

***SERRULATOCEREUS* GUIGGI. A NEW PROPOSED GENUS FOR THE RECENT RE-EVALUATED *CEREUS* *SERRULIFLORUS* HAWORTH FROM HAITI (CACTACEAE)**

Serrulatocereus* Guiggi *gen. nov.

Synonymus: *Cereus* Miller subgen. *Neohaiticereus* Areces, in *Cactus & Succ. J.* 90(2): 113 (2018). **Diagnosis:** differs from *Cereus* Miller *sensu stricto* by its habit densely ramified; stem slender, fluted, not constricted and glaucous; ribs lower, more numerous up to 17, not cross furrowed; flower tubular-campanulate, perianth segments strongly deflexed, with the apical margins finely serrulate, style and stamens strongly exerted from the perianth; fruit indehiscent, pendulous, larger to 13 cm long, flower remnant persistent, occasionally spiny at the base with woolly areoles; seed rostrate, with testa cells strongly tuberculate, without interstitial pits. **Typus generis:** *Serrulatocereus serruliflorus* (Haworth) Guiggi [\equiv *Cereus serruliflorus* Haworth]. **Etymologia:** from Latin *serrulatus* referred to the serrulate apical margin of the perianth segments. **Distributio:** Hispaniola, restricted to Haiti. **Notes:** the closest relatives of this new endemic genus of Haiti are two other genera of the Caribbean region, *Harrisia* Britton *sensu stricto* (excluded *Eriocereus* Riccobono) for its vegetative characters (*i.e.* stem very ramified, slender, with a high number of ribs), and *Leptocereus* Britton & Rose for its reproductive characters (*i.e.* flower tubular-campanulate, with deflexed perianth segments, and fruit with keels, \pm spined), this mean that the evolutionary history of *Serrulatocereus* is more properly belonging to the Caribbean biogeographic region and not to South America and nearby Islands, the origin and distribution of the genus *Cereus* *s.s.*, so justifying its recognition as a separate genus. The enlarged and heterogeneous concept of *Cereus sensu* Hunt & Taylor (1992: 17-25) is not accepted here but rather a narrower taxonomic approach that takes into consideration the different morphologies, ecologies and distributions of *Mirabella* Ritter (1979: 108), *Monvillea* Britton & Rose (Kiesling, 2010: 62) and *Subpilocereus* Backeberg (Guiggi, 2010: 119), which have already been recognized and segregated from *Cereus* Mill. *sensu lato* (*cfr.* Hunt *et al.* 2006: 37-38).

Serrulatocereus serruliflorus* (Haworth) Guiggi *comb. nov. **Basionymus:** *Cereus serruliflorus* Haworth, *Philos. Mag. J.* 37: 113 (1830). **Typus:** *non servatus*. **Neotypus** (Areces, 2018: 113): Haiti, Grand Cul de Sac, between Port-au-Prince and Léogane, in hot, dry woods. Plant portrayed in September 1689–1690, or 1693, by Charles Plumier in plate 3: 26 of his *Botanicon Americanum*, with the exclusion of the drawing of the *Harrisia*-like stem segment, to avoid confusion. **Synonymi:** *Harrisia serruliflora* (Haworth) Lourteig, in *Bradea* 5: 408 (1991); *Cereus hermentianus* Monville, *Ill. Hort.* 6 Misc. 90 (1859); *Pilocereus hermentianus* Lemaire in *F.A.C Weber, Dict. Hort. Bois* 965 (1898); *Cephalocereus hermentianus* (Monville) Britton *et* Rose, in *Contr. U.S. Natl. Herb.* 12: 416 (1909); *Pilosocereus hermentianus* (Monville) Byles & G.D.Rowley *Cact. Succ. J. Gr. Brit.* 19: 67 (1957); *Cereus haitiensis* A.R. Franck *et* Peguero, in *Phytoneuron* 29: 2 (2017). **Specimina visa.** **Exsiccata.** HAITI, Nord-Ouest Dept.: road Jean-Rabel to Môle-St-Nicolas, near Môle-St-Nicolas, 3 Jul. 1925, *E.L. Ekman* H-4446 *sub Cereus repandus* (Linnaeus) Miller [S,US fig. 1; corp, ar, sp, ico]; arid thickets W of Môle gorge, vicinity of Môle-St-Nicolas, 16 Feb. 1929, *E.C. Leonard et G.M. Leonard* 13311 *sub Cephalocereus nobilis* (Haworth) Britton *et* Rose [US, NY; corp, ar, sp, fr]; vicinity of Jean Rabel, thicket along Mole Road, 3 Mar. 1929, *E.C. Leonard et G.M. Leonard* 13682 *sub Cephalocereus nobilis* [US, NY fig.; corp, ar, sp, fl]; Môle-St-Nicolas, 2 Feb. 1985, *T. Zanoni et al.* 33542 *sub Harrisia* sp. [JBSD, corp, ar, sp]. Ouest Dept.: Plaine Cul-de-Sac, Croixdes-

Bouquets, 18 Dec. 1925, *Ekman H-5377 sub Cereus repandus* [S n.v., US; corp, ar, sp]. **Icones:** Plumier plate's 26 (Mottram, 2002: 113; Areces, 2018: 108 fig. 1); Plumier in Burman's plate 195 (Franck *et al.*, 2017: 17 fig. 15); figs. 3-14 (Franck *et al.*, 2017: 10-16); figs. 2-16 (Areces, 2018: 109-116). **Distributio:** NW & Central Haiti, on limestone terraces near the coast. **Notes:** the arguments discussed in Areces (2018: 107-110) about the identity and validity of *Cereus serruliflorus* Haworth are here considered consistent and for this reason the recent described *Cereus haitiensis* A.R. Franck *et* Peguero is treated as synonym of the former name. The herbarium specimens collected by *Leonard et Leonard* 13311, 13682 were re-evaluated as *cfr. Leptocereus* sp. by N.P Taylor, while *Ekman H-4446* and *Zanoni et al.* 33542 were believed to represent a *Harrisia* sp. by N.P Taylor and T. Zanoni *et al.* These opinions further support the author's conviction that *Serrulatocereus serruliflorus* has a closer relationship with these two genera than it does to *Cereus* Miller.



Fig.1: Three spined, multi-ribbed stem branches and two epidermis photos of *Serrulatocereus serruliflorus* (Haworth) Guiggi [\equiv *Cereus serruliflorus* Haworth], near Môle-St-Nicolas, 3 Jul. 1925, *Ekman H-4446 sub Cereus repandus* (Linnaeus) Miller, deposited at US. Photo: © National Museum of Natural History, Smithsonian Institution.

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Nomenclatural novelties proposed in this supplement

Serrulatocereus Guiggi *gen. nov.*

Serrulatocereus serruliflorus (Haworth) Guiggi *comb. nov.*

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