

ADDITIONAL NOTES ON THE GENUS *ACANTHOLIPPIA*. VI

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*ACANTHOLIPPIA* Griseb.

Additional & emended bibliography: Goebel, *Pflanzenbiol. Schild.* 2: 13, pl. 12, fig. 1--4. 1891; R. A. Phil., *Ann. Mus. Nac. Chile Bot.* 1: [Cat. Praev. Pl. Itin. Tarap.] 69. 1891; Briq. in Engl. & Prantl, *Nat. Pflanzenfam.*, ed. 1, 4 (3a): 133, 151, & 152. 1895; Durand & Jacks., *Ind. Kew. Suppl.* 1, imp. 1, 250. 1903; Reiche & Phil. in Reiche, *Estud. Crit. Fl. Chil.* 5: 298--301. 1910; Speg., *Mycet. Argent.* 5: 375. 1910; Sydow, *Justs Bot. Jahresber.* 39 (1): 377. 1912; Sanzin, *Anal. Soc. Cient. Argent.* 88: 96--98, 100, 101, 133, & 134, fig. 2. 1919; Stapf, *Ind. Lond.* 1: 26. 1929; Durand & Jacks., *Ind. Kew. Suppl.* 1, imp. 2, 250. 1941; Cabrera, *Revist. Invest. Agric. Buenos Aires* 11: 327, 336, 339, 343, 357, 359, 366, 369, & 397, fig. 1C. 1957; Durand & Jacks., *Ind. Kew. Suppl.* 1, imp. 3, 250. 1959; Mukhopadhyay, *Pollen Morph. Verb.* [thesis]. 1971; Thanikaimoni, *Ind. Franc. Pond. Trav. Sect. Scient. Tech.* 12 (2): [3] (1973) and 13: [5] & 328. 1976; Anon., *Roy. Bot. Gard. Kew Lib. Curr. Awaren.* 9: 22. 1978; Markgraf & D'Antoni, *Pollen Fl. Argent.* 29, 97, 118, 203, & 207, pl. 42-356. 1978; Mukherjee & Chanda, *Trans. Bose Res. Inst.* 41: 40, 47, 50, & 57. 1978; Mold., *Phytologia* 40: 261--262 & 504 (1978) and 44: 328 & 505. 1979; Hocking, *Excerpt. Bot. A.33*: 89. 1979; Rogerson, Becker, & Prince, *Bull. Torrey Bot. Club* 106: 62. 1979; Botta, *Darwiniana* 22: 511--532. 1980; Mold., *Phytol. Mem.* 2: 4, 173, 182, 184, 369, 420, 422, & 519. 1980; Mold., *Phytologia* 45: 40, 339, & 503 (1980) and 48: 171, 182, & 505. 1981; Rogerson, Becker, Buck, & Long, *Bull. Torrey Bot. Club* 108: 394. 1981; Mold., *Phytologia* 50: 249, 268, & 503. 1982.

*ACANTHOLIPPIA DESERTICOLA* (R. A. Phil.) Mold.

Additional synonymy: *Acantholippia punensis* Botta, *Hickenia* 1: 195. 1979.

Additional & emended bibliography: R. A. Phil., *Ann. Mus. Nac. Chile Bot.* 1: [Cat. Praev. Pl. Itin. Tarap.] 69. 1891; Briq. in Engl. & Prantl, *Nat. Pflanzenfam.*, ed. 1, 4 (3a): 151 & 152. 1895; R. A. Phil., *Anal. Univ. Chile* 90: 620 & 622. 1896; Reiche & Phil. in Reiche, *Estud. Crit. Fl. Chile* 5: 298, 300, & 301. 1910; Speg., *Mycet. Argent.* 5: 375 & 378. 1910; Sydow, *Justs Bot. Jahresber.* 39 (1): 377 & 409. 1912; Mold., *Phytol.* 40: 261--262. 1978; Mukherjee & Chanda, *Trans. Bose Res. Inst.* 41: 50. 1978; Botta, *Hickenia* 1: 195. 1979; Hocking, *Excerpt. Bot. A.33*: 89. 1979; Botta, *Darwiniana* 22: 514--518, fig. 1. 1980; Mold., *Phytol. Mem.* 2: 173, 182, 184, & 519. 1980; Mold., *Phytologia* 45: 339 (1980), 48: 182 (1981), and 50: 249. 1982.

