K.Hoffm.**	
***A. arvensis* Poepp.**	
A. arvensis var. *genuina* Müll.Arg. nom. inval.	*A. arvensis* Poepp.
A. arvensis var. *pavoniana* (Müll.Arg.) Müll.Arg.	*A. arvensis* Porpp.
A. aspericocca Pax & K.Hoffm.	*A. martiana* Müll.Arg.
A. asterifolia Rusby	*A. cuspidata* Jacq.
A. baenitzii Pax	*A. stenoloba* Müll.Arg.
***A. baurii* B.L.Rob. & Greenm.**	
***A. beckii* Cardiel**	
A. benensis Britton ex Rusby	*A. stricta* Poepp.
A. betuloides Klotzsch ex Baill.	*A. variabilis* Klotzsch ex Baill.
A. betuloides Pav. in Klotzsch nom. nud.	*A. diversifolia* Jacq.
A. bistipellata Pittier nom. nud.	*A. macrostachya* Jacq.
***A. boliviensis* Müll.Arg.**	
A. bopiana Rusby	*A. stricta* Poepp.
A. brachyandra Baill.	*A. accedens* Müll.Arg.
A. brachyclada Müll.Arg.	excluded species in this work
***A. brasiliensis* Müll.Arg.** nom. cons.	

Appendix 1 (continued). Published names associated with *Acalypha* L. in South America and accepted names in this paper.

Published names (accepted in bold)	**Accepted names in this paper**
A. brasiliensis f. *cordata* Müll.Arg.	*A. brasiliensis* subsp. *asterotricha* (Müll.Arg.) Cardiel & A.A.C.Sousa
A. brasiliensis f. *microphylla* Müll.Arg. in Pax & K.Hoffm. nom. nud.	*A. accedens* Müll.Arg.
A. brasiliensis f. *obtusa* Müll.Arg.	*A. brasiliensis* subsp. *asterotricha* (Müll.Arg.) Cardiel & A.A.C.Sousa
***A. brasiliensis* subsp. *asterotricha* (Müll.Arg.) Cardiel & A.A.C.Sousa**	
A. brasiliensis* subsp. *brasiliensis	
***A. brasiliensis* subsp. *psilophylla* (Müll.Arg.) Cardiel & A.A.C.Sousa**	
A. brasiliensis var. *angustifolia* Pax & K.Hoffm.	*A. brasiliensis* subsp. *psilophylla* (Müll.Arg.) Cardiel & A.A.C.Sousa
A. brasiliensis var. *asterotricha* Müll.Arg.	*A. brasiliensis* subsp. *asterotricha* (Müll.Arg.) Cardiel & A.A.C.Sousa
A. brasiliensis var. *brevipes* Müll.Arg.	*A. brasiliensis* subsp. *psilophylla* (Müll.Arg.) Cardiel & A.A.C.Sousa
A. brasiliensis var. *cordata* (Müll.Arg.) Müll.Arg.	*A. brasiliensis* subsp. *asterotricha* (Müll.Arg.) Cardiel & A.A.C.Sousa
A. brasiliensis var. *glabrata* Müll.Arg.	*A. brasiliensis* subsp. *psilophylla* (Müll.Arg.) Cardiel & A.A.C.Sousa
A. brasiliensis var. *longipes* Müll.Arg.	*A. brasiliensis* subsp. *psilophylla* (Müll.Arg.) Cardiel & A.A.C.Sousa
A. brasiliensis var. *maxima* Müll.Arg.	*A. brasiliensis* subsp. *asterotricha* (Müll.Arg.) Cardiel & A.A.C.Sousa
A. brasiliensis var. *mollis* Müll.Arg.	*A. brasiliensis* Müll.Arg.
A. brasiliensis var. *obtusa* (Müll.Arg.) Müll.Arg.	*A. brasiliensis* subsp. *asterotricha* (Müll.Arg.) Cardiel & A.A.C.Sousa
A. brasiliensis var. *psilophylla* Müll.Arg.	*A. brasiliensis* subsp. *psilophylla* (Müll.Arg.) Cardiel & A.A.C.Sousa
A. brevibracteata Müll.Arg.	*A. brasiliensis* subsp. *psilophylla* (Müll.Arg.) Cardiel & A.A.C.Sousa
A. brevipes (Müll.Arg.) Müll.Arg.	*A. velamea* Baill.
A. brittonii Rusby	*A. stenoloba* Müll.Arg.
A. buchtienii Pax	*A. hibiscifolia* Britton
A. buddleifolia Pax & K.Hoffm.	*A. argomuelleri* Briq.
A. bullata Müll.Arg.	*A. peruviana* Müll.Arg.
A. callosa Benth.	*A. macrostachya* Jacq.
A. callosa var. *glabra* Britton in Pax & K.Hoffm. nom. nud.	*A. diversifolia* Jacq.
A. campylostyla Müll.Arg. in Pax & K.Hoffm. nom. nud.	*A. gracilis* Spreng.
A. capillaris Rusby	*A. stenoloba* Müll.Arg.
A. carpinifolia Poepp. in Seem. nom. nud.	*A. diversifolia* Jacq.
***A. carrascoana* Cardiel**	
A. carthagenensis Jacq.	*A. villosa* Jacq.
A. castaneifolia Poepp. in Pax & K.Hoffm. nom. nud.	*A. cuneata* Poepp.
***A. castroviejoi* Cardiel**	
A. caucana Müll.Arg.	*A. macrostachya* Jacq.
A. caudata Kunth	*A. macrostachya* Jacq.

Appendix 1 (continued). Published names associated with *Acalypha* L. in South America and accepted names in this paper.

