

New System of the genus *Ariocarpus* Scheidweiler.

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Halda, J. J.: Synopsis of the genus *Ariocarpus* Scheidweiler. Acta Mus. Richnov. 5(1): 34-39 (1998). ISBN 80-86076-08-3.

Ariocarpus Scheidweiler is revised; a genus is divided into four subgenera and two sections. Several new taxonomical changes is made.

Genera *Ariocarpus*, *Encephalocarpus*, *Obregonia*, *Pelecyphora* a *Strombocactus* create a morphologic complex, compound of systematically very similar species. This fact was mentioned by Marshall (1946). "I suggested that the genera *Obregonia* Fric and *Strombocactus* B. & R. should be united with *Ariocarpus* because these genera shared, in common with *Ariocarpus*, the characters of horny tubercles, rosette arrangement, relatively small central flowers from the wool bearing central areoles and smooth fruit almost hidden in the wool. In *Cactaceae* 134 (1941), I suggested that the genus *Encephalocarpus*, which also shared all of these common factors should also be united with *Ariocarpus*".

***Ariocarpus* Scheidweiler,**

Bull. Acad. Sci. Brux. 5:491 (1838).

[*Anhalonium* Lemaire, Cact. Gen. Nov. Sp. 1, 1839, p.p; *Pelecyphora* Ehrenberg, Bot. Zeit. 1:737 (1843); gen. *Mammillaria* Haworth subg. *Anhalonium* (Lem.) Engler in Emory, Cact. Bound. 17, Pl. 16 (1859); *Strombocactus* Britton et Rose, Cactaceae 3:106 (1922); *Roseocactus* Berger, J. Wash. Acad. Sci. 15:45 (1925); *Obregonia* Fric, Zivot v prirode 29:14 (1925); *Encephalocarpus* Berger, Kakteen 332 z91929); *Neogomesia* Castaneda, Cact. Succ. J. Amer. 13:98 (1941)].

subg. *Ariocarpus*

Tubercula trigona vel squamata, cartilaginea.

A. scapharostrus Boedeker, Monats. Deutsch. Kakt. 1:60 (1930).

A. kotschoubeyanus (Lemaire) Schumann in Engler et Prantl, Pflanzenf. Nachtr. 259 (1897).
subsp. *kotschoubeyanus*

var. *kotschoubeyanus*

[*Anhalonium kotschoubeyanum* Lem. in Cels, Cat. Bull. Cercle Conf. Hort. Dep. Seine (1842); *Anhalonium fissipedum* Monville, Cat. (1846); *Anhalonium kotschubeyi* Lem. ex Salm-Dyck, Cact. Hort. Dyck (1849): 5 (1850); *Anhalonium sulcatum* Salm-Dyck, Cact. Hort. Dyck (1849): 78 (1850); *Stromatocarpus kotschubeyi* Karwinsky ex Lem., Illustr. Hort. 16:72 (1869); *Stromatocactus kotschoubeyi* Karw. ex Ruempler in Foerster, Handb. Cact. 2a: 232 (1886); *Cactus kotschoubeyi* Kuntze, Rev. Gen. Pl. 1:260 (1891); *Ariocarpus sulcatus* Schum. in Engler et Prantl, Nat. Pflanzenf. 3, 6a:195 (1894); *Ariocarpus kotschobeyanus* Cobbold, J. Hort. Cact. Gard. Home Farm. 3, 64:332 (1903); *Roseocactus kotschoubeyanus* (Lem.) Berger, J. Wash. Acad. 15:43 (1925); *Stromatocactus kotschubeyi* Karw. ex Backbg., Cactaceae 5:3070 (1961)].

var. *macdowellii* (Marsh. ex Krainz) Krainz, Die Kakteen CVIIIb.

[*Ariocarpus macdowellii* Marshall in Marshall et Bock, Cactaceae 135 (1941), nom. nud; *Roseocactus kotschoubeyanus* ssp. *macdowellii* (Marsh.) Bscckbg., Blatt. Kakt. 1:8 (1949), comb. nud; *Roseocactus kotschoubeyanus* (Lem.) Berg. var. *macdowellii* (Marsh.) Backbg., Cactaceae 5:3075 (1961)].

subsp. *tulensis* J.J. Halda nom. nov.

[*Roseocactus kotschoubeyanus* (Lem.) Berger var. *albiflorus* Backbg., Kakteenfr. 4:66 (1935), sine descr. lat; *Roseocactus kotschoubeyanus* ssp. *albiflorus* (Backbg.) Backbg., Blat. Sukk. 1:8 (1949), comb. nud; *Roseocactus kotschoubeyanus* (Lem.) Berg. var. *albiflorus* Backbg., Cact. Succ. J. Amer. 13:151 (1951)].

subsp. *bravoanus* (H. Hernandez & E. F. Anderson) Halda stat. nov.