Additional illustrations: Botta, *Darwiniana* 22: 518, fig. 1. 1980.

Philippi (1891) reports this species from near Breas, in Tarapa-

cá, Chile, where it is known as "ricarica". Spegazzini (1910) records a fungus, *Camarasporulum andicola* Speg., as parasitic on *Lippia microphylla* in Argentina. Since the true *L. microphylla* Cham. does not occur in Argentina, it seems obvious that the plant referred to by Spegazzini is *L. microphylla* R. A. Phil., a synonym of *Acantholippia deserticola*.

The *Lippia trifida* var. *gracilis* Phil., previously regarded as a synonym of *A. deserticola*, is now regarded as *A. trifida* var. *reichei* Mold.

Additional citations" MOUNTED ILLUSTRATIONS: Botta, Darwiniana 22: 518, fig. 1. 1980 (Z, Z).

#### ACANTHOLIPPIA HASTULATA Griseb.

Additional & emended bibliography: Cabrera, Revist. Invest. Agric. Buenos Aires 11: 339, 343, 357, 359, 369, & 397, fig. 1C. 1957; Mold., Phytologia 40: 262. 1978; Botta, Darwiniana 22: 523--525, fig. 4. 1980; Mold., Phytol. Mem. 2: 173, 184, & 519. 1980

Emended illustrations: Cabrera, Revist. Invest. Agric. Buenos Aires 11: 339, fig. 1C. 1957; Botta, Darwiniana 22: [524], fig. 4. 1980.

#### ACANTHOLIPPIA RIOJANA (Hieron.) Hieron. & Mold.

Additional bibliography: Goebel, Pflanzenbiol. Schild. 2: 13, pl. 12, fig. 1--4. 1891; Stapf, Ind. Lond. 1: 26. 1929; Mold., Phytologia 40: 262. 1978; Botta, Darwiniana 22: 513--515 & 519--520, fig. 2. 1980; Mold., Phytol. Mem. 2: 184 & 519. 1980.

Additional illustrations: Goebel, Pflanzenbiol. Schild. 2: pl. 12, fig. 1--4. 1891; Botta, Darwiniana 22: 520, fig. 2. 1980.

Additional citations: MOUNTED ILLUSTRATIONS: Botta, Darwiniana 22: 520, fig. 2. 1980 (Z, Z).

#### ACANTHOLIPPIA SERIPHIOIDES (A. Gray) Mold.

Additional & emended bibliography: Sanzin, Anal. Soc. Cient. Argent. 88: 100, 101, & 134. 1919; Markgraf & D'Antoni, Pollen Fl. Argent. 29, 97, 118, 2-3, & 207, pl. 42-356. 1978; Mold., Phytologia 40: 262. 1978; Botta, Darwiniana 22: 514, 516, & 525, fig. 5. 1980; Mold., Phytol. Mem. 2: 184, 420, 422, & 519. 1980.

Additional illustrations: Markgraf & D'Antoni, Pollen Fl. Argent. pl. 42-256. 1978; Botta, Darwiniana 22: 527, fig. 5. 1980.

Recent collectors refer to this plant as a small shrub, to 0.5 m. tall, and have encountered it in dry rocky places at 1900--2450 m. altitude. The corollas are said to have been "white" on *Miehe* 255.

Markgraf & D'Antoni (1978) describe the pollen of this species as "Tricolporate, verrucate. Grain prolate spheroidal, 16 x 15  $\mu$ m. Exine 1.3  $\mu$ m thick. Pore lalongate, 5 x 2  $\mu$ m. Margo 2.5--3  $\mu$ m wide. Polar A 0.15, amb sub-angulare" on the basis of *Lagiglia* 27 from Mendoza, Argentina, and list the vernacular names, "alargato" and "tomillo". I assume that by " $\mu$ m" these authors mean  $\mu$  or micron.

