



Aristolochia albopilosa (Aristolochiaceae), a new name for *Aristolochia cordata* Eastw.

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Aristolochia cordata Eastw. (1909), the name of an undercollected mexican species of conservation concern, is a later homonym of *Aristolochia cordata* L. (1759). It is renamed here as *Aristolochia albopilosa* M. González, S. González & Barrie.

Keywords: *Aristolochia* sect. *Gymnolobus*, Jamaica, Mexico, Sierra Madre Occidental

Aristolochia cordata Eastw. (1909), el nombre de una especie mexicana poco colectada, de interés para la conservación, es un homónimo posterior de *Aristolochia cordata* L. (1759). Se propone *Aristolochia albopilosa* M. González, S. González & Barrie como nombre de reemplazo.

Palabras clave: *Aristolochia* sect. *Gymnolobus*, Jamaica, México, Sierra Madre Occidental

Aristolochia cordata Eastwood (1909: 603), a small, procumbent herb with a two-lipped, pentandrous flower, was described from open pine-oak woodlands in the Sierra Madre Occidental, Mexico. Linnaeus (1759: 20) applied the name *A. cordata* to a lianescent plant from Jamaica, which he subsequently renamed *A. odoratissima* Linnaeus (1763: 1362). Consequently, Eastwood's *A. cordata* is an illegitimate later homonym (Art. 53.1 of the International Code of Nomenclature (Melbourne Code), McNeill *et al.* 2012) and renamed here. *Aristolochia cordata* L., a binomial that was never taken up, has priority over *A. odoratissima*, the name that has been consistently applied to the taxon since 1763. A proposal to reject the former name outright has been made in order to maintain usage of the latter name (Barrie *et al.* 2016).

Aristolochia albopilosa M. González, S. González & Barrie, *nom. nov.* ≡ *Aristolochia cordata* Eastw. Proc. Am. Acad. Arts Sci. 44: 603. 1909, *non* *Aristolochia cordata* L. Fl. Jamaic. (Linnaeus) 20. 1759. Type:—MEXICO. Durango: Otinapa, Jul-Aug, 1906 (fl-fr), *Edward Palmer 431* (holotype GH [GH00099201], isotypes F, MO, UC, US). (Fig. 1) **Etmology:**—The new epithet refers to the long, white trichomes on the branches and petioles.

Aristolochia cordata Eastw.

Eastwood's *Aristolochia cordata* belongs to *Aristolochia* sect. *Gymnolobus* ((Duchartre) Duchartre 1864: 439) subsect. *Pentandrae* ((Duchartre) O.C. Schmidt (1935: 237)), the most species-rich *Aristolochia* lineage in Mexico (Pfeifer 1970; Paizanni Guillén *et al.* 2016). This monophyletic taxon consists of about 40 species having flowers with five stamens and five carpels, known from southern USA, Mexico, N Central America, Cuba, Jamaica, and an island in Colombia (González 1997; González *et al.* 2010; Wanke *et al.* 2006). *Aristolochia cordata* Eastw. was described from only one collection in southern Durango, Mexico (*Edward Palmer 431* (GH, F, MO, UC, US)). A second collection was made at the type locality in 2014 (*A. Paizanni Guillén, J. M. Ramírez-Amezcuca & S. Müller 223*, CIIDIR, IEB, MEXU), and in 2015 the plant was found at a Biosphere Reserve (La Michilía), more than a hundred kilometers (air distance) southeast of that site.



FIGURE 1. Holotype of *Aristolochia cordata* Eastw. deposited at GH. Reproduced with the permission of the Gray Herbarium of Harvard University, Cambridge, Massachusetts, USA.

Additional specimens examined:—MEXICO. Durango. Municipio Durango: Otinapa, pasando el poblado Otinapa ca. 1 km después del primer puente, in pine-oak forest with *Pinus* and *Quercus durifolia*, in rocky ravine, 24°04'25"N, -105°56'00"W, 2150 m, 29 July 2014 (fl), *A. Paizanni Guillén, J. M. Ramírez-Amezcuca & S. Müller* 223 (CIIDIR, IEB, MEXU). Cía. Gan. El Carmen, km 46 carr. Dgo.-Mazatlán, 23°40'50"N, 104°45'05"W, 2400 m, September 1998 (fr), *S. Aguirre* 307 (MEXU). Municipio Súchil: Reserva de la Biosfera La Michilía, Arroyo El Alemán, cerca de Alemán Nuevo, Súchil, Durango, in oak woodland of *Quercus grisea* and *Juniperus deppeana* with *Opuntia* and scarce *Pinus cembroides*, 23°20'55"N, -104°11'29" W, 2200 m, 20 Oct. 2015 (fr), *CERAC 10-7* (CIIDIR).