[*A. bravoanus* H. Hernandez & E. F. Anderson in Bradleya 10:1 (1992)].

subsp. *agavoides* (Castaneda) J. J. Halda stat. nov.

[*Neogomesia agavoides* Castaneda, Cact. Succ. J. Amer. 13:98 (1941);

Ariocarpus agavoides (Castaneda) Anderson, Amer. J. Bot. 49:615 (1962)].

Ariocarpus fissuratus (Engelmann) Schumann in Engler et Prantl, Nat. Pflanzenfam. 3, 6a:15, 9 (1891).

subsp. *fissuratus*

var. *fissuratus*

[*Mammillaria fissurata* Engelmann, Proc. Amer. Acad. 3:270 (1856); *Anhalonium fissuratum* Engelmann, Cact. Mex. Bound. 75 (1859); *Anhalonium engelmannii* Lemaire, Cactees 42 (1868); *Roseocactus fissuratus* (Engelmann) Berger, J. Wash. Acad. 15:45 (1925)].

var. *lloydii* (Rose) Marshall, Cact. Succ. J. Amer. 18(4):56 (1946).

[*Ariocarpus lloydii* Rose, Contr. U. S. Nat. Herb. 13:308 (1911); *Ariocarpus lloydii* var. *major* Fric, Zivot v prirode 29:15 (1926); *Roseocactus lloydii* (Rose) Berger, J. Wash. Acad. 5:43 (1925); *Ariocarpus fissuratus* var. *lloydii* (Rose) Marshall in Marshall et Bock, Cactaceae 135 (1941), comb. nud; *Roseocactus intermedius* Backbg. et Kilian, Kakt. Sukk. 11(10):149 (1960)].
subsp. *hintonii* (W. Stuppy & N. P. Taylor) Halda stat. nov.

[*A. fissuratus* (Engelm.) K. Schum. var. *hintonii* W. Stuppy & N. P. Taylor in Bradleya 7:84 (1989)].

A. retusus Scheidweiler, Bull. Acad. Sci. Brux. 5:492 (1838).

subsp. ***retusus***

[*Anhalonium prismaticum* Lemaire, Cact. Gen. Nov. Sp. 1 (1839); *Anhalonium retusum* Salm-Dyck, Cact. Hort. Dyck (1844) 5, 77 (1844); *Anhalonium elongatum* Salm-Dyck, Cact. Hort. Dyck (1849) 5, 77 (1850); *Mammillaria aloides* Monville ex Labouret, Monogr. Cact. 153 (1853), nom. nud; *Anhalonium areolosum* Lem., Illustr. Hort. 6, Misc. 35 (1859); *Anhalonium pulvilligerum* Lem., Illustr. Hort. 16:72 (1869); *Mammillaria aloides pulvilligera* Monv. ex Lem., Illustr. Hort. 16:72 (1869); *Mammillaria areolosa* Hemsley, Biol. Centr. Amer. Bot. 1:503 (188); *Mammillaria elongata* Hemsley, Biol. Centr. Amer. Bot. 1:509 (1880); *Mammillaria prismatica* Hemsley, Biol. Centr. Amer. Bot. 1:519 (1880); *Mammillaria furfuracea* S. Watson, Proc. Amer. Acad. 25:150 (1890); *Cactus prismaticus* Kuntze, Rev. Gen. Pl. 1:261 (1891); *Anhalonium furfuraceum* Coulter, Contr. U.S. Nat. Herb. 3:130 (1894); *Ariocarpus furfuraceus* (S. Wats.) Thompson, Rep. Mo. Bot. Gard. 9:130 (1898); *Ariocarpus pulvilligeris* Schumann ex Engler, Bot. Jahrb. 24:550 (1898); *Ariocarpus prismaticus* Cobbold, J. Hort. Cot. Gard. Home. Farm. 3, 46:332 (1903); *Ariocarpus furfuraceus* (S. Wats.) Thomps. var. *rostratus* Berger, Kakteen 334 (1929); *Ariocarpus elongatus* (Salm-Dyck) Wittstein, Kakteenkunde 13 (1933); *Ariocarpus retusus* Scheidw. var. *furfuraceus* (S. Wats.) Frank in Krainz, Die Kakteen CVIIIb, 1. 10 (1975)].

subsp. ***scapharostroides*** Halda et Horacek in Cactaceae etc. 3/97:97 (1997).