Sanzin (1919) states that this species flowers from November to March and lists it from San Juan, Río Negro, San Luis, and Chubut in Argentina.

Additional citations: ARGENTINA: Chubut: *O'Donell 3239* (Ws). Mendoza: *Castellanos 3468* (W--2923097); *Miehe 255* (Ld). Santa Cruz: *Dusén s.n.* [Puerto Mazaredo, Dec. 17, 1904] (N). MOUNTED ILLUSTRATIONS: Botta, *Darwiniana* 22: 527, fig. 5. 1980 (Z)

*ACANTHOLIPPIA TARAPACANA* Botta, *Hickenia* 1: 197. 1979.

Bibliography: Botta, *Hickenia* 1: 197. 1979; Botta, *Darwiniana* 22: 514, 516, 521, & [522], fig. 3. 1980; Mold., *Phytologia* 50: 249 & 268. 1982.

Illustrations: Botta, *Darwiniana* 22: [522], fig. 3. 1980.

This species is based on *Ricardi 3363* from Puyulos, on the railway from Arica to La Paz, at 3750 m. altitude, in the department of Arica, Tarapaca, Chile, collected on September 16, 1955. and deposited in the San Isidro herbarium. Botta (1980) cites also *Ricardi 3418*, *Ricardi & Marticorena 4725/1110*, *Ricardi, Marticorena, & Matthei 77*, and *Schlegel 4884* from Chile.

The only vernacular name thus far recorded for the species is "chachacoma".

Citations: MOUNTED ILLUSTRATIONS: Botta, *Darwiniana* 22: [522], fig. 3. 1980 (Z, Z).

*ACANTHOLIPPIA TRIFIDA* (C. Gay) Mold.

Additional & emended bibliography: Reiche & Phil. in Reiche, *Estud. Crit. Fl. Chile* 5: 298--300. 1910; Sanzin, *Anal. Soc. Cient. Argent.* 88: 96--98, 100, 101, 133, & 134, fig. 2. 1919; Mold., *Phytologia* 40: 262 (1978) and 44: 328. 1979; Hocking, *Excerpt. Bot. A.33*: 89. 1979; Botta, *Darwiniana* 22: 514, 516, & 528--531, fig. 6. 1980; Mold., *Phytol. Mem.* 2: 182, 369, 420, 422, & 519. 1980; Mold., *Phytologia* 48: 171. 1981.

Additional & emended illustrations: Sanzin, *Anal. Soc. Cient. Argent.* 88: 101, fig. 2. 1919; Botta, *Darwiniana* 22: [530], fig. 6. 1980.

Sanzin (1919) regards *Lippia floribunda* R. A. Phil. and *L. foliolosa* R. A. Phil. and conspecific with and synonyms of the present species, but I regard the former as a synonym of *Aloysia reichii* Mold. and the latter as a synonym of *Acantholippia seriphoides* (A. Gray) Mold. He describes the species as "Pequeño arbusto, muy común en la Precordillera a una altura de 1000 a 1500 metros. Numerosos ejemplares de varias procedencias (leg. Sanzin)." He records the common name, "tomillo", and also lists it as characteristic of the subandean life zone, 900--1500 m. altitude.

The *Lippia gracilis* R. A. Phil., previously placed in the synonymy of typical *A. trifida*, is now regarded as belonging to that of its var. *reichii* Mold. The *O'Donell 3239*, distributed as *A. trifida*, seems actually to be *A. seriphoides* (A. Gray) Mold.

Additional citations: MOUNTED ILLUSTRATIONS: Botta, *Darwiniana* 22: [530], fig. 3. 1980 (Z, Z).

*ACANTHOLIPPIA TRIFIDA* var. *REICHEI* Mold., *Phytologia* 44: 328. 1979.

Synonymy: *Lippia gracilis* R. A. Phil., *Anal. Univ. Chile* 90: 620. 1896 [not *L. gracilis* Schau., 1847]. *Lippia trifida* var. *gracilis* Phil. ex Reiche, *Estud. Crit. Fl. Chile* 300. 1907.

[to be continued]