

COMBINATIONES NOVAE IN CACTACEIS PERUVIANIS

Andinopuntia floccosa (Salm-Dyck ex Winterfeld) Guiggi **subsp. yanganucensis comb. nov.**

Basionymus: *Tephrocactus yanganucensis* Rauh et Backeberg, Descr. Cact. Nov. 8. 1956 (1957).
 Synonymi: *Opuntia yanganucensis* (Rauh et Backeberg) G.D.Rowley, in Natl. Cact. Succ. J. 13: 6 (1958); *Austrocylindropuntia yanganucensis* (Rauh et Backeberg) E.F.Anderson, in Cact. Succ. J. (U.S.) 71(6): 324. (1999); *Tephrocactus punta-caillan* Rauh et Backeberg, Descr. Cact. Nov. 8. 1956 (1957); *Tephrocactus blancii* Backeberg., Descr. Cact. Nov. 8. 1956 (1957); *Tephrocactus hirschii* Backeberg., Descr. Cact. Nov. 8. 1956 (1957); *Austrocylindropuntia machacana* F.Ritter, Kakt. Südamerika 4: 1246 (1981), **Syn. nov.**; *Austrocylindropuntia lauliacoana* F.Ritter, Kakt. Südamerika 4: 1247 (1981). **Specimina visa. Exsiccata:** Peru, Ancash, Huari, above Machac, ca. 3600 m, F. Ritter 701 loc. 4 sub *Austrocylindropuntia machacana* F.Ritter [ZSS, iso., sem]; Peru, Cordillera Negra, W. Rauh 20627 sub *Opuntia hirschii* (Backeberg) G.D.Rowley [ZSS, sem]; *sine legit et loco* sub *Tephrocactus yanganucensis* Rauh et Backeberg [ZSS, sem]. **Distributio:** Peru. **Note:** the studied seed material of *Austrocylindropuntia machacana* F.Ritter confirms its conspecificity with the taxon here recognized.

Andinopuntia lagopus (K. Schumann) Guiggi **subsp. septentrionalis** Guiggi **subsp. nov.**

Diagnosis: differs from the subspecies type by its larger mounds with the stems more separated and not compressed (very dense and compact); flower larger, 3.5-4.5 cm (1.5-2 cm), reddish (yellowish), exerted from the wool (included in the wool); fruit yellowish (violet-rose), ovoid (compressed laterally); distributed only in Peru in the northern range of the species in Ayacucho and Cuzco (vs. Peru, Puno; Bolivia, La Paz). **Typus:** Peru, Ayacucho, above Ayacucho, Jul. 1957, F. Ritter 152 loc. 1 sub *Austrocylindropuntia lagopus* (K. Schumann) F.Ritter [SGO, holo., corp, ar, sp, cfr. Egli et al., 1995: 140]. **Etymologia:** from Latin *septentrionalis* “north” referring to the more northern distribution of this recognized infraspecific taxon. **Distributio:** Peru. **Note:** as discussed in Crook et al. (2003: 88) the type locality of *Tephrocactus malyanus* Rausch is the same of *Opuntia lagopus* K. Schumann, for this reason the former name is correctly reported as synonym of the latter in Crook et al. (2003: 89), and it can't be so recognized at subspecies level (Ostolaza, 2014: 160). As consequence a new infra-specific taxon is here described. It is distinguished by different vegetative and reproductive characters combined with a more northern distribution.

Borzicactella serpens (Kunth) F.Ritter **subsp. erecta** (G.J.Charles) Guiggi **comb. nov.**

Basionymus: *Borzicactus longiserpens* (Leuenberger) G.J.Charles subsp. *erectus* G.J.Charles, in Bradleya 28: 8 (2010). Synonymus: *Borzicactus serpens* (Kunth) Kimmach subsp. *erectus* (G.J.Charles) Ostolaza, Cactus Perú 266 (2014), *nom. inval.* (cfr. ICN Art. 41.5, McNeill et al., 2012). **Distributio:** Peru.

