

NEW COMBINATIONS IN THE SOUTH AMERICAN *OPUNTIA* SER. *ARMATAE* K. SCHUMANN (*CACTACEAE- OPUNTIOIDEAE*)

Opuntia elata Salm-Dyck, Hort. Dyck. 361 (1834). *Neotypus* (Leuenberger, 2002: 423): Uruguay, Salto, rocky places, 7 Mar. 1917, J.A. Shafer 120 [US, *holo.*, corp, ar, sp, ico, *spec. vis.*; K, *iso.*, corp, ar, sp, *spec. vis.*]. *Synonymi*: *Opuntia elata* var. *obovata* E. Walther, in Cact. Succ. J. (U.S.A.) 1: 204 (1930); *Opuntia cardiosperma* K. Schumann, in Monatschr. Kakteenk. 9: 150 (1899); *Opuntia elata* var. *cardiosperma* (K. Schumann) R. Kiesling, in Fl. Illustr. Entre Rios 4b: 412 (2005); *Opuntia rioplatense* Font, in Succ. Pl. Res. 8: 85 (2014).

Opuntia elata subsp. *bonaerensis* (Spegazzini) Guiggi *comb. et stat. nov.* *Basionymus*: *Opuntia bonaerensis* Spegazzini, in Contr. Fl. Tandil 18 (1901). *Neotypus* (Crook & Mottram, 1995: 114): *ico.* in Spegazzini, '1924' 1925: 94, *spec. vis.* **Note**: subspecies recognized for its longer, spatulate cladodes, stigma with green lobes, fruit normally longer, with a red pulp, and for its endemic distribution in the Pampean region of Argentina.

Opuntia megapotamica Arechavaleta, in Anales Mus. Nac. Montevideo ser. 2, 1: 42 (1905b). *Lectotypus* (Leuenberger, 2002: 426, 427 fig. 5): pl. 32 *spec. vis.* in Arechavaleta 5(2): 275 (1905a) sub *Opuntia monacantha* Haworth. *Synonymus*: *Opuntia megapotamica* var. *chadihuensis* Oakley et Villamil, in Botany (Ottawa) 95: 115 (2017), *syn. nov.*

Opuntia megapotamica subsp. *salagria* (A. Castellanos) Guiggi *stat. nov.* *Basionymus*: *Opuntia salagria* A. Castellanos, in Lilloa 27: 85. 1953 (1955). *Lectotypus* (Leuenberger, 2002: 431): Argentina, Buenos Aires, Campana, 20 Nov. 1951, A. Castellanos s.n. [BA 54768, in alc.]. *Synonymus*: *Opuntia megapotamica* var. *salagria* (A. Castellanos) Oakley, in Botany (Ottawa) 95: 115 (2017). **Note**: infra-specific taxon characterized by the thinner and more glaucous cladodes with a higher number of areoles, *hyphanthium* with 2-3 tiny, brown spines, and a greenish pulp of the fruit, endemic to central Argentina.

Opuntia monacantha (Willdenow) Haworth subsp. *arechavaletae* (Spegazzini) Guiggi *comb. et stat. nov.* *Basionymus*: *Opuntia arechavaletae* Spegazzini, in Anales Mus. Nac. Buenos Aires ser. 3, 4: 520 (1905), as '*Arechavaletai*'. *Typus* (Kiesling, 1984: 233): Uruguay, Pan de Azúcar, Nov. 1903, *ex* Herb. J. Arechavaleta [LPS 14705, *holo.*, fr.]. **Note**: subspecies distinguished by the different reproductive characters of the flower (green stigma lobes) and fruit (longer, elongate, with an apical and smaller *loculus*), with a more southern distribution in Brazil, Uruguay and Argentina.