A. confusus J. J. Halda et L. Horacek in Cactaceae etc. 1/97:4 (1997).

A. elongatus (Salm-Dyck) Wettstein emend. Halda emend. nov.

[*Anhalonium elongatum* Salm-Dyck, Cact. Hort. Dyck. 1849:77 (1850); *Mammillaria elongata* Hemsley, Biol. Centr. Amer. Bot. 1:509 (1880), not De Candolle 1828; *Anhalonium trigonum* Weber in Bois, Dict. Hort. 90 (1893); *Ariocarpus trigonus* Schumann in Engler, Bot. Jahrb. 24:549 (1898)].

Anhalonium elongatum Salm-Dyck, popsane z okoli Jaumave bylo mylne prirazovano jako synonym k *Ariocarpus retusus* Scheidweiler. Je nepochybne, ze se jedna o taxon, identicky s o vic jak 40 let pozdeji popsanym *A. trigonum* a proto je nutne z duvodu priority uzivat epitet *A. elongatus*, na coz uz v roce 1933 upozornil Wettstein [Kakteenkunde 1933:13 (1933)].

subsp. ***elongatus***

subsp. ***horaceki*** J. J. Halda stat. nov.

[bas: *A. trigonus* Schumann var. *horaceki* Halda in Cactaceae etc. 3/97:98 (1997)].

subg. *Obregonia* J. J. Halda subg. nov.

[bas: *Obregonia* Fric, *Zivot v prirode* 29(2):14 (1925) pro gen.].

Corpus subglobosum; tubercula elongata, truncata; areola apicalis, spinosa.

Stem subglobose; tubercles elongate, truncate; apical areola spined.

Type: *A. denegrii* (Fric) Marshall.

A. denegrii (Fric) Marshall, *Cact. Succ. J. Amer.* 18(4):56 (1946).

[*Obregonia denegrii* Fric, *Zivot v prirode* 29(2):14 (1925); *Strombocactus denegrii* (Fric)

Rowley in *Repert. Pl. Succ. (I.O.S.)* 23:9 (1972, publ. 1974), without basionym date].

subg. *Strombocactus* (Britton & Rose) J. J. Halda subg. nov.

[bas: *Strombocactus* Britton & Rose, *Cactaceae* 3:106 (1922), pro gen.; *Ariocarpus* Scheidw.

emend. Marshall, *Cact. Succ. J. Am.* 18(4):55 (1946), p.p.].

Corpus disciformis; tubercula rhomboideo-squamosa; semen parvum.

Stem disciform; tubercles rhomboid-squamosa; seed tiny.

Type: *A. disciformis* (DC.) Marshall.

A. disciformis (DC.) Marshall, *Cact. Succ. J. Amer.* 18:56 (1946).

subsp. ***disciformis***

[*Mammillaria disciformis* DC., *Mem. Mus. Hist. Nat. Paris* 17:114 (1828); *Echinocactus turbiniformis* Pfeiffer, *Allg. Gartenz.* 6:275 (1838); *Echinofossulocactus turbiniformis* Lawrence in Loudon, *Gard. Mag.* 17:318 (1841); *Mammillaria turbinata* Hooker in Curtis, *Bot. Mag.* 69:3984 (1843); *Cactus disciformis* Kuntze, *Rev. Gen. Pl.* 1:260 (1891); *Cactus turbinatus* Kuntze, *Rev. Gen. Pl.* 1:261 (1891); *Anhalonium turbiniforme* Weber in Bois, *Dict. Hort.* 90 (1893); *Echinocactus disciformis* Schumann in Engler et Prantl, *Pflanzenfam.* 36a:189 (1894); *Strombocactus disciformis* (DC.) Britton et Rose, *Cactaceae* 3:106 (1922); *Strombocactus (Turbinicarpus) disciformis* (DC.) Backbg., *Blat. Kakt.* 1 (1936)].

subsp. ***jarmilae*** (J. J. Halda) J. J. Halda stat. nov.

[bas: *Strombocactus jarmilae* J. J. Halda in *Cactaceae etc.* 3:83 (1996); *S. disciformis* subsp.

jarmilae (J. J. Halda) J. J. Halda in *Acta Mus. Richnov.* 4:71 (1997)].

A. pulcherrimus (J. J. Halda) J. J. Halda stat. nov.

[*Strombocactus pulcherrimus* J. J. Halda in *Cactaceae etc.* 3:88 (1996); *S. disciformis*

subsp. *esperanzae* Glass et Arias, *Cact. Succ. J. G.B.* 47, vol. 14 (4):200-204 (1996)].

subg. *Pelecyphora* (Ehrenberg)

J. J. Halda subg. nov.

[*Pelecyphora* Ehrenberg, *Bot. Zeit.* 1:737 (1843) pro gen.; *Encephalocarpus* Berger, *Kakteen* 332 (1929) pro gen.].

