

Confusion surrounding *Crassula mollis*

Niels H G Jacobsen

A short note on the apparent confusion regarding the presence or absence of a membranous petal apex in *Crassula mollis* Thunberg. Photographs by the author.

C*Crassula mollis* Thunb. (1778) is described from a specimen (Thunberg 7766, UPS) collected between Cannaland and the Langkloof in the Little Karoo, South Africa. During vegetation surveys in the Eastern and Western Cape Provinces, low shrubs with near-subulate leaves and with terminal appendages on the petals typical for plants of the Section *Globulea*

(Haw.) Harv. were found at widespread localities (Figs. 1 & 2). An assessment of all the species placed by Tölken (1985) in this Section did not offer a solution to their identity, the closest in terms of habit being *C. mollis* but the petals all exhibited incurved membranous petal apices below the terminal appendage (Figs. 3 & 4). This appears contrary to the



Fig. 1 *Crassula mollis* growing along rocky slope at Mossel Bay, W. Cape



Fig. 2 The inflorescence and flowers of *Crassula mollis* from Mossel Bay

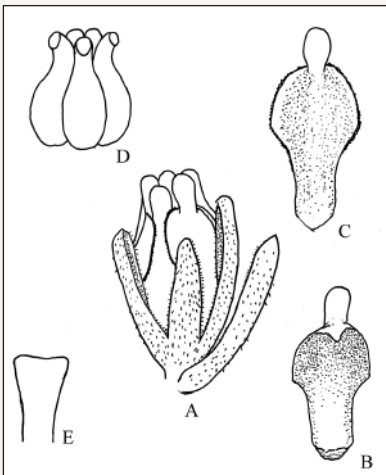
description of the petal apex by Tölken (op cit, Key 11, page 96 and again on page 216) as being, 'without a membranous petal apex on the inside' while in a later paragraph stated, "The apex of the corolla lobes is the ellipsoid dorsal appendage, now in terminal position, while the apices of the corolla lobes on the inside of this fleshy structure are no longer visible. This is similar to the structure of the corolla lobes in *C. mesembryanthoides*". According to this it would appear that there is no petal apex, which has led to some confusion regarding the distinguishing characters and the identity of *C. mollis*. That this interpretation is accepted is seen in the account of *C. mollis* by the International Crassulaceae Network which published photographs of a plant without a petal apex as typical for this species, apparently grown



Fig. 6 The inflorescence and flowers of *Crassula subaphylla* from Pearston, E. Cape

from seed, and which can be seen on their website (www.crassulaceae.ch/).

However, *C. mollis* does have a 'membranous' petal apex as seen in Figures 3 and 4 and this is also evident in Tölken's 1977 revision (p. 37, Fig. 3.3) but is refuted elsewhere (see above) resulting in the current confusion.



L-R Fig. 3 A flower of *C. mollis* from Mossel Bay. A. flower; B. ventral view of petal showing incurved petal apex; C. dorsal side of petal; D. carpels; E. nectary

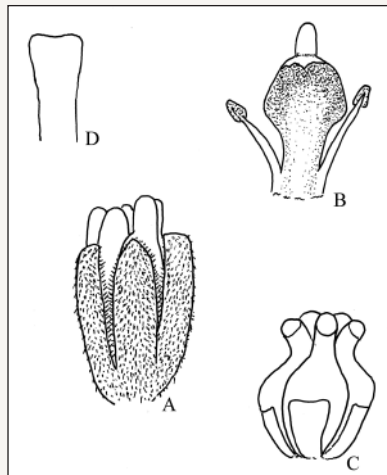


Fig. 4 A flower of *C. mollis* from the Rolbaken Nature Reserve. A. flower; B. petal with incurved apex; C. carpels; D. nectary

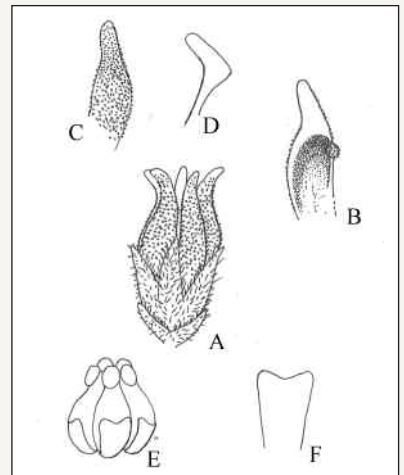


Fig. 5 A flower of *C. mesembryanthoides* from Kwanobuhle, Uitenhage, E. Cape. A. flower; B. ventral view of petal; C. dorsal view of petal; D. side view of petal apex; E. carpels; F. nectary

There is little similarity between the flowers of *C. mollis* (Figs. 3 & 4) and *C. mesembryanthoides* (Haw.) Dietr., (Fig. 5). The corolla of the latter is more similar to that of *Crassula subaphylla* (Eckl. & Zeyh.) Harv. (Fig. 6) with corolla lobes recurved and beak-like and without a membranous petal apex.

Plants of *C. mollis* are widespread and often locally common, having been found from Mossel Bay, Ladismith, Rolbaken Nature Reserve south-east of Dysseidorp to Graaf Reinet and Kirkwood, north of Port Elizabeth. There are some differences in plants from the various localities, with plants from Mossel Bay having short, upward but spread subulate leaves while those from the Rolbaken plants are large, arcuate or sickle-shaped and subulate (Fig. 7) and the leaves of a specimen from Ladismith were erect and almost adpressed. Other differences in floral structure can also be seen which need to be reviewed.

According to Tölken (1985) the flowering period of *C. mollis* is December to January, rarely into February but plants have been recorded flowering from July to March depending on locality. Plants from most localities in the Little Karoo flower from November to March but a plant from Graaf Reinet flowered during July and August.

Conclusion

Confusion in the literature regarding the presence or absence of a petal apex in *C. mollis* has resulted in the perception that this species is characterised by an absence of this structure. This note serves to clarify this perception. The petals of this species have a



Fig. 7 *Crassula mollis* in situ on north-facing slope, Rolbaken Nature Reserve, near Dysseidorp in the Little Karoo

membranous petal apex on the inside of the terminal appendage.

ACKNOWLEDGEMENTS:

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LITERATURE:

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