Published names (accepted in bold)	**Accepted names in this paper**
***A. chaquensis* Cardiel & I.Montero**	
A. chathamensis B.L.Rob.	*A. parvula* Hook.f.
***A. chocoana* Cardiel**	
***A. chorisandra* Baill.**	
***A. clausenii* (Turcz.) Müll.Arg.**	
A. colombiana Cardiel	*A. muelleriana* Urb.
***A. communis* Müll.Arg.** nom. cons.	
A. communis f. *decumbens* Müll.Arg.	*A. velamea* Baill.
A. communis f. *grandifolia* Chodat & Hassl.	*A. communis* subsp. *apicalis* (N.E.Br.) Cardiel & P.Muñoz
A. communis f. *hirsutissima* Chodat & Hassl.	*A. variabilis* Klotzsch ex Baill.
A. communis f. *longipetiolata* Chodat & Hassl.	*A. communis* subsp. *apicalis* (N.E.Br.) Cardiel & P.Muñoz
***A. communis* subsp. *apicalis* (N.E.Br.) Cardiel & P.Muñoz**	
A. communis* subsp. *communis	
***A. communis* subsp. *paraguariensis* (Chodat & Hassl.) Cardiel & P.Muñoz**	
***A. communis* subsp. *saltensis* (Pax & K.Hoffm.) Cardiel & P.Muñoz**	
***A. communis* subsp. *tracheliifolia* (Pax & K.Hoffm.) Cardiel & P.Muñoz**	
A. communis var. *agrestis* (Morong ex Britton) Chodat & Hassl.	*A. communis* subsp. *communis*
A. communis var. *brevipes* Müll.Arg.	*A. velamea* Baill.
A. communis var. *brevipetiolata* Chodat & Hassl.	*A. velamea* Baill.
A. communis var. *communis*	*A. communis* Müll.Arg.
A. communis var. *guaranitica* Chodat & Hassl.	*A. communis* subsp. *apicalis* (N.E.Br.) Cardiel & P.Muñoz
A. communis var. *hirtiformis* Pax & K.Hoffm.	*A. communis* subsp. *apicalis* (N.E.Br.) Cardiel & P.Muñoz
A. communis var. *hispida* Müll.Arg. in Pax & K.Hoffm. nom. nud.	*A. variabilis* Klotzsch ex Baill.
A. communis var. *intermedia* Müll.Arg.	*A. communis* subsp. *communis*
A. communis var. *obscura* Müll.Arg.	*A. communis* subsp. *communis*
A. communis var. *pallida* Müll.Arg.	*A. velamea* Baill.
A. communis var. *puberula* Müll.Arg.	*A. communis* subsp. *communis*
A. communis var. *rotundata* (Griseb.) Pax & K.Hoffm.	*A. variabilis* Klotzsch ex Baill.
A. communis var. *salicifolia* Pax & K.Hoffm.	*A. communis* subsp. *paraguariensis* (Chodat & Hassl.) Cardiel & P.Muñoz
A. communis var. *saltensis* Pax & K.Hoffm.	*A. communis* subsp. *saltensis* (Pax & K.Hoffm.) Cardiel & P.Muñoz
A. communis var. *tomentella* Müll.Arg.	*A. communis* subsp. *communis*
A. communis var. *tomentosa* Müll.Arg.	*A. communis* Müll.Arg.
A. contermina Müll.Arg.	excluded species in this work
A. controversa (Kuntze) K.Schum.	*A. peruviana* Müll.Arg.
A. cordifolia Andersson	*A. parvula* Hook.f.
A. cordifolia Griseb.	*A. plicata* Müll.Arg.
A. cordifolia Hook.f.	*A. parvula* Hook.f.
A. cordifolia var. *polyadenia* Griseb.	*A. plicata* Müll.Arg.
A. cordobensis Müll.Arg.	*A. variabilis* Klotzsch ex Baill.
A. cordobensis Müll.Arg. ex Griseb.	*A. variabilis* Klotzsch ex Baill.

Appendix 1 (continued). Published names associated with *Acalypha* L. in South America and accepted names in this paper.

Published names (accepted in bold)	**Accepted names in this paper**
A. cordobensis var. *rotundata* Griseb.	*A. variabilis* Klotzsch ex Baill.
A. corensis Jacq.	*Bernardia corensis* (Jacq.) Müll.Arg.
A. coriifolia Pax & K.Hoffm.	*A. padifolia* Kunth
A. cuculata Poir.	*A. macrostachya* Jacq.
A. cundinamarcensis Croizat in Cardiel nom. nud.	*A. cuneata* Poepp.
***A. cuneata* Poepp.**	
A. cuneata var. *cuneata*	*A. cuneata* Poepp.
A. cuneata var. *genuina* Müll.Arg. nom. inval.	*A. cuneata* Poepp.
A. cuneata var. *obovata* (Benth.) Müll.Arg.	*A. cuneata* Poepp.
A. cuprea Herzog	excluded species in this work
***A. cuspidata* Jacq.**	
A. cuspidata var. *amblyodonta* Müll.Arg.	*A. amblyodonta* (Müll.Arg.) Müll.Arg.
A. cuspidata var. *genuina* Müll.Arg. nom. inval.	*A. cuspidata* Jacq.
A. cuspidata var. *oxyodonta* Müll.Arg.	*A. cuspidata* Jacq
***A. delicata* Cardiel**	
***A. dictyoneura* Müll.Arg.**	
A. dictyoneura f. *dictyoneura*	*A. dictyoneura* Müll.Arg.
A. dictyoneura f. *reducta* Müll.Arg.	*A. dictyoneura* Müll.Arg.
A. dictyoneura var. *dictyoneura* J.F.Macbr.	*A. dictyoneura* Müll.Arg.
A. dictyoneura var. *reducta* (Müll.Arg.) J.F.Macbr.	*A. dictyoneura* Müll.Arg.
A. diffusa Andersson	*A. parvula* Hook.f.
***A. digynostachya* Baill.**	
***A. dimorpha* Müll.Arg.**	
A. divaricata Klotzsch ex Baill.	*A. gracilis* Spreng.
A. divaricata Müll.Arg. nom. illeg.	*A. aronioides* Pax & K.Hoffm.
***A. diversifolia* Jacq.**	
A. diversifolia Rusby	*A. diversifolia* Jacq.
A. diversifolia var. *caloneura* Pax & K.Hoffm.	*A. diversifolia* Jacq.
A. diversifolia var. *carpinifolia* (Poepp. ex Müll.Arg.) Müll.Arg.	*A. diversifolia* Jacq.
A. diversifolia var. *genuina* Müll.Arg. nom. inval.	*A. diversifolia* Jacq.
A. diversifolia var. *leptostachya* (Kunth) Müll.Arg.	*A. diversifolia* Jacq.
A. diversifolia var. *popayanensis* (Kunth) Müll.Arg.	*A. diversifolia* Jacq.
A. diversifolia var. *squarrosa* Müll.Arg.	*A. diversifolia* Jacq.
A. douilleana Rusby	*A. stenoloba* Müll.Arg.
A. dupraeana Baill.	*A. amblyodonta* (Müll.Arg.) Müll.Arg.
A. dupraeana var. *arciana* Baill. nom. illeg. superfl.	*A. brasiliensis* Müll.Arg.
A. dupraeana var. *gaudichaudii* Baill.	*A. amblyodonta* (Müll.Arg.) Müll.Arg.
A. dupraeana var. *hilarii* Baill.	*A. amblyodonta* (Müll.Arg.) Müll.Arg.
A. dupraeana var. *sylvicola* Baill.	*A. brasiliensis* subsp. *psilophylla* (Müll.Arg.) Cardiel & A.A.C.Sousa
A. ecuadorica Pax & K.Hoffm.	*A. schiedeana* Schltdl.
A. eggersii Pax & K.Hoffm.	*A. cuneata* Poepp.
A. erosa Rusby	*A. cuneata* Poepp.
A. erythrostachya Müll.Arg.	*A. padifolia* Kunth
A. estrellana Baill.	*A. accedens* Müll.Arg.

