

## AMARYLLIDACEAE

### THE TYPIFICATION OF *CYRTANTHUS SMITHIAE* WATT EX HARV.

#### INTRODUCTION

While researching a collection of original water colour paintings of South African flora by John and Margaret Herschel, executed at the Cape between 1834 and 1838, a painting was found in the collection which appears to have an important bearing on the typification of the name *Cyrtanthus smithiae* Watt ex Harv. The original plate is in the Brenthurst Library, Johannesburg—no. 53 in the Herschel collection (Warner & Rourke 1998).

*Cyrtanthus smithiae* is similar to *C. helictus* Lehm. and, as there has been some confusion between the two (Dyer 1939), it is important to typify these names as accurately as possible.

#### TYPE OF *CYRTANTHUS SMITHIAE*

Harvey's name *Cyrtanthus smithiae* is based on the following brief description which appeared under the generic account of *Cyrtanthus* in his *Genera of South African plants* (1838): 'There are several species, one of the most elegant of which, *C. Smithiae*, Watt MSS. was brought from Cafferland by Mrs Col. Smith, in 1836, and blossomed in Mr Watt's garden at Rondebosch last year. It has large white flowers, each segment marked with a rose coloured band, and spiral strap-shaped leaves'.

The Mr Watt, to whom Harvey attributes the name, is James Duff Watt, Deputy Assistant Commissary General, who lived at Mowbray Place, Rondebosch. No mate-

rial seems to have been preserved or, if it was, it appears to have been lost, as Dyer (1939), who was the first to recognize this name, did not cite a type specimen in his account of this species. The curator of the herbarium at Trinity College Dublin (TCD) confirms that there is no material of *Cyrtanthus smithiae* in Harvey's herbarium (M. Foody pers. comm.). Dyer's interpretation of the name *C. smithiae* was evidently based on the above brief but sufficient description.

Two years after Harvey's description appeared, Herbert (1840) published *Cyrtanthus smithianus* Herbert, based on the same collection—a bulb from Caffraria collected by Mrs Smith and sent to him by Watt & Harvey. Apparently he was unaware of Harvey's earlier name. It subsequently flowered in Herbert's garden in England from which Herbert's description was prepared. Again, no type material seems to have been preserved and no illustration was published. Some of Herbert's types are at Kew but both Baker (1896) and Dyer (1939) failed to trace any material used by Herbert in his description of *Cyrtanthus smithianus*. As the Herschels' watercolour was also based on the same collection—collected by Mrs Juana Smith (wife of the then Col. Harry Smith)—it has particular relevance to the typification of the name *Cyrtanthus smithiae* as well as the later name, *C. smithianus*.

The Herschels' painting is annotated '*Cyrtanthus smithiae*' in Sir John Herschel's hand and is dated 'Dec. 27 1837', the same year in which Harvey had described a flowering specimen from Mr Watt's garden. However, a day before the painting was made, Col. and Mrs Smith



FIGURE 10.—Lectotype of *Cyrtanthus smithiae* Watt ex Harv., outlined in pencil using a *camera lucida* by Sir John Herschel and painted in water colour by Margaret Herschel on 27th December 1837. Mrs Juana Smith brought the bulbs from 'Cafferland' in 1836. Plate 53, Herschel collection, Brenthurst Library, Johannesburg. Photo: Clive Hassall.

F.H.W. delin. Cam. luc.

*Cyrtanthus Smithiae*

M.H. pinx.

dined with the Herschels at Feldhausen, on Dec. 26th 1837, according to Sir John Herschel's diary [Evans *et al.*: 333 (1969)]. Knowing the Herschels' interest in botanical matters, it was clearly the Smiths themselves who brought John and Margaret Herschel the flowering specimen of the *Cyrtanthus* which Mrs Smith had also given to Mr J.D. Watt where Harvey had originally examined it. It is therefore reasonable to assume that the Herschels fine colour plate is the only visual image we have of part of the type collection of *Cyrtanthus smithiae* (Figure 10). This plate can therefore be regarded as having the status of a lectotype and is here designated as such. (See Warner & Rourke 1998, plate 110 for a colour reproduction of this illustration.) In following this line of argument one must assume that Mrs Juana Smith made a single collection of this particular *Cyrtanthus*, that all the material was of the same species, and that there were sufficient bulbs to distribute to Mr J.D. Watt, in Rondebosch, Cape Town, William Herbert in England and also the Herschels in Cape Town.

#### SYNONYMY

***Cyrtanthus smithiae* Watt ex Harv.**, Genera of South African plants: 338 (1838); Dyer: 100 (1939); Reid & Dyer: 38 (1984). Type: Cafferland, Mrs Smith, watercolour painting by J.F.W. Herschel and M.B. Herschel, plate 53 labelled *Cyrtanthus Smithiae* in J.F.W. Herschel's hand, in Brenthurst Library (lecto.!, here designated).

*Cyrtanthus smithianus* Herbert in Curtis's Botanical Magazine 66 sub. tab. 3779 (1840); Baker: 227 (1896). Type: Caffraria, Mrs Smith, plate 53 labelled *Cyrtanthus Smithiae* by J.F.W. Herschel and M.B. Herschel in Brenthurst Library (lecto.!, here designated).

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