

## MESEMBRYANTHEMACEAE

NOMENCLATURE IN THE GENUS *MESTOKLEMA*

The original description of the genus *Mestoklema* was published on 29 August 1936 in English only (Brown, 1936). This means that the genus and the four new species which Brown described in the same posthumous paper, are all invalidly published in terms of the International Code of Botanical Nomenclature, Article 35, which requires that for all names of new taxa published after 1 January 1935, a Latin diagnosis or description be given. And, since the genus was not validly published, Brown's three new combinations were also not validly published (Article 43).

Latin translations of Brown's original descriptions are given here in order to validate the five names which were not published validly. These descriptions have not been changed except for the measurements, which have been metricated. In the case of the new combinations, Brown's literature citations have been taken over unchanged.

***Mestoklema* N. E. Br. ex Glen**

*Mestoklema* N. E. Br., Gdnrs' Chron. 100: 164 (1936) descr. anglice.

Frutices vel fruticuli, una specie cum trunco arboriforme, dumaliter, saepe intricate ramificati, aliquando (semper?) radicibus tuberosis; rami juvenes minute papulosi, tactu asperiusculi ubi exsiccati, pallidi; cymi perdurantes, indurescentes, subspinescentes neque pungentes. Folia opposita, basin non connata, desciscentia saepe prominentiam denticuloidam relinquentia, trigona vel subteretia, minute vel microscopice papulosa micantiaque, cum caespibus foliarum in axillis. Flores parvi, pedicellati, in cymis terminalibus bracteatis dichotome 2–5-plo divisis. Bracteae parvae, foliiformes. Calyx subaequante 5-lobatus, nonnulli lobi marginis angustis membranaceis. Petala uniseriata, linearia, saepe vix longiora quam lobi calycis. Stamina multa, conico-collecta, intima barbata; staminodia nulla. Stigmata 5, erecta, breviora quam stamina, subulata, fortasse papillata. Ovarium semisuperius, conicum vel convexum, superne cristatum, 5-valvatum -loculatumque, valvuli recurvati dum expansi, carinae expansoriae inferne contiguae, superne divergentes, vulgo sordide aurantiacae vel aurantiaco-brunneae, alibus angustulis, acutis, membranaceis, sine tuberculo placentale. Semini ovoidei, brunnei, laeves. Type species: *M. tuberosum* (L.) N. E. Br. ex Glen.

***Mestoklema tuberosum* (L.) N. E. Br. ex Glen, comb. nov.**

*Mesembryanthemum tuberosum* L., Sp. Pl. 484 (1753); Haw., Obs. Gen. Mesemb. 271 (1795); Misc. Nat. 89 (1803); Syn. Pl. Succ. 252 (1812); Rev. Pl. Succ. 179 (1821); Salm Dyck, Monogr. Gen. Aloes Mesemb. 49, t. 2 (1854); Berger, Mesemb. Portulac. 100, fig. 13. III-IV (1908). *Delosperma tuberosum* (L.) Schwart., Möllers dt Gärtn.-Ztg 42: 258 (1927). Iconotype: Dill., Hort. Elth. 275, t. 207, fig. 264 (1732).

*M. spinosum* O. Kuntze, Rev. Gen. Pl. 3: 109 (1893), non L.

var. **macrorhizum** (Haw.) N. E. Br. ex Glen, comb. et stat. nov.

*Mesembryanthemum macrorhizum* Haw. in Till. Phil. Mag. 1826: 331 (1826); Salm Dyck, Monogr. Gen. Aloes Mesemb. 49, t. 3 (1842); N. E. Br. in J. Linn. Soc., Bot. 45: 121 (1920). Lecto-iconotype: Duncanson watercolour (K!).

*M. megarhizum* Don, Gen. Syst. 3: 145 (1834); Sond., Fl. Cap. 2: 441 (1862); Berger, Mesemb. Portulac. 101 (1908).

Brown states that the type is a plant of which Bowie sent tubers to Kew in 1820 from South Africa. The plant itself has disappeared, but there is a Duncanson watercolour of one branch of it still extant at Kew; this is now designated as the lecto-iconotype.

***Mestoklema arboriforme* (Burch.) N. E. Br. ex Glen, comb. nov.**

*Mesembryanthemum arboriforme* Burch., Trav. 1: 343 (1822); N. E. Br. in J. Linn. Soc., Bot. 45: 124 (1920). Type: Cape, between Wittewater and Rietfontein, Burchell 2004 (K, holo.!).