Appendix 1 (continued). Published names associated with *Acalypha* L. in South America and accepted names in this paper.

Published names (accepted in bold)	**Accepted names in this paper**
A. eugenifolia Rusby	*A. stenoloba* Müll.Arg.
A. falconensis Pittier nom. nud.	*A. villosa* Jacq.
A. flabellifera Rusby	*A. plicata* Müll.Arg.
A. flaccida Hook.f.	*A. parvula* Hook.f.
A. foliosa Rusby	*A. macrostachya* Jacq.
A. forbesii S.Moore	*A. infesta* Poepp.
A. fragilis Pax & K.Hoffm.	*A. brasiliensis* subsp. *psilophylla* (Müll.Arg.) Cardiel & A.A.C.Sousa
A. friesii Pax & K.Hoffm.	*A. communis* subsp. *saltensis* (Pax & K.Hoffm.) Cardiel & P.Muñoz
A. fruticulosa Klotsch in Pax & K.Hoffm. nom. nud.	*A. gracilis* Spreng.
A. fulva I.M.Johnst.	*A. plicata* Müll.Arg.
***A. glandulosa* Cav.**	
A. glandulosa Chodat & Hassl.	*A. hassleriana* Chodat
A. glandulosa var. *brevistachya* Chodat & Hassl.	*A. hassleriana* Chodat
A. goyazensis Glaz. nom. nud.	*A. velamea* Baill.
***A. gracilis* Spreng.**	
A. gracilis var. *divaricata* (Baill.) Pax & K.Hoffm.	*A. gracilis* Spreng.
A. gracilis var. *fruticulosa* Müll.Arg.	*A. gracilis* Spreng.
A. gracilis var. *genuina* Müll.Arg. nom. inval.	*A. gracilis* Spreng.
A. gracilis var. *gracilis*	*A. gracilis* Spreng.
A. gracilis var. *pubescens* Müll.Arg.	*A. gracilis* Spreng.
A. grandispicata Britton ex Rusby	*A. stenoloba* Müll.Arg.
A. granulata Ruiz in Pax & K.Hoffm. nom. nud.	*A. padifolia* Kunth
A. hartwegiana Benth. in Baill. nom. nud.	*A. diversifolia* Jacq.
***A. hassleriana* Chodat**	
A. hassleriana var. *genuina* Pax & K.Hoffm. nom. inval.	*A. hassleriana* Chodat
A. hassleriana var. *glandulosa* (Chodat & Hassl.) Pax & K.Hoffm.	*A. hassleriana* Chodat
***A. herzogiana* Pax & K.Hoffm.**	
A. heterodonta var. *hirsuta* Müll.Arg.	*A. macrostachya* Jacq.
A. heterodonta var. *psiloclada* Müll.Arg.	*A. macrostachya* Jacq.
A. heterodonta var. *trichoclada* Müll.Arg.	*A. macrostachya* Jacq.
A. heteromorpha Rusby	*A. macrostachya* Jacq.
***A. hibiscifolia* Britton ex Rusby**	
A. hirsuta Mart. ex Colla nom. rej.	*A. communis* Müll.Arg.
A. hirsutissima Willd.	*A. macrostachya* Jacq.
A. hirta Spreng.	*A. variabilis* Klotzsch ex Baill.
***A. hispida* Burm.f.**	
A. hookeri J.F.Macbr.	*A. parvula* Hook.f.
A. humilis Pax & K.Hoffm.	*A. variabilis* Klotzsch ex Baill.
A. hystrix Balb. in Spreng. nom. nud.	*A. alopecuroidea* Jacq.
A. inaequalis Rusby	*A. diversifolia* Jacq.
***A. inaequilatera* Cardiel**	
***A. indica* L.**	
A. indica Vell.	*A. poiretii* Spreng.

Appendix 1 (continued). Published names associated with *Acalypha* L. in South America and accepted names in this paper.

