RANGE EXTENSION RECORDS FROM THE SOUTHERN DRAKENSBERG, EASTERN CAPE, SOUTH AFRICA

The southern-most parts of the Drakensberg Mountains extend into the central to northern areas of the Eastern Cape Province. Most of the botanical exploration of this region is concentrated along the main roads. Up until 1993, a mere 1 900 specimens were collected in the area (Bester 1998). It is therefore not surprising that botanical surveys of this area will lead to new distribution records.

A study with its primary aim to obtain a basic knowledge on the vegetation of the Maclear-Elliot districts was conducted in the early 1990s (Bester 1998). During this study the area was properly surveyed and more than 3 600 specimens collected. These include new distribution records for *Elaphoglossum spathulatum* (Bory) T.Moore var. *spathulatum* (Dryopteridaceae) and *Isoetes transvaalensis* Jermy & Schelpe (Isoetaceae) in the area, which are reported here.

Elaphoglossum spathulatum is distinguished from other *Elaphoglossum* species in the region by its small, strongly dimorphic fronds that are covered with pale brown scales on both surfaces. The spathulate lamina of the sterile fronds is 11–45 × 4–9 mm, whereas the fertile lamina is 6–23 × 6–9 mm. Another distinguishing feature is that the fertile fronds are folded along the midrib (Burrows 1990).

This fern has a restricted habitat preference and grows mostly on moss-covered boulders adjacent to fast-flowing mountain streams in deeply shaded evergreen forests. Because of effective vegetative reproduction by the creeping rhizomes, it can become locally abundant, forming mats over suitable rocks. It has a rather wide distribution from the KwaZulu-Natal Drakensberg to as far north as Tanzania and the Democratic Republic of the Congo, as well as Réunion, Madagascar and tropical America (Jacobsen 1983; Burrows 1990; Roux 2001, 2009). Until now it has not been formally recorded for the Eastern Cape and the collection in the Ugie area represents the southern-most record for this species (Figure 23).

EASTERN CAPE.—3128 (Umtata): Farm Wildebeest. ± 20 km W of Ugie, edge of small stream, (–AA), *Bester 2591* (NH, PRE!, PRU!).

Isoetes species (quillworts) are notoriously difficult to recognize in the field, because of their grass- or sedge-like appearance, and they are similarly problematic to distinguish from one another. Spore ornamentation is very useful in identifying quillworts, but a good microscope is needed. The spores of *I. transvaalensis* are black when wet and almost smooth, but can be variably tuberculate. Another distinguishing character, which is also hard to see, is the fan-shaped ligule above the sporangia at the base of the leaf (Burrows 1990).

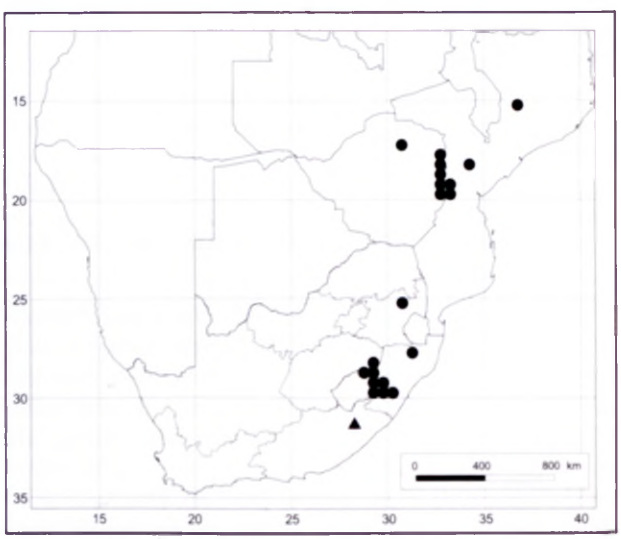

FIGURE 23.—Distribution of *Elaphoglossum spathulatum* var. *spathulatum* in southern Africa, adapted from Burrows (1990), with kind permission of the author, ●; new locality in the Eastern Cape, ▲.

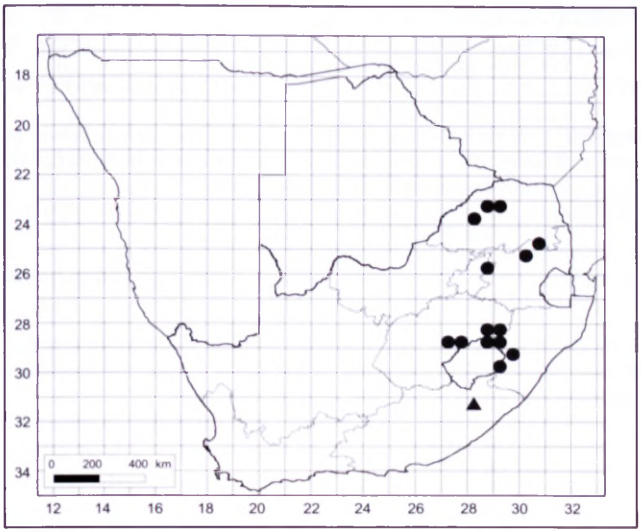

FIGURE 24.—Distribution of *Isoetes transvaalensis*, based on specimens at PRE, NBG and BOL, and cited in Burrows (1990), used with kind permission of the author, ●; new record in the Eastern Cape, ▲.

Isoetes transvaalensis grows submerged in shallow pools that dry out in winter (April–October). It is generally found on Clarens sandstone in mid-high altitude montane grassland. The species is rather widely distributed in South Africa, occurring from the Limpopo Province and Mpumalanga to the eastern Free State and southwestern KwaZulu-Natal, as well as in Lesotho (Schelpe & Anthony 1986; Burrows 1990; Roux 2001, 2009). The collection reported here from the Ugie area is the southern-most record for this species and the first for the Eastern Cape (Figure 24).

EASTERN CAPE.—3128 (Umtata): Gatberg, Farm Odairn, ± 21 km SW from Ugie, (–AC), *Bester 2430* (PRU!).

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