

ASTERACEAE

A NEW NAME AND NEOTYPIFICATION FOR *HIPPIA INTEGRIFOLIA* (ANTHEMIDEAE)

Hippia integrifolia Less. (1832), a name currently applied to a species endemic to the Langeberg mountains in the Cape Floristic Region of South Africa, is a later homonym of *Hippia integrifolia* L.f. (1782). The latter is a name previously and validly published for a widely distributed species, described by the younger Linnaeus from a specimen collected in India and currently placed within the genus *Dichrocephala*, as *D. integrifolia* (L.f.) Kuntze (Fayed 1979; Pruski 2011).

Although De Candolle (1838) clearly indicated Lessing's use of the name in a sense other than that proposed by Linnaeus, subsequent authors have overlooked the matter, attributing the name to Lessing (Harvey 1865; Hutchinson 1918; Merxmüller 1950; Bond & Goldblatt 1984; Goldblatt & Manning 2000; Germishuizen *et al.* 2006; Klopper *et al.* 2006). As a result, no other available names for this taxon exist.

Lessing's species is clearly very closely related to another species, *H. trilobata* Hutch., which is also restricted to the Langeberg mountains. In fact, Merxmüller (1950) suggested that *H. trilobata* may be insufficiently distinct from *H. integrifolia* Less. on the grounds of leaf variation within both *H. integrifolia* Less. and the genus in general. Unfortunately, flowering and fruiting material of *H. trilobata* has only recently become available (Brusse 3590, NBG, PRE), so that neither Hutchinson (1918) nor Merxmüller (1950) were able to compare the fruit. We therefore studied the available fruit material of the two species from collections at BOL, NBG, PRE and SAM and came to the conclusion that they are certainly distinct. The fruit of Lessing's *Hippia integrifolia* have very broad membranous wings (Figure 1A), while those of *H. trilobata* are only very narrowly membrane-rimmed (Figure 1B). Although the leaves of Lessing's *H. integrifolia* may become apically two- or three-lobed in the uppermost portion of the flowering stems, they are predominantly entire (Figure 1D–F), unlike the smaller, consistently three-lobed leaves of *H. trilobata* (Figure 1C).

Lessing (1832) referred to a single collection in the protologue, viz. a specimen from the Cape of Good Hope in Vahl's herbarium ("v. sp. in hrb. Vahliano, in Prom. b. sp. lectum"). The only specimen that could be found in Vahl's herbarium, now housed in the Natural History Museum of Denmark (C), was that of Ecklon 317 (70.10). However, this specimen bears no annotation by Lessing nor is there any indication that he ever saw it. Elsewhere in his treatment, Lessing very clearly and unambiguously cites Ecklon material (i.e. for *Berkheya carlinoides* he lists "Ecklon in Zwelendamenti monte in et supra Voormansbosch Octbr."), so it seems reasonable to assume that had he been referring to Ecklon's collection of *H. integrifolia*, he would have similarly indicated it. Subsequent searches of the herbaria of the Botanical Museum Berlin-Dahlem (B) and the Swedish Museum of Natural History (S) also failed to uncover any original material.

