

## IRIDACEAE

### MONTBRETIOPSIS: REDUCED TO SYNONYMY IN TRITONIA (IRIDACEAE)

A diminutive but very attractive species of Iridaceae was discovered early this century in the vicinity of Prince Albert, north of the Swartberg Mountains. This plant, with large, yellow, medianly zygomorphic flowers is very reduced in size and lacks an aerial stem at the time of flowering. When the seeds are ripe, however, a stem may emerge a few centimetres above ground. Marloth (1912) described the plant as *Gladiolus florentiae* in honour of Lady Florence Philips and he provided an excellent figure of it in his Flora of South Africa (1915: t. 47a).

The choice of genus has proved incorrect as Louisa Bolus (1929) pointed out. She acknowledged the similarity of this plant to both *Tritonia* and to *Montbretia* (a genus now regarded as part of *Tritonia*), but decided to place it in a new genus, *Montbretiopsis*, on account of its reduced stem and the inflorescence which she interpreted as cymose in contrast to the spike in *Tritonia*. In this she was incorrect for the inflorescence of her new genus is simply a reduced spike, often with a single flower, thus the flowers seem pedicellate. The position of the floral bracts at the base of the ovary (indicating a sessile flower) shows, however, that the flower stalk is not strictly a pedicel, but the reduced scape itself. Thus the main reason for the recognition of *Montbretiopsis* falls away.

A close analysis of the morphology confirms the contention that *Montbretiopsis* must be regarded as a *Tritonia*. The two genera have almost identical characteristics; their flowers are similar in shape, even to the presence of small teeth or calluses in the centre of each of the three lower perianth segments. The style branches, usually a characteristic generic feature in Iridaceae, are also similar, being quite long and entire except at the very apex which is slightly expanded or barely bifid. The corm tunics too are similar in colour and texture.

One species of *Tritonia*, *T. flava*, occurring in the arid Calvinia-Sutherland region of the Cape Province, is in fact strikingly similar to *Montbretiopsis* in all features except that *T. flava* usually has a short aerial stem, though in a dry season this may not extend above the ground. The similarity is so great that the species are easily mistaken and can often be distinguished only by the bracts: those in *Montbretiopsis* are dry-membranous while in *T. flava* they are somewhat herbaceous. Both bract types are found in *Tritonia* and are not significant from the generic standpoint.

The occurrence in other Cape Iridaceae of reduced species in genera that are typically long stalked, is worth mentioning at this point. In most examples the reduced species occur in arid karoo or karoo-margin areas and the reason for the adaptation seems clear. Stemless species are known in the following genera: *Hesperantha*, e.g. *H. hantamensis*, *H. rosea*; *Lapeirousia* e.g. *L. plicata*, *L. montana*; *Babiana*, e.g. *B. villosula*; *Moraea*, e.g. *M. falcifolia*. These examples all indicate that reduction of the inflorescence axis alone is no criterion for recognition of genera.

As a result of this survey, *Montbretiopsis* is reduced to synonymy in *Tritonia* and the following combination is necessary:

***Tritonia florentiae* (Marl.) Goldbl., comb. nov.**

Type: Tygerberg, Prince Albert district, fl. May, Marloth 4452 (PRE, holotype).

*Gladiolus florentiae* Marl. in Trans. Roy. Soc. S. Afr. 2: 241 (1912).

*Montbretiopsis florentiae* (Marl.) L. Bol. in S. Afr. Gard. 19: 215 (1929).

#### REFERENCES

- BOLUS, L., 1929. Plants new and noteworthy. *S. Afr. Gard.* 19: 215.  
MARLOTH, R., 1912. Some new South African succulents and other plants. Part IV. *Trans. Roy. Soc. S. Afr.* 2: 241.  
MARLOTH, R., 1915. *Flora of South Africa IV. Monocotyledons*. Cape Town and London.

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