

Gochnatia calophylla — a synonym of Gochnatia oligocephala (Gardner) Cabrera (Asteraceae, Mutisieae)

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GISELA SANCHO

***Gochnatia calophylla* – a synonym of *Gochnatia oligocephala* (Gardner) Cabrera (Asteraceae, Mutisieae)**

Abstract

Sancho, G.: *Gochnatia calophylla* – a synonym of *Gochnatia oligocephala* (Gardner) Cabrera (Asteraceae, Mutisieae). – Willdenowia 29: 235-237. 1999. – ISSN 0511-9618.

Gochnatia calophylla, distributed in NE Venezuela, is shown to agree in all morphological characters and to be conspecific with *G. oligocephala* from NE Brazil.

Gochnatia oligocephala (Gardner) Cabrera from NE Brazil (Cabrera 1971) and *G. calophylla* (Sch. Bip.) V. M. Badillo from Venezuela (Pruski 1997) are two species of *G.* sect. *Moquiniastrum*, one of the six sections of *Gochnatia*, which is the largest genus of *Mutisieae* (Asteraceae). *G.* sect. *Moquiniastrum* comprises some twenty species distributed in Argentina, Brazil, Bolivia, Paraguay, Peru, Uruguay and Venezuela (Cabrera 1971, 1974, Badillo 1975) and has been revised by the author recently (doctoral thesis, University of La Plata, 1997, not yet published).

Gochnatia calophylla was first published as *Tephrothamnus calophyllus* Sch. Bip., based on a collection by Humboldt & Bonpland from Venezuela, of which a specimen was annotated by Willdenow as '*Conyza calophylla*' (B-W 15627). According to Badillo, who transferred the taxon to *Gochnatia* (Badillo 1975) and added *Piptocarpha upatensis* as its synonym, *Gochnatia calophylla* is diagnosed by subsessile, stellate foliar hairs ('asterotrichii', Ramayya 1962), hairy corolla lobes and smooth anther tails. My own examinations, however, revealed that *G. calophylla* actually has the same two-armed foliar hairs with a short base (Fig. 1A) and the same lacinate anther tails (Fig. 1B) as *G. oligocephala*. With respect to the corolla lobes, I found that the perfect and female florets of both species have the same flagellate, oblique hairs (Fig. 1C). Both species, moreover, agree perfectly in all other features, and are apparently conspecific.

Gochnatia oligocephala (Gardner) Cabrera in Notas Mus. La Plata 15: 43. 1950 ≡ *Moquinia oligocephala* Gardner in London J. Bot. 6: 457. 1847. – Holotype: Brazil, "province of Ceará, Serra de Araripe, at Brejo Grande, Feb. 1839", Gardner 2422 (BM [photo LP!]; isotype: K) = *Moquinia polymorpha* var. *lucida* DC., Prodr. 7(1): 23. 1838 ≡ *Moquinia lucida* (DC.) Baker in Martius, Fl. Bras. 6(3): 347. 1884 ≡ *Gochnatia lucida* (DC.) Cabrera in Notas Mus. La Plata

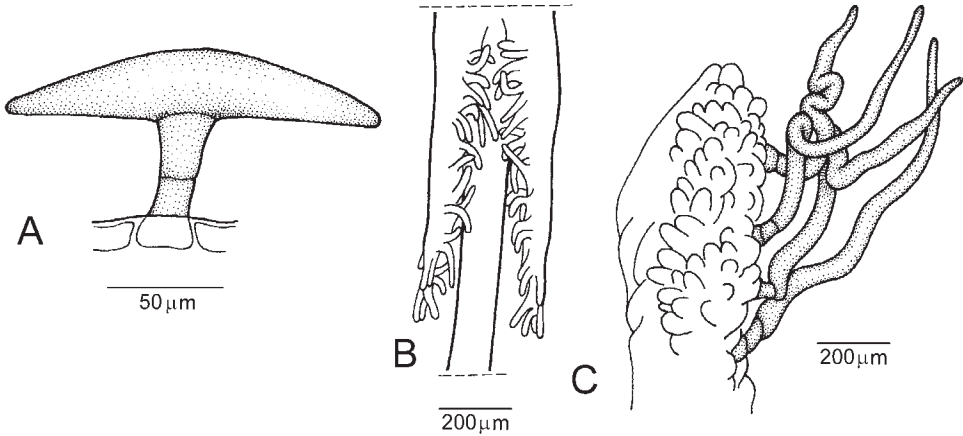


Fig. 1. *Gochnatia oligocephala* – A: two-armed hair on leaf (from *Foldats 3000*, CAR), B: anther tails (from *Sudgen 1242*, VEN), C: apex a corolla lobe with flagellate-oblique hairs (from *Pirani 2575 & al.*, SP).

15: 43. 1950. – Holotype: Brazil, “Bahia in collibus, 1831” *Salzman s.n.* (G!; isotypes: FI, K! [photo LP!], P).

= *Tephrothamnus calophyllus* Sch. Bip. in *Jahresber. Pollichia* 20/21: 432. 1864 ≡ *Gochnatia calophylla* (Sch. Bip.) V. M. Badillo in *Revista Fac. Agron. (Maracay)* 8(4): 188. 1975. – Holotype: Venezuela, Sucre, “pr. Cumaná, m. Oct. 1799 (Vendem. an 8) a cl. Humb.! et Bonpl.! lect.” (B-W 15627 [photo VEN!]).