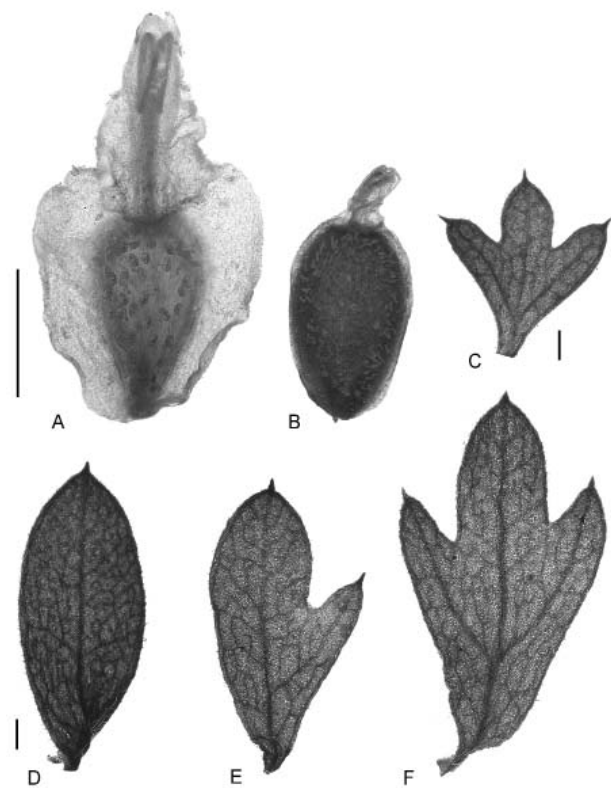


FIGURE 1.—Fruit and leaves of *Hippia simplicior* (A, D–F) and *H. trilobata* (B, C). Vouchers: A, Du Plessis 76 (NBG); B, C, Brusse 3590 (NBG); D, E, F Helme 4629 (NBG). Scale bars: 1 mm.

As *H. integrifolia* Less. is an illegitimate name and so unavailable for use, a new name is provided here. Furthermore, we designate a neotype from the widely distributed Ecklon collection until such time as original elements can be definitely identified.

***Hippia simplicior* Magee & B. Busch** nom. nov. pro *Hippia integrifolia* Less., Synopsis generum Compositarum: 268 (1832), hom. illegit. non L.f. (1781). Type: Western Cape, Swellendam, Oct., Ecklon 317 (SAM, neo!), here designated; C – photo!, G-DC, MO, S, TCD – photo! isoneo.).

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REFERENCES

- BOND, P. & GOLDBLATT, P. 1984. Plants of the Cape Flora: A Descriptive Catalogue. *Journal of South African Botany* 13: 177.
- DE CANDOLLE, A.G. 1838 ['1837']. *Prodromus systematis naturalis regni vegetabilis* 6. Paris.
- FAYED, A. 1979. Revision der Grangeinae (Asteraceae–Astereae). *Mitteilungen (aus) der Botanischen Staatssammlung München* 15: 425–576.
- GERMISHUIZEN, G., MEYER, N.L., STEENKAMP, Y. & KEITH, M. (eds). 2006. A Checklist of South African Plants. *Southern African Botanical Diversity Network Report* 41. SABONET, Pretoria.
- GOLDBLATT, P & MANNING, J.C. 2000. Cape Plants: A conspectus of the Cape Flora. *Strelitzia* 9. National Botanical Institute, Pretoria & Missouri Botanical Garden, St Louis.
- HARVEY, W.H. 1865. Compositae. In W.H. Harvey & O.W. Sonder, *Flora capensis* 3: 44–533. Reeve, London.
- HUTCHINSON, J. 1918. Notes on African Compositae: V. *Hippia*, Thunb. *Bulletin of Miscellaneous Information, Royal Gardens, Kew* 1918: 179–181.
- KLOPPER, R.R., CHATELAIN, C., BÄNNINGER, V., HABASHI, C., STEYN, H.M., DE WET, B.C., ARNOLD, T.H., GAUTIER, L., SMITH, G.F. & SPICHIGER, R. 2006. Checklist of the flowering plants of sub-Saharan Africa. An Index of accepted names and synonyms. *South African Botanical Diversity Network Report* 42. SABONET, Pretoria.
- LESSING, C.F. 1832. *Synopsis generum Compositarum*. Berlin.
- LINNAEUS, C.f. 1782 ['1781']. *Supplementarum plantarum*. Braunschweig.
- MERXMÜLLER, H. 1950. Compositen-Studien 1. *Mitteilungen (aus) der Botanischen Staatssammlung München* 2: 39–42.
- PRUSKI, J.F. 2011. Studies of Neotropical Compositae-III. *Dichrocephala integrifolia* (Asteraceae: Grangeinae) in Guatemala, an exotic genus and species new to the Americas. *Phytoneuron* 65: 1–9.

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