***Mestoklema copiosum* N. E. Br. ex Glen**

Fortasse frutex parvus vel fruticulus, rami visi [Brownio—HFG] 150–200 mm longi, inferne 3–4 mm lati, internodiis 4–12 mm longis, juvenili minute papulosi albidi, primo cinerascentes, deinde laevescentes brunnescentes aetate. Folia adscendentia-patentia, 10–17 mm longa, ca. 1,5–2 mm crassa, trigona, obtusa, haud vel aegre apiculata, ut videtur superne subcanaliculata, inferne obtusissime carinata, microscopice papulosa. Cymi 40–90 mm diametro, 4–5-plo furcati, subdense pluri- (15–50)-florati. Bracteae 2–4 mm longae, crassae, apice obtusissimae subrecurvatae. Pedicelli 2–3 mm longi. Receptaculum 2,5–3 mm diametro, per breve obconicum; lobi calycis 2–3 mm longi, deltoidei. Corolla ut videtur ca. 8 mm diametro, petala ca. 3 mm longa, 0,5–0,7 mm lata, obtusa vel acuta. Stamina ca. 1,5 mm longa. Stigmata 5–7, ca. 0,6–1 mm longa, crassa, acuminata. Ovarium superne convexum. Capsula 2,5 mm diametro, obconica; cetera ut in descriptione generico.

TYPE.—Cape. Mazelsfontein, Anderson 720 (K, holo.!).

***Mestoklema elatum* N. E. Br. ex Glen**

Frutex 60–120 cm altus, rami primi adscendentes, inferne 4–6 mm lati, internodiis 10–25 mm longis, juvenili perminute papulosi cinerei; laevescentes brunnescentes aetate; cortex exsiccatus longitudine rugosus. Folia adscendentia-patentia vel patentia, 8–15 mm longa, 1,3–1,5 mm crassa, compressa-trigona, superne plana vel subcanaliculata, inferne carinata, apice recurvata, lateraliter visa inferne subacuta vel obtusa, microscopice papulosa. Cymi 25–40 mm diametro, dense 15–20 -florati, pedicelli 2–6 mm longi. Bracteae pusillae, ca. 1–1,5 mm longae, ut videtur mox desciscentes. Receptaculum 2,5–3 mm diametro, lobi calycis ca. 1,5 mm longi, deltoidei, obtusi. Corolla 6–7 mm diametro; petala vix 2 mm longa, obtusa, ‘purpurea’ — fortasse color aliquis magenteae. Stamina ca. 1,5 mm longa. Stigmata vix 1 mm longa. Capsula 2,5–3 mm diametro, mox desciscens; cetera ut in descriptione generico.

TYPE.—Cape, between Committees and Hunt's Drift, Dyer 890 (K, holo.!).

***Mestoklema illepidum* N. E. Br. ex Glen**

Planta ca. 230–250 mm alta, glabra, multiramosa. Rami primi inferne 5–8 mm crassi, internodiis 6–13 mm longis, juvenili minute papulosi, exsiccati albidi, aetate brunnescentes. Folia parva, 3–8 mm longa, 1–1,5 mm crassa, compresso-subteretia, obtusa, appice subrecurvata, microscopice papulosa, viridia.

*Flores* perparvi, in cymis terminalibus bracteatis, bracteis 1–2 mm longis. *Pedicelli* 2–4 mm longi. *Receptaculum* 2–2,5 mm diametro; lobi calycis 1,5 mm longi, deltoidei, obtusi. *Corolla* ut videtur ca. 6 mm diametro; petala 2 mm longa, 0,4–0,5 mm lata, obtusa, ‘submagentea’. *Stamina* ca. 1 mm longa, ut videtur alba. *Stigmata* ca. 0,5 mm longa subulata. *Capsula* ca. 3 mm diametro; cetera ut in descriptione generico.

TYPE.—Cape, on the road from Grahamstown to Bedford, Dyer 2336 (K, holo.!).

### **Mestoklema albanicum N. E. Br. ex Glen**

Planta ut videtur ca. 230–380 mm alta, glabra. *Rami* primi ut videtur basin decumbentes, deinde erecti vel adscendenti, ramosi, basin 2–3,5 mm lati, internodiis pro parte maxima 13–19 mm longis, juvenili minute papulosi cinerei, laeviscentes brunnescentesque aetate. *Folia* patentia, apice plus minusve recurvata, 6–10 mm longa, 1,5–3 mm crassa, supra ut videtur plana vel subcarinata, infra

obtuse carinata, fortasse compressa, minute papulosa. *Cymi* 25–55 mm diametro, laxi, pedicelli 8–15 mm longi, *Calyx* subaequaliter 5-lobatus, lobi 2–2,5 mm longi, deltoidei, obutsi; *receptaculum* ca. 3 mm diametro, breve obconicum. *Corolla* ut videtur ca. 7 mm diametro, petala ca. 2,5–3 mm longa, linearia, obtusa, ‘submagentea’. *Stamina* ca. 2 mm longa. *Stigmata* ca. 1 mm longa, subulata; ovarium supra convexus. *Capsula* 4–5 mm diametro; cetera ut in descriptione generico.

TYPE.—Cape, 12 km from Grahamstown towards Cradock, Dyer 1308 (K, holo.!; PRE, iso.!).

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### REFERENCE

BROWN, N. E., 1936. *Mesembryanthemum*. *Gdnrs' Chron.* 100: 164–166.

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