Calymmanthium substerile F.Ritter **subsp. fertile** (F. Ritter) Guiggi **comb. et stat. nov.**

Basionymus: *Calymmanthium fertile* F. Ritter, Kakt. Südamerika 4: 1266 (1981). **Distributio:** Peru. **Note:** in the original publication was omitted the *typus* (Ritter, 1966a: 117), included successively as FR 1295 in Ritter (1981: 1267), for this reason it has been chosen here as correct reference for the taxon validation.

Espostoa calva F.Ritter **subsp. utcubambensis** (G.J.Charles) Guiggi **comb. et stat. nov.**

Basionymus: *Espostoa utcubambensis* G.J.Charles, in Brit. Cact. Succ. J. 21(2): 69 (2003). Synonymus: *Espostoa calva* subsp. *utcubambensis* (G.J.Charles) Ostolaza, Cactus Perú 278 (2014),

nom. inval. (cfr. ICN Art. 41.5, McNeill *et al.*, 2012). **Specimina visa.** **Imago:** Peru, Río Utcubamaba, Graham Charles GC1062.05 *sub* *Espostoa utcubambensis*. **Distributio:** Peru.

Morawetzia doelziana Backeberg **subsp. calva** (Rauh *et* Backeberg) Guiggi **comb. nov.** Basionymus: *Morawetzia doelziana* var. *calva* Rauh *et* Backeberg, Descr. Cact. Nov. 18 (1956) 1957. Synonymi: *Morawetzia doelziana* Backeb. f. *calva* (Rauh *et* Backeberg) F.Ritter, Kakt. Südamerika 4: 1366 (1981); *Oreocereus doelzianus* subsp. *calvus* (Rauh *et* Backeberg) Mottram, in Cact. Syst. Init. 14: 18 (2002). **Specimina visa.** **Imago:** Peru, North of Ayacucho, Graham Charles GC315.01 *sub* *Oreocereus doelzianus* subsp. *calvus* (Imago 1). **Distributio:** Peru.

Sphaeropuntia sphaerica (C.F. Förster) Guiggi **subsp. crassicylindrica** (Rauh *et* Backeberg) Guiggi **comb. et stat. nov.** Basionymus: *Tephrocactus crassicylindricus* Rauh *et* Backeberg, Descr. Cact. Nov. 8. 1956 (1957). Synonymi: *Cumulopuntia crassicylindrica* (Rauh *et* Backeberg) F.Ritter, Kakt. Südamerika 4: 1254 (1981), *nom. inval.* (cfr. ICN Art. 41.5, McNeill *et al.*, 2012); *Opuntia crassicylindrica* (Rauh *et* Backeberg) G.D.Rowley, in Natl. Cact. Succ. J. 13: 5 (1958); *Cumulopuntia crassicylindrica* (Rauh *et* Backeberg) F.Ritter *ex* Eggli, in Novon 15(2): 277 (2005). **Specimina visa.** **Plantae viventium:** *sine legit et loco sub* *Opuntia crassicylindrica* (Rauh *et* Backeberg) G.D.Rowley, *cult. hort.* Sukkulente-Sammlung Zürich *ex cult hort.* Les Cedres; Peru, Arequipa, Volcán Misti, 3500 m, *K. Knize* KK 400 *sub* *Tephrocactus mistiensis* Backeberg, *cult. hort.* Sukkulente-Sammlung Zürich. **Exsiccata:** Peru, Arequipa, “Valle Majes”, Jul. 1957, *F. Ritter* 673 *sub* *Cumulopuntia crassicylindrica* (Rauh *et* Backeberg) F.Ritter [ZSS, sem]. **Distributio:** Peru.

Sphaeropuntia sphaerica (C.F. Förster) Guiggi **subsp. tumida** (F.Ritter) Guiggi **comb. et stat. nov.** Basionymus: *Cumulopuntia tumida* F.Ritter, Kakt. Südamerika 4: 1254 (1981). Synonymus: *Opuntia tumida* (F.Ritter) D.R.Hunt, Cact. Cons. Init. 4: 6. (1997). **Specimina visa.** **Plantae viventium:** Peru, Arequipa, “Chala Vieja”, 1964, *F. Ritter* 1324 loc. 1 (type collection, Imago 2) *sub* *Cumulopuntia tumida* F.Ritter, *cult. hort.* Sukkulente-Sammlung Zürich. **Exsiccata:** Peru, Arequipa, N of Chala Vieja, coast, *sine data*, *F. Ritter* 1324 loc. 2 *sub* *Cumulopuntia tumida* F.Ritter [ZSS, iso., sem]. **Distributio:** Peru.