Caulibus adpressis; corpus simplex; tubercula aselliformis vel imbricata.

sect. *Pelecyphora*

Tubercula aselliformis, non imbricata.

Tubercles aselliform, not imbricate.

Type: *A. aselliformis* (Ehrenberg) Web.

A. aselliformis (Ehrenberg) Web. in Bois, Dict. Hort. 931 (1898).

[*Pelecyphora aselliformis* Ehrenberg, Bot. Zeit. 1:737 (1843); *Pelecyphora aselliformis concolor* Hooker in Curtis, Bot. Mag. 99:6061 (1873), nom. nud; *Mammillaria aselliformis* W. Watson, Cact. Cult. 188 (1889); *Mammillaria asellifera* Monville ex Weber in Bois, Dict. Hort. 931 (1898); *Anhalonium aselliforme* Web. in Bois, Dict. Hort. 931 (1898); *Pelecyphora aselliformis grandiflora* Haage Jr., Kakt. Kultur 2a:206 (1900)].

sect. *Encephalocarpus* (Berger) J. J. Halda sect. nov.

[bas: *Encephalocarpus* Berger, Kakteen 332 (1929), pro gen.].

Tubercula imbricata, trigona.

Tubercles imbricate, trigonous.

Type: *A. strobiliformis* (Werd.) Berger.

A. strobiliformis Werd., Zeits. Sukk. 3:126 (1927).

[*Encephalocarpus strobiliformis* (Werd.) Berger, Kakteen 332 (1929); *Pelecyphora strobiliformis* (Werderm.) Fric et Scheele in Kreuzinger, Verzeichnis 9 (1935)].

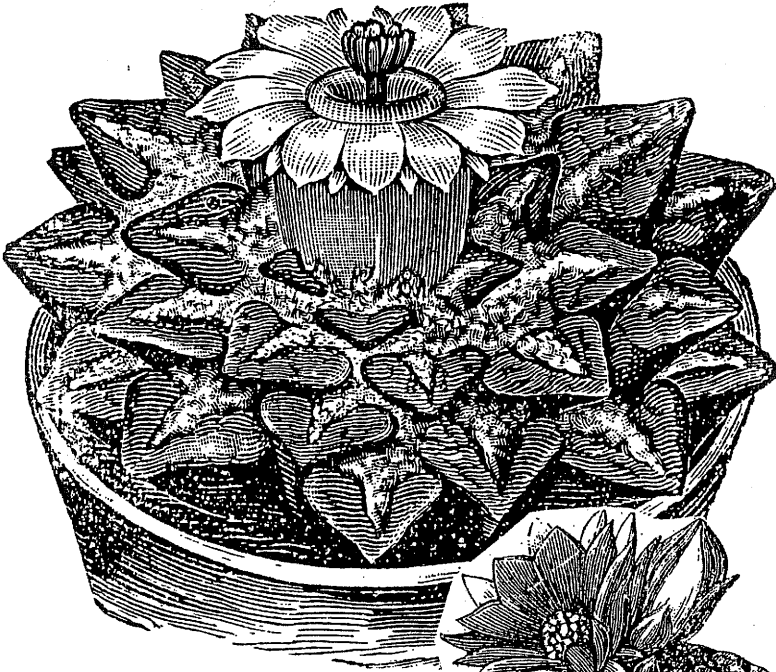
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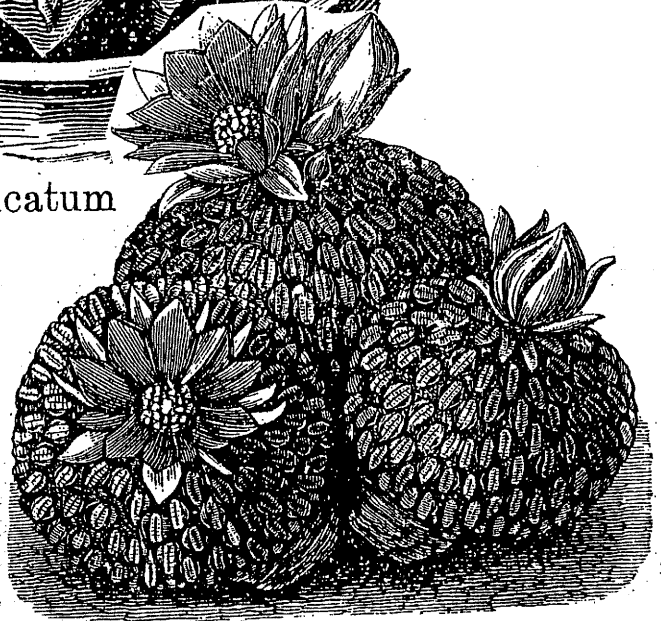
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Anhalonium sulcatum



Pelecyphora asseliformis