Distribution and ecology:—*Aristolochia albopilosa* is endemic to the eastern slopes of the southern region of the Sierra Madre Occidental in western Mexico, at elevations from 2150 to 2400 m. Given its scarcity and rareness as well as the fact that its habitat is being severely modified, it should be considered as a threatened species. The new record into a Biosphere Reserve represents a local range extension that could buffer its threatened status.

***Aristolochia cordata* L. and *Aristolochia odoratissima* L.**

The species to which both names apply is a large, lianescent plant with cordate leaves and solitary, strong-smelling flowers with a purple-brown and cream perianth. Some of its local names are contrayerva (Jamaica), cocobá, guaco, patito in Mexico and Central America (Ortega-Ortíz and Ortega-Ortíz 1997; Davidse & al. 2015), tlacopatle in Central and South America, as well as carihua (Chácobo, Bolivia), jarrinha, jarrinha de babado, papo de peru (Brasil), and retrato (Bolivia) (González *et al.* 2015). English common names are sweet-scented birthwort (Maycock 1830) and fragrant dutchman's pipe (USDA 2016). It is widely distributed from S United States to NE Argentina and Paraguay, including the Antilles (González *et al.* 2015).

Aristolochia cordata L. *Fl. Jamaic.* (Linnaeus) 20. 1759 [22 Dec 1759]

In his *Flora Jamaicensis* (1759), Linnaeus supplied binomial names for species described by Patrick Browne in the *Civil and Natural History of Jamaica* (1756). Although no descriptions appeared in the dissertation, Linnaeus' nomenclatural novelties were validated by reference to the descriptions effectively published by Browne (Jarvis 2007).

Aristolochia cordata L. has not been typified and, as we are proposing the name for rejection, no lectotype is designated here. The only original material for the name are the figures cited by Browne: Sloane *Voy. Jamaica* 1: t. 104, f. 1 (1707) and Hernández, *Rer. Med. Nov. Hisp.*: 162 (1651). No relevant specimens are known. Sloane's plate, an illustration by Everard Kickius, was designated as the lectotype of *Aristolochia odoratissima* L. by Howard (1988). A specimen in the Sloane herbarium at BM (Herb. Sloane 3: 32, BM-SL) is not original material because Browne never saw it, but is almost identical to Sloane's plate and it may be used for confirming the identification of the species.

Aristolochia odoratissima L. *Sp. Pl.* (ed. 2). 1362. 1763

Lectotype:—Sloane, *Voy. Jamaica* 1: t. 104, f. 1 (1707); designated by Howard, *Fl. Lesser Antilles* 4(1): 125 (1988).

In 1763, Linnaeus published the name *Aristolochia odoratissima* (*Sp. Pl.*, ed. 2, 2: 1362), with a new descriptive polynomial. He cited Browne (1756) and Sloane (1707) in synonymy, as well as a Plumier figure (*Pl. Amer.* 5, t. 34. 1756). The Hernández (1651) figure was not cited. This is but one of several examples in *Species Plantarum*, ed. 2, of Linnaeus redescribing and renaming species that he had published previously. The name *A. cordata* was not expressly cited in 1763, thus in this case both names are legitimate.

Aristolochia odoratissima L. became the accepted name, while *A. cordata* L. lapsed into obscurity. For more than 250 years, the former name has been used in all relevant publications (see the entry under *A. odoratissima* in www.Tropicos.org for an extensive bibliography), while the latter apparently did not appear again in print until the publication of the Linnaean Typification Project checklist of Linnaean names (Jarvis 2007). Reverting to *A. cordata* now would be a seriously disadvantageous nomenclatural change (Arts. 14.1 and 58.1 of the ICN, McNeill *et al.* 2012). Therefore, a proposal to reject outright the name *A. cordata* L. (Barrie *et al.* 2016) has been made, so that *A. odoratissima* may remain the correct name.

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