Published names (accepted in bold)	**Accepted names in this paper**
***A. infesta* Poepp.**	
A. infesta var. *infesta*	*A. infesta* Poepp.
A. infestans Müll.Arg.	*A. infesta* Poepp.
A. infestans var. *rotundifolia* Müll.Arg.	*A. infesta* Poepp.
A. infestans var. *stenoloba* Müll.Arg.	*A. infesta* Poepp.
***A. inselbergensis* Cardiel & I.Montero**	
A. jubifera Rusby	excluded species in this work
A. juruana Ule	*A. cuneata* Poepp.
A. karsteniana Pax & K.Hoffm.	*A. villosa* Jacq.
***A. klotzschii* Baill.**	
A. lagoensis Müll.Arg.	*A. multicaulis* Müll.Arg.
A. lagoensis var. *grandifolia* Chodat & Hassl.	*A. amblyodonta* (Müll.Arg.) Mull.Arg.
***A. lanceolata* Willd.**	
A. lechleri Britton ex Rusby	*A. stenoloba* Müll.Arg.
A. lehmanniana Pax	*A. macrostachya* Jacq.
A. leptostachya Kunth	*A. diversifolia* Jacq.
A. leptostachya f. *diversifolia* (Jacq.) Müll.Arg.	*A. diversifolia* Jacq.
A. leptostachya var. *carpinifolia* Poepp. ex Müll.Arg.	*A. diversifolia* Jacq.
A. leptostachya var. *genuina* Müll.Arg. nom. inval.	*A. diversifolia* Jacq.
A. leptostachya var. *leptostachya*	*A. diversifolia* Jacq.
A. leptostachya var. *popayanensis* (Kunth) Müll.Arg.	*A. diversifolia* Jacq.
A. linostachya Baill.	*A. villosa* Jacq.
A. longifolia Baill. nom. nud.	*A. cuneata* Poepp.
A. longifolia Klotsch in Pax & K.Hoffm. nom. nud.	*A. cuneata* Poepp.
***A. longipetiolata* Cardiel**	
A. lucida Rusby	*A. stenoloba* Müll.Arg.
***A. lycioides* Pax & K.Hoffm.**	
A. macbridei I.M.Johnst.	*A. salicifolia* Müll.Arg.
***A. machiensis* Cardiel & P.Muñoz**	
A. macrodonta Müll.Arg.	*A. padifolia* Kunth
A. macrophylla Kunth	*A. macrostachya* Jacq.
A. macrophylla Ule	*A. stachyura* Pax
***A. macrostachya* Jacq.**	
A. macrostachya f. *androgyna* Müll.Arg.	*A. macrostachya* Jacq.
A. macrostachya f. *macrophylla* (Kunth) Müll.Arg.	*A. macrostachya* Jacq.
A. macrostachya f. *puberula* Müll.Arg. nom. inval.	*A. macrostachya* Jacq.
A. macrostachya var. *genuina* Müll.Arg. nom. inval.	*A. macrostachya* Jacq.
A. macrostachya var. *hirsutissima* (Willd.) Müll.Arg.	*A. macrostachya* Jacq.
A. macrostachya var. *macrophylla* (Kunth) Müll.Arg.	*A. macrostachya* Jacq.
A. macrostachya var. *macrostachya*	*A. macrostachya* Jacq.
A. macrostachya var. *sidaefolia* (Kunth) Müll.Arg.	*A. macrostachya* Jacq.
A. macrostachya var. *tristis* (Poepp.) Müll.Arg.	*A. macrostachya* Jacq.
***A. macularis* Pax & K.Hoffm.**	
A. major Salzm. ex Baill.	*A. brasiliensis* subsp. *psilophylla* (Müll.Arg.) Cardiel & A.A.C.Sousa

Appendix 1 (continued). Published names associated with *Acalypha* L. in South America and accepted names in this paper.

Published names (accepted in bold)	**Accepted names in this paper**
A. mandonii Müll.Arg.	*A. reflexa* Müll.Arg.
A. mapirensis Pax	*A. stricta* Poepp.
A. mapirensis var. *pubescens* Pax & K.Hoffm.	*A. stricta* Poepp.
A. mapirensis var. *scabra* Pax & K.Hoffm.	*A. stricta* Poepp.
***A. martiana* Müll.Arg.**	
A. membranacea Müll.Arg. in Pax & K.Hoffm. nom. nud.	*A. tenuifolia* Müll.Arg.
A. microgyna Poepp.	*A. diversifolia* Jacq.
A. microphylla Pittier nom. nud.	*A. tenuifolia* Müll.Arg.
A. microstachya Klotzsch in Pax & K.Hoffm. nom. nud.	*A. accedens* Müll.Arg.
A. mollis Rusby	*A. reflexa* Müll.Arg.
A. mollissima Klotzsch in Pax & K.Hoffm. nom. nud.	*A. stricta* Poepp.
A. montevidensis Klotzsch in Pax & K.Hoffm. nom. nud.	*A. variabilis* Klotzsch ex Baill.
***A. muelleriana* Urb.**	
A. multicaulis Chodat & Hassl. nom. inval.	*A. multicaulis* Müll.Arg.
***A. multicaulis* Müll.Arg.** nom. cons. prop. in prep.	
A. multicaulis var. *genuina* Müll.Arg. nom. inval.	*A. multicaulis* Müll.Arg.
A. multicaulis var. *glabrescens* Pax & K.Hoffm.	*A. multicaulis* Müll.Arg.
A. multicaulis var. *multicaulis*	*A. multicaulis* Müll.Arg.
A. multicaulis var. *tenuispica* Pax & K.Hoffm.	*A. multicaulis* Müll.Arg.
A. multicaulis var. *tomentella* Müll.Arg.	*A. multicaulis* Müll.Arg.
A. muricata Klotzsch in Pax & K.Hoffm. nom. nud.	*A. villosa* Jacq.
***A. mutisii* Cardiel**	
***A. neeana* Cardiel & P.Muñoz**	
A. neogranatensis Müll.Arg.	*A. macrostachya* Jacq.
A. nitschkeana Pax & K.Hoffm.	*A. herzogiana* Pax & K.Hoffm.
A. noronhae Ridl.	*A. brasiliensis* subsp. *psilophylla* (Müll.Arg.) Cardiel & A.A.C.Sousa
A. obovata Benth.	*A. cuneata* Poepp.
A. obovata var. *cuneata* (Poepp.) J.F.Macbr.	*A. cuneata* Poepp.
A. omissa Pax & K.Hoffm.	*A. accedens* Müll.Arg.
A. ovata Pax & K.Hoffm.	*A. stenoloba* Müll.Arg.
A. oxyodonta (Müll.Arg.) Müll.Arg.	*A. amblyodonta* (Müll.Arg.) Müll.Arg.
A. padifolia Humb. in Pax & K.Hoffm. nom. nud.	*A. villosa* Jacq.
***A. padifolia* Kunth**	
A. paraguariensis Chodat & Hassl.	*A. communis* subsp. *paraguariensis* (Chodat & Hassl.) Cardiel & P.Muñoz
***A. parvula* Hook.f.**	
A. parvula f. *diffusa* (Andersson) Müll.Arg.	*A. parvula* Hook.f.
A. parvula f. *sericea* (Andersson) Müll.Arg.	*A. parvula* Hook.f.
A. parvula f. *velutina* (Hook.f.) Müll.Arg.	*A. parvula* Hook.f.
A. parvula var. *chathamensis* (B.L.Rob.) G.L.Webster	*A. parvula* Hook.f.
A. parvula var. *cordifolia* (Griseb.) Müll.Arg.	*A. parvula* Hook.f.
A. parvula var. *cordifolia* (Hook.f.) Müll.Arg.	*A. parvula* Hook.f.
A. parvula var. *flaccida* (Hook.f.) Müll.Arg.	*A. parvula* Hook.f.
A. parvula var. *genuina* Müll.Arg. nom. inval.	*A. parvula* Hook.f.
A. parvula var. *parvula*	*A. parvula* Hook.f.