Images 1-2. **1:** *Morawetzia doelziana* subsp. *calva* (Rauh *et* Backeberg) Guiggi in its habitat from Peru, North of Ayacucho, GC315.01. Photo: Graham Charles. **2:** A type collection of *Cumulopuntia tumida* F.Ritter [\equiv *Sphaeropuntia sphaerica* subsp. *tumida* (F.Ritter) Guiggi] from Peru, Arequipa, F. Ritter 1324 loc. 1, in cultivation at the Sukkulenten-Sammlung of Zürich. Photo: A. Guiggi.

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COMBINACIONES ET SYNONYMI NOVAE IN CACTACEIS AEQUATORIALIS

Borzicactus sepium (Kunth) Britton et Rose **subsp. leonensis** (Madsen) Guiggi **comb. et stat. nov.** Basionymus: *Cleistocactus leonensis* Madsen, Fl. Ecuador 35(45): 18 (1989). Synonymus: *Borzicactus leonensis* (Madsen) G.J.Charles, in Cact. Syst. Init. 26: 14 (2012). **Distributio:** Ecuador.

Espostoa lanata (Kunth) Britton et Rose **subsp. frutescens** (Madsen) Guiggi **comb. et stat. nov.** Basionymus: *Espostoa frutescens* Madsen, Fl. Ecuador 35(45): 36 (1989). **Distributio:** Ecuador.

Espostoa lanata **f. roseiflora** (Madsen) Guiggi **stat. nov.** Basionymus: *Espostoa lanata* subsp. *roseiflora* Madsen et Z. Aguirre, in Nordic J. Bot. 23(1): 24 (2004). **Distributio:** Ecuador.

Opuntia ficus-indica Mill. **f. amyclaea** Schelle, Handb. Kakteenkult. 51 (1907). Basionymus: *Opuntia amyclaea* Ten., in Fl. Napol. 3: App. 15 (1826). Synonymi: *Opuntia megacantha* Salm-Dyck, Hort. Dyck. 363 (1834); *Opuntia soederstromiana* Britton et Rose, The Cact. 1: 154, 221 (1919), **Syn. nov. Specimina visa. Exsiccata:** Ecuador, vicinity of San Antonio and Pomasqui, 29 Oct. 1918, J. N. Rose 23559 [US, *holo.*; corp, sp, fl, ico]. **Distributio:** Ecuador.

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Nomenclatural novelties proposed in this supplement II

Andinopuntia floccosa (Salm-Dyck ex Winterfeld) Guiggi subsp. *yanganucensis* comb. nov.
Andinopuntia lagopus (K. Schumann) Guiggi subsp. *septentrionalis* Guiggi subsp. nov.
Borzicactella serpens (Kunth) F.Ritter subsp. *erecta* (G.J.Charles) Guiggi comb. nov.
Borzicactus sepium (Kunth) Britton et Rose subsp. *leonensis* (Madsen) Guiggi comb. et stat.
nov.
Calymmanthium substerile F.Ritter subsp. *fertile* (F. Ritter) Guiggi comb. et stat. nov.
Espostoa calva F.Ritter subsp. *utcubambensis* (G.J.Charles) Guiggi comb. et stat. nov.
Espostoa lanata (Kunth) Britton et Rose subsp. *frutescens* (Madsen) Guiggi comb. et stat. nov.
Espostoa lanata f. *roseiflora* (Madsen) Guiggi stat. nov.
Morawetzia doelziana Backeberg subsp. *calva* (Rauh et Backeberg) Guiggi comb. nov.
Sphaeropuntia sphaerica (C.F. Förster) Guiggi subsp. *crassicylindrica* (Rauh et Backeberg)
Guiggi comb. et stat. nov.
Sphaeropuntia sphaerica C.F. Förster) Guiggi subsp. *tumida* (F.Ritter) Guiggi comb. et stat.
nov.

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