= *Piptocarpha upatensis* V. M. Badillo in *Bol. Soc. Venez. Ci. Nat.* 10: 279. 1946. – Holotype: Venezuela, Bolívar, “woods 1-10 kms. northwest of Upata, on road to San Felix, between Upata and Altagracia, altitude 700 meters, 31.7.-1.8.1944”, *Steyermark 57674* (VEN; isotype: F! [photo LP!]). – Paratype: Venezuela, Anzoátegui, *Steyermark 61475* (F!, VEN).

Additional specimens examined

BRAZIL: PERNAMBUCO: Mun. Buique, 5.2.1981, *Zardini 1328* (LP, MO); *ibid.*, *Zardini 1323* (LP, MO); Taquaritinga do Norte, 6.3.1966, *Andrade-Lima 66-4493* (LP). — BAHIA: Rio Branco, 15.5.1918, *Curran 284* (NY, SP), 284 A (F, S), 301 (US); 18 km de Maracas, 24.1.1965, *Pereira 9681 & Pabst 8570* (LP); 6 km SW de Maracas, *Sobral & Mattos Silva 5898* (ICN); Ilha dos Frades, 1.1947, *Menezes* (LP); *ibid.*, *Blanchet* (S); Mun. Maracas, Gamaleiras, 21.11.1985, *Hatschbach 50045 & Zelma* (S); Monte Santo, 20.2.1974, *Harley 16415 & al.* (LP, MO, NY, R); Tucano a Rib. do Pomal, 2.1.1950, *Lima 50-404* (SI); *ibid.*, 21.3.1992, *de Carvalho & al. 3903* (NY); Serra da Jacobina, *Blanchet 3288* (G, LP, NY, US). — CEARÁ: Tianguá, 28.1.1990, *Pirani & al. 2575* (SP).

VENEZUELA: NUEVA ESPARTA: ISLA MARGARITA: 13.1.1982, *Sudgen 909* (VEN); Cerro Copei, 18.6.1983, *Sudgen 1242* (VEN); *ibid.*, 30.8.1953, *Foldats 3000* (CAR); La Soledad, Macanao, 1.9.1953, *Foldats 3095* (CAR). — SUCRE: El Merey, 15.-17.9.1973, *Steyermark & al. 108632* (VEN); between Zurita and El Naranjo and Agua Colorada, 18.-19.8.1973, *Steyermark & al. 107809* (VEN); Península de Araya, 21.5.1981, *Liesner & Gonzalez 12130* (VEN). — ANZOÁTEGUI: Alrededores de El Zamuro, 11.12.1970, *Morillo 182* (VEN).

After unification of *Gochnatia oligocephala* and *G. calophylla* we recognize an interesting distributional pattern of this species. Occurring at margins of dry forests of NE Brazil (Bahia, Ceará, Pernambuco) and NE Venezuela (Anzoátegui, Bolívar, Nueva Esparta, Sucre), *G. oligocephala* exhibits a similar disjunct distribution as is known from, e.g., *Dasyphyllum vepreculatum* (D.

Don) Cabrera of the tribe *Barnadesieae* (Pruski & Aymard 1993). Today their two distribution areas are separated by the tropical rainforest zone. It has been proposed (Prado & Gibbs 1993) that disjunct distributional patterns in South America (like that of *G. oligocephala*) are vestiges of an once extensive semideciduous forest, which may have reached its maximum extension during Pleistocene dry periods.

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References

- Badillo, V. M. 1946: Contribución al conocimiento de la sistemática y distribución geográfica de las compuestas en Venezuela. – *Bol. Venez. Ci. Nat.* **10**: 279-320.
- 1975: Un nuevo género de *Compositae* para Venezuela. – *Revista Fac. Agron. (Maracay)* **8(4)**: 187-191.
- Cabrera, A. L. 1950: Observaciones sobre los géneros *Gochnatia* y *Moquinia*. – *Notas Mus. La Plata, Bot.* **15(74)**: 37-48.
- 1971: Revisión del género *Gochnatia* (*Compositae*). – *Revista Mus. La Plata, Secc. Bot.* **12(66)**.
- 1974: Tres *Compositae* nuevas de Minas Gerais (Brasil). – *Bol. Mus. Bot. Munic.* **15**: 1-4.
- Prado, D. E. & Gibbs, P. E. 1993: Patterns of species distributions in the dry seasonal forests of South America. – *Ann. Missouri Bot. Gard.* **80**: 902-927.
- Pruski, J. F. 1997: *Asteraceae*. – Pp. 177-393 in: Steyermark, J. A., Berry, P. E. & Holst, B. K. (ed.), *Flora of the Venezuelan Guayana* **3**. – St. Louis.
- & Aymard, G. 1993: *Compositae* of the Guayana Highland VIII. *Dasyphyllum vepreculatum* (D. Don) Cabrera (*Barnadesioideae* : *Barnadesieae*), new for Guayana. – *Compositae Newslett.* **23**: 10-15.
- Ramayya, N. 1962: Studies on the trichomes of some *Compositae* I. General structure. – *Bull. Bot. Surv. India* **4**: 177-188.

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