Appendix 1 (continued). Published names associated with *Acalypha* L. in South America and accepted names in this paper.

Published names (accepted in bold)	**Accepted names in this paper**
A. parvula var. *procumbens* Müll.Arg.	*A. parvula* Hook.f.
A. parvula var. *pubescens* Müll.Arg.	*A. parvula* Hook.f.
A. parvula var. *reniformis* (Hook.f.) Müll.Arg.	*A. parvula* Hook.f.
A. parvula var. *strobilifera* (Hook.f.) Müll.Arg.	*A. parvula* Hook.f.
A. paupercula Pax & K.Hoffm.	*A. poiretii* Spreng.
A. pavoniana Müll.Arg.	*A. arvensis* Poepp**.**
***A. peckoltii* Müll.Arg.**	
***A. pedemontana* Cardiel & I.Montero**	
***A. peruviana* Müll.Arg.**	
A. pilifera Klotzsch in Baill. nom. nud.	*A. variabilis* Klotzsch ex Baill.
A. pilocardia Gilli	*A. dictyoneura* Müll.Arg.
A. pinnata Poir.	*Tragia pinnata* (Poir.) A.Juss.
***A. platyphylla* Müll.Arg.**	
***A. plicata* Müll.Arg.**	
***A. pohliana* Müll.Arg.**	
***A. poiretii* Spreng.**	
A. popayanensis Kunth	*A. diversifolia* Jacq.
A. prunifolia Nees & Mart.	*A. klotzschii* Baill.
A. pruriens Nees & Mart. nom. rej. prop.	*A. multicaulis* Müll.Arg.
***A. psamofila* Cardiel, M.Nee & P.Muñoz**	
A. punctata D.Parodi nom. inval.	*A. communis* subsp. *communis*
***A. radicans* Müll.Arg.**	
***A. reflexa* Müll.Arg.**	
A. reniformis Hook.f.	*A. parvula* Hook.f.
A. rhombifolia Baill.	*A. poiretii* Spreng.
A. riedeliana Baill.	excluded species in this work
A. rotundifolia Herter	*A. senilis* Baill.
A. rotundifolia Vahl ex Baill. nom. nud.	*A. infesta* Poepp.
A. ruderalis Mart. ex Colla nom. rej. prop.	*A. multicaulis* Müll.Arg.
A. rugosa Klotzsch in Pax & K.Hoffm. nom. nud.	*A. peruviana* Müll.Arg.
A. ruiziana Müll.Arg.	*A. padifolia* Kunth
A. rusbyi Dorr	*A. villosa* Jacq.
***A. salicifolia* Müll.Arg.**	
***A. salicina* Hutch. ex Cardiel**	
A. salicioides Rusby	*A. diversifolia* Jacq.
A. samydaefolia Poepp.	*A. diversifolia* Jacq.
A. samydifolia Poepp.	*A. diversifolia* Jacq.
A. santae-martae Pax & K.Hoffm.	*A. cuspidata* Jacq.
***A. scandens* Benth.**	
***A. schiedeana* Schltdl.**	
A. schiedeana f. *angustifolia* Müll.Arg.	*A. schiedeana* Schltdl.
A. schiedeana var. *macrodonta* Müll.Arg.	*A. schiedeana* Schltdl.
A. schimpffii Diels	*A. padifolia* Kunth
***A. schreiteri* Lillo ex Lourteig & O'Donell**	
***A. schultesii* Cardiel**	

Appendix 1 (continued). Published names associated with *Acalypha* L. in South America and accepted names in this paper.

Published names (accepted in bold)	**Accepted names in this paper**
***A. sehnemii* Allem & Irgang**	
A. seminuda Müll.Arg.	*A. brasiliensis* subsp. *asterotricha* (Müll.Arg.) Cardiel & A.A.C.Sousa
***A. senilis* Baill.**	
A. sericea Andersson	*A. parvula* Hook.f.
A. sericea var. *baurii* (B.L.Rob. & Greenm.) G.L.Webster	*A. baurii* B.L.Rob. & Greenm.
A. sericea var. *indefessus* G.L.Webster	*A. baurii* B.L.Rob. & Greenm.
A. sericea var. *sericea*	*A. parvula* Hook.f.
A. serratifolia Klotzsch in Pax & K.Hoffm. nom. nud.	*A. velamea* Baill.
***A. setosa* A.Rich.**	
A. sidaefolia Kunth	*A. macrostachya* Jacq.
***A. simplicistyla* Cardiel**	
A. soratensis Pax & K.Hoffm.	*A. reflexa* Müll.Arg.
A. spicata Andersson	*A. parvula* Hook.f.
A. spicigera Seem.	*A. diversifolia* Jacq.
***A. stachyura* Pax**	
***A. stellata* Cardiel**	
A. stellipila Pax & K.Hoffm.	*A. dictyoneura* Müll.Arg.
***A. stenoloba* Müll.Arg.**	
***A. stricta* Poepp.**	
A. striolata Lingelsh.	*A. digynostachya* Baill.
A. strobilifera Hook.f.	*A. parvula* Hook.f.
A. subandina Ule	*A. platyphylla* Müll.Arg.
A. subbullata Pax & K.Hoffm.	*A. peruviana* Müll.Arg.
***A. subcastrata* F.Aresch.**	
A. subsana Mart. ex Colla nom. rej.	*A. brasiliensis* Müll.Arg.
*A. subscanden*s Rusby	*A. schiedeana* Schltdl.
A. subvillosa Müll.Arg.	*A. villosa* Jacq.
A. tarapotensis Müll.Arg.	*A. macrostachya* Jacq.
A. tenuicaulis Baill.	*A. multicaulis* Müll.Arg.
***A. tenuifolia* Müll.Arg.**	
A. tenuipes Pax & K.Hoffm.	*A. cuspidata* Jacq.
A. tenuiramea Müll.Arg.	*A. accedens* Müll.Arg.
A. tomentosula Ule	*A. stricta* Poepp.
A. tracheliifolia Pax & K.Hoffm.	*A. communis* subsp. *tracheliifolia* (Pax & K.Hoffm.) Cardiel & P.Muñoz
A. tristis Poepp.	*A. macrostachya* Jacq.
A. tunguraguae Pax & K.Hoffm.	*A. padifolia* Kunth
***A. uleana* L.B.Sm. & Downs**	
A. ulei Radcl.-Sm. & Govaerts	*A. stachyura* Pax
A. ulmifolia Benth.	*A. diversifolia* Jacq.
A. urostachya Baill.	*A. stricta* Poepp.
A. urticoides Klotzsch in Baill. nom. nud.	*A. variabilis* Klotzsch ex Baill.
***A. variabilis* Klotzsch ex Baill.**	
A. variabilis var. *albescens* Baill.	*A. variabilis* Klotzsch ex Baill.
A. variabilis var. *angustifolia* Baill.	*A. variabilis* Klotzsch ex Baill.

