



The correct name of *Aloe plicatilis* in *Kumara* (Xanthorrhoeaceae: Asphodeloideae)

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The genus *Kumara* Medikus (1786: 69) was recently reinstated in the Xanthorrhoeaceae: Asphodeloideae (alternatively Asphodelaceae: Alooidae) comprising only one species, namely the fan aloe, *Kumara disticha* Medikus (1786: 70) [with *Aloe plicatilis* (Linnaeus 1753: 321) Miller (1768: 7) given as a synonym] (Grace *et al.* 2013). However, if the fan aloe, currently known as *Aloe plicatilis*, is treated as a species of *Kumara*, the epithet *plicatilis* has priority and a new combination in *Kumara* is required. The new combination is made here.

Kumara disticha Medik., used as correct name for the fan aloe by Grace *et al.* (2013), is in reality a superfluous name. According to the synonymy provided by Medikus (1786: 70), it has to be considered as a new combination based on *Aloe disticha* Linnaeus (1753: 321) [i.e. the correct author citation is *Kumara disticha* (L.) Medik.]. It is thus a nomenclatural synonym of *Gasteria disticha* (L.) Haworth (1827: 352), even though the intention of Medikus (1786), as substantiated by the accompanying plate (Medikus 1786: t.4), was clearly to apply it to the fan aloe (Klopper *et al.* 2013).

The type of *Kumara* was designated by Rowley (1976: 55) as *K. disticha*, thus making the names *Kumara* (1786) and *Gasteria* Duval (1809: 6) synonyms for the same genus. Since *Kumara* has priority, the implication of this in terms of nomenclatural disruptions is severe. To retain use of the names *Kumara* and *Gasteria* in the sense that it was intended by Medikus (1786) and Duval (1809), and has been applied for the past two centuries, conservation of the name *Kumara* with a conserved type [namely *Aloe plicatilis* (L.) Burm.f.] is essential (see Klopper *et al.* 2013, for this conservation proposal).

The combination in *Aloe* of *A. plicatilis* has historically been attributed to Miller (1768: 7) [as *A. plicatilis* (L.) Mill.]. However, Miller's *The Gardener's Dictionary* was published on 16 April 1768 (Stafleu & Cowan 1981: 495), whereas the *Prodromus Florae Capensis* of Burman was published between 1 March and 6 April 1768 (Stafleu & Cowan 1976: 417). Therefore, the correct author citation is *A. plicatilis* (L.) Burm.f.

New combination in *Kumara* Medik.

Kumara plicatilis (L.) Klopper & Gideon F.Sm., *comb. nov.*

Basionym:—*Aloe disticha* var. *plicatilis* Linnaeus (1753: 321). Homotypic synonyms:—*Aloe plicatilis* (L.) Burman (1768: 10) ≡ *Kumara disticha* sensu Medikus (1786: 70, t.4), *nom. superfl.* Lectotype (designated by Wijnands 1983: 125):—*Aloe africana arborescens montana non spinosa, folio longissimo plicatili, flore rubro* (Commelijn 1701: 5, t.3).

For a complete list of synonyms see Grace *et al.* (2011: 123).

Acknowledgements

We are grateful to Proff. Werner Greuter, John McNeill and Jimmy Jacobs, as well as an anonymous referee, for useful comments on drafts of the manuscript.

References

- Burman, N.L. (1768) *Flora Indica, Prodromus Florae Capensis*. Leiden, Amsterdam, 34 pp.
- Commelijn, J. (1701) *Horti medici Amstelodamensis rariorum plantarum descriptio et icones 2*. Blaeu, Amsterdam, 228 pp.
- Duval, H.A. (1809) *Plantae Succulentae in Horto Alenconio*. Gabon, Paris, 18 pp.
- Grace, O.M., Klopper, R.R., Figueiredo, E. & Smith, G.F. (2011) *The Aloe Names Book*. Strelitzia 28. South African National Biodiversity Institute, Pretoria; Royal Botanic Gardens, Kew, 232 pp.
- Grace, O.M., Klopper, R.R., Smith, G.F., Crouch, N.R., Figueiredo, E., Rønsted, N. & Van Wyk, A.E. (2013) A revised generic classification for *Aloe* (Xanthorrhoeaceae subfam. Asphodeloideae). *Phytotaxa* 76(1): 7–14. <http://dx.doi.org/10.11646/phytotaxa.76.1.22013>
- Haworth, A.H. (1827) Description of new succulent plants. *The Philosophical Magazine* 2: 344–361.
- Klopper, R.R., Smith, G.F. & Van Wyk, A.E. (2013) (2144) Proposal to conserve the name *Kumara* (Asphodelaceae) with a conserved type. *Taxon* 62: 402–403.
- Linnaeus, C. (1753) *Species Plantarum* 1. Impensis Laurentii Salvii, Stockholm, 560 pp.
- Medikus, F.K. (1786) *Theodora speciosa: ein neues Pflanzen Geschlecht*. Hof- und Akademische Buchhandlung, Mannheim, 116 pp.
- Miller, P. (1768) *The Gardener's Dictionary*, ed. 8. Rivington et al., London, 228 pp.
- Stafleu, F.A. & Cowan, R.S. (1976) *Taxonomic Literature: A Selective Guide to Botanical Publications and Collections with Dates, Commentaries and Types*, ed. 2, Vol. 1. Bohn, Scheltema & Holkema, Utrecht, 1136 pp.
- Stafleu, F.A. & Cowan, R.S. (1981) *Taxonomic Literature: A Selective Guide to Botanical Publications and Collections with Dates, Commentaries and Types*, ed. 2, Vol. 3. Bohn, Scheltema & Holkema, Utrecht, 980 pp.
- Wijnands, D.O. (1983) *The Botany of the Commelins: A Taxonomical, Nomenclatural and Historical Account of the Plants Depicted in the Moninckx Atlas and the Four Books by Jan and Caspar Commelin on the Plants in the Hortus Medicus Amstelodamensis, 1682–1710*. Taylor & Francis, Abingdon, 232 pp.