Bibliographia

- Arechavaleta, J. (1902) 1905a. Cactáceas. *Anales Mus. Nac. Montevideo*. 5(2): 161-291.
 Arechavaleta, J. (1904) 1905b. Esclarecimientos sobre algunas Cactáceas. *Anales Mus. Nac. Montevideo*. ser. 2, 1: 41-45.
 Britton, N. L., and Rose J. N. 1919. *The Cactaceae*. Vol. 1. Carnegie Institution: Washington (U.S.A).
 Castellanos, A. (1953) 1955. Noticias sobre *Opuntia* (Cactaceae). I. *Lilloa*. 27: 4-12.
 Crook R., and Mottram R. 1995. *Opuntia* Index Part 1: Introduction and A-B. *Bradleya*. 13: 88-118.

- Font, F. 2014. A revision of *Opuntia* serie *Armatae* K. Schum. *Opuntia* ser. *Elatae* Britton & Rose (*Cactaceae-Opuntioideae*). In: Further Studies in *Opuntioideae* (*Cactaceae*). Hunt, D. ed. *Succulent Plant Research*. 8: 51-94.
- Hunt, D., N. Taylor, and G. Charles (eds.). 2006. *New Cactus Lexicon*. David Hunt Books: Milborne Port (England).
- Kiesling, R. 1984. *Cactaceas publicadas por el Dr. Carlos Spegazzini*. Librosur: Buenos Aires (Argentina).
- Kiesling, R. 2005. *Cactales*. In: *Flora Ilustrada de Entre Ríos*. Geraniales a Umbeliflorales. Burkart, A., and Bacigalupo N. M. (eds.). Instituto Nacional de Tecnología Agropecuaria. Colección Científica. 4b: 401-444.
- Lambert, J. G. 1992. *Cactus d'Argentine*. Concordia-Roeselare.
- Las Peñas, M. L., Oakley L., Moreno N.C., and Bernardello G. 2017. Taxonomic and cytogenetic studies in *Opuntia* ser. *Armatae* (*Cactaceae*). *Botany*. 95: 101-120.
- Leuenberger, B.E. 2001. The type specimen of *Opuntia cardiosperma* (*Cactaceae*), new synonyms and new records from Argentina and Paraguay. *Willdenowia*. 31: 171-179.
- Leuenberger, B.E. 2002. The south american *Opuntia* ser. *Armatae* (= *O.* ser. *Elatae*) (*Cactaceae*). *Bot. Jahrb. syst.* 123: 413-439.
- Realini, M.F., Gottlieb, A.M., Font, F., Picca, P., Poggio, L., and González G.E. 2014. Cytogenetic characterization of southern South American species of *Opuntia* (*Cactaceae, Opuntioideae*). In: Further studies in the *Opuntioideae* (*Cactaceae*). Hunt, D. ed. *Succulent Plant Research*. 8. 31-50.
- Realini, M.F., González, G.E., Font, F., Picca, P.I., Poggio, L., and Gottlieb A.M. 2015. Phylogenetic relationships in *Opuntia* (*Cactaceae, Opuntioideae*) from southern South America. *Pl. Syst. Evol.* 301(4): 1123-1134.

Edited & published by Alessandro Guiggi
 DISTAV, Polo Botanico, Università degli Studi di Genova
 International Cactaceae Research Center (ICRC)
 alex.guiggi@libero.it

The text has been written by Alessandro Guiggi
 Illustrations by individual contributors

All right reserved

No parts of this issue may be reproduced in any form, without permission from the Publisher
 © Copyright ICRC

ISSN 1971-3010 (paper edition)
 ISSN 2421-5457 (online edition)

Printed copies have been deposited at the libraries of Hanbury Botanical Gardens, Huntington Botanical Gardens, Instituto de Botánica Darwinion, Kew Gardens, New York Botanical Garden, Jardin Exotique de Monaco and Sukkulenten Sammlung Zürich

Nomenclatural novelties proposed in this supplement

- Opuntia elata* subsp. *bonaerensis* (Spegazzini) Guiggi *comb. et stat. nov.*
Opuntia megapotamica subsp. *salagra* (A. Castellanos) Guiggi *stat. nov.*
Opuntia monacantha subsp. *arechavaletae* (Spegazzini) Guiggi *comb. et stat. nov.*