Appendix 1 (continued). Published names associated with *Acalypha* L. in South America and accepted names in this paper.

Published names (accepted in bold)	**Accepted names in this paper**
A. variabilis var. *elliptica* Baill.	*A. variabilis* Klotzsch ex Baill.
A. variabilis var. *longifolia* Baill.	*A. variabilis* Klotzsch ex Baill.
A. variabilis var. *typica* Baill. nom. inval.	*A. variabilis* Klotzsch ex Baill.
A. variabilis var. *urticoides* Klotzsch ex Baill.	*A. variabilis* Klotzsch ex Baill.
A. variegata Rusby	*A. stricta* Poepp.
***A. velamea* Baill.**	
A. velutina Hook.f.	*A. parvula* Hook.f.
A. velutina var. *minor* Hook.f.	*A. parvula* Hook.f.
***A. venezuelica* Cardiel**	
A. vermifera Rusby	*A. diversifolia* Jacq.
A. vestita Benth.	*A. cuspidata* Jacq.
***A. villosa* Jacq.**	
A. villosa Pax in Pittier nom. nud.	*A. villosa* Jacq.
A. villosa Vahl in Baill. nom. nud.	*A. poiretii* Spreng.
A. villosa f. *paniculata* Müll.Arg.	*A. villosa* Jacq.
A. villosa var. *genuina* Müll.Arg. nom. inval.	*A. villosa* Jacq.
A. villosa var. *intermedia* Müll.Arg.	*A. villosa* Jacq.
A. villosa var. *latiuscula* Pax & K.Hoffm.	*A. villosa* Jacq.
A. villosa var. *paniculata* (Müll.Arg.) Pax & K.Hoffm.	*A. villosa* Jacq.
A. villosa var. *tomentosa* Müll.Arg.	*A. villosa* Jacq.
A. villosa var. *trichopoda* Müll.Arg.	*A. villosa* Jacq.
A. villosa var. *villosa*	*A. villosa* Jacq.
A. virgata Vell.	*A. variabilis* Klotzsch ex Baill.
***A. websteri* Cardiel**	
A. weddelliana Baill.	*A. accedens* Müll.Arg.
A. weddelliana var. *genuina* Müll.Arg. nom. inval.	*A. accedens* Müll.Arg.
A. weddelliana var. *janeirensis* Pax & K.Hoffm.	*A. accedens* Müll.Arg.
A. weddelliana var. *major* (Salzm. ex Baill.) Müll.Arg.	*A. brasiliensis* subsp. *psilophylla* (Müll.Arg.) Cardiel & A.A.C.Sousa
***A. wigginsii* G.L.Webster**	
***A. wilkesiana* Müll.Arg.**	
A. williamsii Rusby [1912]	*A. macrostachya* Jacq.
A. williamsii Rusby [1920] nom. inval.	*A. villosa* Jacq.
Gymnalypha jacquini Griseb.	*A. villosa* Jacq.
Linostachys urticifolia Klotzsch ex Schltdl.	*A. muelleriana* Urb.
Odonteilema claussenii Turcz.	*A. clausenii* (Turcz.) Müll.Arg.
Ricinocarpus accedens (Müll.Arg.) Kuntze	*A. accedens* Müll.Arg.
R. acumininatus (Benth.) Kuntze	*A. acuminata* Benth.
R. alopecuroides (Jacq.) Kuntze	*A. alopecuroidea* Jacq.
R. amblyodontus (Müll.Arg.) Kuntze	*A. amblyodonta* (Müll.Arg.) Müll.Arg.
R. arcianus (Müll.Arg.) Kuntze	*A. brasiliensis* Müll.Arg.
R. aristatus (Kunth) Kuntze	*A. alopecuroidea* Jacq.
R. arvensis (Poepp.) Kuntze	*A. arvensis* Poepp.
R. boliviensis (Müll.Arg.) Kuntze	*A. boliviensis* Müll.Arg.
R. brachyandrus (Baill.) Kuntze	*A. accedens* Müll.Arg.

Appendix 1 (continued). Published names associated with *Acalypha* L. in South America and accepted names in this paper.

