ASTERACEAE

THE TRUE IDENTITY OF *OXYLAENA ACICULARIS*

The genus *Oxylaena* Benth. ex Anderb. with its single species *O. acicularis* (Benth.) Anderb. has intrigued many scientists over the last few years, and many collectors have wanted to re-collect this species. It was classified in the tribe Gnaphalieae and rested in an informal basal group (*Macowania* group) that was not assigned to a subtribe (Anderberg 1991; Bayer *et al.* 2007). It was known only from the type specimen, *Burchell 5159*, collected between Cloete's Kraal and Paardekraal in the George District, Cape Province, in March 1814. The genus *Oxylaena* has subsequently been excluded from the Gnaphalieae and moved to the Calenduleae when *O. acicularis* was found to be conspecific with *Gibbaria scabra* (Thunb.) Norl. (Ward *et al*. 2009).

In Fourcade's (1944) notes on Burchell's travels, he stated that on the afternoon of 26 March 1814, Burchell travelled on the road between Cloete's Kraal and Paardekraal and collected 17 specimens (numbers 5151–5167). Furthermore, Fourcade (1944) wrote: 'Burchell continued down the Cloete's Kraal ridge, south of the river, to the only crossing of the Diep River that was possible before the new main road was constructed, there being a succession of precipitous cliffs higher up, and reached Paardekraal, on the farm Roodemuur, in the division of Knysna'.

In March 2003, almost two centuries later, an attempt was made to re-collect the plant (Koekemoer & Steyn 2004) on a section of Burchell's route that was discovered by Mr Katot Meyer on his Farm Pietersrivier. Even in a modern vehicle this route, where it deviates from the main road, is only for the very adventurous. It was easier searching for the plant on foot rather than trying to manoeuvre a vehicle over the rocks and dongas, but despite searching a wide area around the track, only one species which resembled the illustration of *Oxylaena acicularis* was seen. Very few plants were flowering at the time and I was convinced that it was *Oxylaena* but a local botanist, Jan Vlok, identified it as *Gibbaria scabra* (Thunb.) Norl.

This led to a deeper investigation into the two species. Upon inspection of the type specimens at Kew, it became apparent that *Oxylaena acicularis* and *Gibbaria scabra* are conspecific. Bentham's (1876) description failed to describe the flower colour and cypsela structure, which contributed to the confusion. Although the rays of fresh flowers are bright yellow above and brownish below, the florets and bracts turn brick-red in older specimens. Careful observation of the type specimen of *Oxylaena* revealed a single incurvate cypsela that undoubtedly identifies the plant as *Gibbaria scabra*.

De Candolle (1836) described the genus *Anaglypha* with *A. aspera* as type, which is now a synonym of *Gibbaria scabra* (Hilliard & Burtt 1976).

Bentham (1876) described a new species *Anaglypha acicularis*. He did not, however, recognize the genus and had it figured under the name *Oxylaena acicularis*. The genus *Oxylaena* was only formalized much later by Anderberg (1991), based on *Anaglypha acicularis* Benth. (1876).

Up to a few years ago the genus *Gibbaria* consisted of two species (Norlindh 1943): *G. scabra* and *G. ilicifolia* (L.) Norl. The latter species was transferred to a new monotypic genus, *Nephrotheca*, in the tribe Calenduleae (Nordenstam *et al*. 2006). Nordenstam & Källersjö (2009) then restored the number of species in *Gibbaria* to two by transferring *Osteospermum glabrum* N.E.Br. to the genus.

The revised synonymy for *Gibbaria scabra*, adding *Oxylaena acicularis* is:

Gibbaria scabra *(Thunb.) Norlindh*, Studies in the Calenduleae: 360 (1943). *Osteospermum scabrum* Thunb.: 166 (1800). Type: in Herb. Thunberg (UPS; K, photo.!).

G. bicolor Cass.: 139 (1817). Type: unknown.

Xerothamnus ecklonianus DC.: 311 (1836). Type: Caput Bonae-Spei in Uitenhage Dist., *Ecklon & Zeyher 1851* (G-DC).

Anaglypha aspera DC.: 311 (1836). Type: Africae capensis, Albany Dist., *Drège s.n.* (G-DC).

Anaglypha acicularis Benth.: 9 (1876). *Oxylaena acicularis* (Benth.) Anderb.: 53 (1991), syn. nov. Type: South Africa, Cape Colony, George Dist., between Cloete's Kraal and Paardekraal, *Burchell 5159* (K, holo.!).

This example of *Oxylaena* shows how critical it is for taxonomists to investigate the specimens and types and to clarify the classification. In turn the name *Oxylaena* can now be removed from checklists and the Red Data List (Raimondo *et al*. 2009) where the status is indicated as Unsure or Data Deficient.

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