Published names (accepted in bold)	**Accepted names in this paper**
R. brasiliensis (Müll.Arg.) Kuntze	*A. brasiliensis* Müll.Arg.
R. brevibracteatus (Müll.Arg.) Kuntze	*A. brasiliensis* Müll.Arg.
R. brevipes (Müll.Arg.) Kuntze	*A. velamea* Baill.
R. bullatus (Müll.Arg.) Kuntze	*A. peruviana* Müll.Arg.
R. callosus (Benth.) Kuntze	*A. macrostachya* Jacq.
R. cancanus (Müll.Arg.) Kuntze	*A. macrostachya* Jacq.
R. carthagenensis (Jacq.) Kuntze	*A. villosa* Jacq.
R. chorisandrus (Baill.) Kuntze	*A. chorisandra* Baill.
R. claussenii (Turcz.) Kuntze	*A. clausenii* (Turcz.) Müll.Arg.
R. communis (Müll.Arg.) Kuntze	*A. communis* Müll.Arg.
R. controversus Kuntze	*A. peruviana* Müll.Arg.
R. cordobensis (Müll.Arg.) Kuntze	*A. variabilis* Klotzsch ex Baill.
R. cuneatus (Poepp.) Kuntze	*A. cuneata* Poepp.
R. cuspidatus (Jacq.) Kuntze	*A. cuspidata* Jacq.
R. cuspidatus var. *glandulosus* Kuntze	*A. plicata* Müll.Arg.
R. dictyoneurus (Müll.Arg.) Kuntze	*A. dictyoneura* Müll.Arg.
R. digynostachyus (Baill.) Kuntze	*A. digynostachya* Baill.
R. dimorphus (Müll.Arg.) Kuntze	*A. dimorpha* Müll.Arg.
R. divaricatus (Müll.Arg.) Kuntze	*A. aronioides* Pax & K.Hoffm.
R. diversifolius (Jacq.) Kuntze	*A. diversifolia* Jacq.
R. erythrostachyus (Müll.Arg.) Kuntze	*A. padifolia* Kunth
R. glandulosus (Cav.) Kuntze	*A. glandulosa* Cav.
R. gracilis (Spreng.) Kuntze	*A. gracilis* Spreng.
R. gracilis var. *arboreus* Kuntze	*A. stenoloba* Müll.Arg.
R. infestus (Poepp.) Kuntze	*A. infesta* Poepp.
R. lagoensis (Müll.Arg.) Kuntze	*A. lagoensis* Müll.Arg.
R. macrodontus (Müll.Arg.) Kuntze	*A. padifolia* Kunth
R. macrostachyus (Jacq.) Kuntze	*A. macrostachya* Jacq.
R. mandonii (Müll.Arg.) Kuntze	*A. reflexa* Müll.Arg.
R. martianus (Müll.Arg.) Kuntze	*A. martiana* Müll.Arg.
R. multicaulis (Müll.Arg.) Kuntze	*A. multicaulis* Müll.Arg.
R. neogranatensis (Müll.Arg.) Kuntze	*A. macrostachya* Jacq.
R. oxyodontus (Müll.Arg.) Kuntze	*A. amblyodonta* (Müll.Arg.) Müll.Arg.
R. padifolius (Kunth) Kuntze	*A. padifolia* Kunth
R. parvulus (Hook.f.) Kuntze	*A. parvula* Hook.f.
R. peckoltii (Müll.Arg.) Kuntze	*A. peckoltii* Müll.Arg.
R. peruvianus (Müll.Arg.) Kuntze	*A. peruviana* Müll.Arg.
R. platyphyllus (Müll.Arg.) Kuntze	*A. platyphylla* Müll.Arg.
R. plicatus (Müll.Arg.) Kuntze	*A. plicata* Müll.Arg.
R. pohlianus (Müll.Arg.) Kuntze	*A. pohliana* Müll.Arg.
R. prunifolius (Nees & Mart.) Kuntze	*A. klotzschii* Baill.
R. pruriens (Nees & Mart.) Kuntze	*A. multicaulis* Müll.Arg.
R. radicans (Müll.Arg.) Kuntze	*A. radicans* Müll.Arg.
R. reflexus (Müll.Arg.) Kuntze	*A. reflexa* Müll.Arg.
R. ruizianus (Müll.Arg.) Kuntze	*A. padifolia* Kunth
R. salicifolius (Müll.Arg.) Kuntze	*A. salicifolia* Müll.Arg.

Appendix 1 (continued). Published names associated with *Acalypha* L. in South America and accepted names in this paper.

Published names (accepted in bold)	**Accepted names in this paper**
R. samydifolius (Poepp.) Kuntze	*A. diversifolia* Jacq.
R. scandens (Benth.) Kuntze	*A. scandens* Benth.
R. seminudus (Müll.Arg.) Kuntze	*A. brasiliensis* subsp. *asterotricha* (Müll.Arg.) Cardiel & A.A.C.Sousa
Ricinocarpus setosus (A.Rich.) Kuntze.	*Acalypha setosa* A.Rich.
R. senilis (Baill.) Kuntze	*A. senilis* Baill.
R. strictus (Poepp.) Kuntze	*A. stricta* Poepp.
R. subvillosus (Müll.Arg.) Kuntze	*A. villosa* Jacq.
R. tarapotensis (Müll.Arg.) Kuntze	*A. macrostachya* Jacq.
R. tenuifolius (Müll.Arg.) Kuntze	*A. tenuifolia* Müll.Arg.
R. tenuirameus (Müll.Arg.) Kuntze	*A. accedens* Müll.Arg.
R. urostachyus (Baill.) Kuntze	*A. stricta* Poepp.
R. vellameus (Baill.) Kuntze	*A. velamea* Baill.
R. villosus (Jacq.) Kuntze	*A. villosa* Jacq.
R. weddellianus (Baill.) Kuntze	*A. accedens* Müll.Arg.

Appendix 2 (continued on next page). Preliminary conservation assessment of the native species of *Acalypha* L. of South America. In bold: Red List of threatened species.

Species and subspecies	UICN category	UICN criteria	AOO (km^2)	EOO (km^2)	Collections dates
A. abingdonii	**CR**	B2ab(ii,iii,iv)	4	–	1906–1981
A. accedens	**EN**	B2ab(ii,iii)	72	56 610.980	1816–2009
A. acuminata	LC	–	28	445 678.410	1851–1977
A. almadinensis	**CR**	B2ab(ii,iii,iv)	8	–	1983–2004
A. alopecuroidea	LC	–	140	1 704 185.898	1829–1991
A. amblyodonta	LC	–	312	5 732 299.183	1816–2016
A. amphigyne	**CR probably EX**	B2ab(ii,iii,iv)	8	–	1891–1892
A. apetiolata	**EN**	B2ab(ii,iii)	16	12 125.270	1947–2018
A. argomuelleri	**VU**	B1ab(i,iii)	32	11 486.893	1840–1988
A. aronioides	NT	–	92	29 700.531	1839–1988
A. arvensis	LC	–	348	9 412 291.440	1831–2016
A. baurii	**EN**	B1ab(i,iii,iv)+B2ab(i,ii,iv)	28	1157.982	1891–1975
A. beckii	**CR**	B2ab(ii,iii,iv)	4	–	1984
A. boliviensis	NT	–	36	250 374.271	1858–2003
A. brasiliensis* subsp. *asterotricha	**CR**	B2ab(ii,iii,iv)	4	–	1830–1856
A. brasiliensis* subsp. *brasiliensis	**EN**	B2ab(ii,iii)	20	533 788.573	1839–2000
A. brasiliensis subsp. *psilophylla*	LC	–	720	4 149 184.206	1816–2015
A. carrascoana	**EN**	B2ab(ii,iii)	12	51 303.240	1946–1973
A. castroviejoi	**CR probably EX**	B2ab(ii,iii,iv)	4	–	1927
A. chaquensis	**VU**	D2	12	6511.863	1977–2007
A. chocoana	**VU**	D2	4	–	1967
A. chorisandra	**CR probably EX**	B2ab(ii,iii,iv)	4	–	1816
A. clausenii	NT	–	104	428 939.598	1816–2007
A. communis subsp. *apicalis*	LC	–	216	1 753 253.346	
A. communis subsp. *communis*	LC	–	572	4 094 433.003	
A. communis* subsp. *paraguariensis	**EN**	B1ab(i,iii,iv)	32	161 027.393	
A. communis subsp. *saltensis*	NT	–	180	693 121.310	
A. communis subsp. *tracheliifolia*	NT	–	32	69 280.870	
A. cuneata	LC	–	704	4 806 614.648	1831–1998
A. cuspidata	LC	–	192	2 033 856.916	1830–1997
A. delicata	**CR probably EX**	B2ab(ii,iii,iv)	4	–	1927
A. dictyoneura	LC	–	176	238 892.605	1865–1999
A. digynostachya	LC	–	440	827 638.234	1816–2014
A. dimorpha	**EN**	B2ab(ii,iii)	12	19 283.161	1995
A. diversifolia	LC	–	2272	11 317 202.200	1788–2012
A. glandulosa	**EN**	B1ab(i,iii)+B2ab(ii,iii)	16	328.239	1938–1995
A. gracilis	LC	–	604	2 332 565.399	1833–2013
A. hassleriana	**EN**	B2ab(ii,iii)	12	2084.602	1845–1902
A. herzogiana	NT	–	224	3 105 136.935	1875–2012
A. hibiscifolia	LC	–	68	117 205.718	1885–1997
A. inaequilatera	**CR probably EX**	B2ab(ii,iii,iv)	4	–	1844
A. infesta	LC	–	148	1 103 474.907	1790–2017

Appendix 2 (continued). Preliminary conservation assessment of the native species of *Acalypha* L. of South America. In bold: Red List of threatened species.

Species and subspecies	UICN category	UICN criteria	AOO (km^2)	EOO (km^2)	Collections dates
A. inselbergensis	LC	–	196	237 753.999	1968–2012
A. klotzschii	**EN**	B2ab(ii,iii)	72	136 283.183	1815–2008
A. longipetiolata	**CR**	B2ab(ii,iii,iv)	4	–	1979
A. lycioides	LC	–	220	462 1147.708	1873–2005
A. machiensis	**VU**	D2	4	–	2002
A. macrostachya	LC	–	1636	9 013 980.242	1760–2009
A. macularis	**EN**	B2ab(ii,iii)	16	262 528.467	1851–1882
A. martiana	**EN**	B2ab(ii,iii,iv)	24	121 143.628	1875–2003
A. muelleriana	LC	–	112	4 446 095.474	1845–1989
A. multicaulis	LC	–	724	3 718 703.625	1816–2012
A. mutisii	**VU**	B1ab(i,iii)	24	10 719.194	1844–1980
A. neeana	**VU**	D2	4	–	1994
A. padifolia	LC	–	304	1 974 762.838	1855–1999
A. parvula	NT	–	120	39 353.695	1825–1982
A. peckoltii	**CR probably EX**	B2ab(ii,iii,iv)	4	–	ca 1800
A. pedemontana	**VU**	D2	4	0	2007
A. peruviana	LC	–	84	322 637.090	1892–1998
A. platyphylla	LC	–	268	460 433.768	1844–1996
A. plicata	LC	–	204	1 223 590.9641	1873–2000
A. pohliana	**CR probably EX**	B2ab(ii,iii,iv)	4	–	–
A. poiretii	LC	–	352	12 424 005.495	1816–2013
A. psamofila	NT	–	40	28 830.134	1846–1998
A. radicans	**CR**	B2ab(ii,iii,iv)	4	–	1800–2016
A. reflexa	NT	–	28	285 601.077	1858–2003
A. salicifolia	LC	–	96	198 177.182	1857–1990
A. salicina	**VU**	B1ab(i,iii)	16	6 310.941	1913–1992
A. scandens	LC	–	352	3 663 718.953	1838–2009
A. schiedeana	LC	–	232	1 741 422.037	1854–1996
A. schreiteri	**EN**	B2ab(ii,iii)	16	6976.001	1915–1991
A. schultesii	**EN**	B1ab(i,iii)+B2ab(ii,iii)	12	1516.039	1946–1990
A. sehnemii	**CR probably EX**	B2ab(ii,iii,iv)	4	–	1942
A. senilis	LC	–	88	1 253 351.674	1816–1996
A. setosa	LC	–	60	268 724.179	1844–1985
A. simplicistyla	**EN**	B1ab(i,iii)+B2ab(ii,iii)	12	982.924	1950–1970
A. stachyura	LC	–	544	3 613 375.047	1892–2008
A. stellata	**EN**	B2ab(ii,iii)	24	6511.190	1933–1993
A. stenoloba	LC	–	312	948 806.736	1865–2009
A. stricta	LC	–	436	2 096 275.555	1828–2011
A. subcastrata	NT	–	88	148 330.340	1852–1994
A. tenuifolia	NT	–	64	33 129.770	1846–1980
A. uleana	**CR probably EX**	B2ab(ii,iii,iv)	4	–	1891
A. variabilis	LC	–	484	3 276 959.049	1816–2008
A. velamea	LC	–	68	847 217.871	1816–2005
A. venezuelica	**EN**	B1ab(i,iii)+B2ab(ii,iii)	12	3909.663	1953–1985
A. villosa	LC	–	924	12 402 286.655	1817–2012
A. websteri	**CR**	B2ab(ii,iii,iv)	8	–	1955–1979
A. wigginsii	**CR**	B2ab(ii,iii,iv)	8	–	1967–1974