

## PTERIDOPHYTA

A UNIQUE LOCALITY FOR *OLEANDRA DISTENTA*, THE FIRST RECORDED FOR THE ORANGE FREE STATE

During a phytosociological investigation of the Korannaberg (2827CC Excelsior and 2827CD Clocolan) in the south-eastern Orange Free State, a colony of *Oleandra distenta* Kunze was discovered. This is the first record of this species for the Orange Free State (Anthony & Schelpe 1985; Burrows 1990; Jacobsen 1983; Schelpe & Anthony 1986; Roux 1986). It is also the first time that the species is recorded from an area with an average annual rainfall as low as 617 mm (Weather Bureau 1954). According to Jacobsen (1983) *O. distenta* Kunze occurs almost exclusively in high rainfall areas that receive a rainfall of more than 1 000 mm per annum. According to Burrows (1990); Jacobsen (1983) and Schelpe & Anthony (1986) *O. distenta* Kunze also occurs in the Magaliesberg, where it was first collected by Zeyher (Sim 1915) and where the annual rainfall is 703 mm (Weather Bureau 1954). Plants in that area were described by Jacobsen (1983) as relicts of an earlier, wider distribution.

This fern species also occurs from the Transkei, through Natal, the eastern and northern Transvaal into eastern Zimbabwe, Mozambique (Figure 11), Malawi, Zambia and throughout tropical Africa. It is also found on the Seychelles, Madagascar, Réunion, Mauritius and the Comoro Islands (Burrows 1990).

It grows at very low altitudes in Natal but reaches altitudes well over 2 000 m above sea level in the tropics (Burrows 1990; Jacobsen 1983; Schelpe & Anthony 1986). This lithophyte forms extensive, tangled colonies over exposed rocky outcrops or scrambles over boulders in light shade (Burrows 1990; Schelpe & Anthony 1986). In tropical Africa it can occur as a high-level epiphyte on forest trees (Jacobsen 1983; Schelpe & Anthony 1986).

At the Korannaberg it was found at an altitude of 1 720 m above sea level on a north-easterly aspect. The fern's

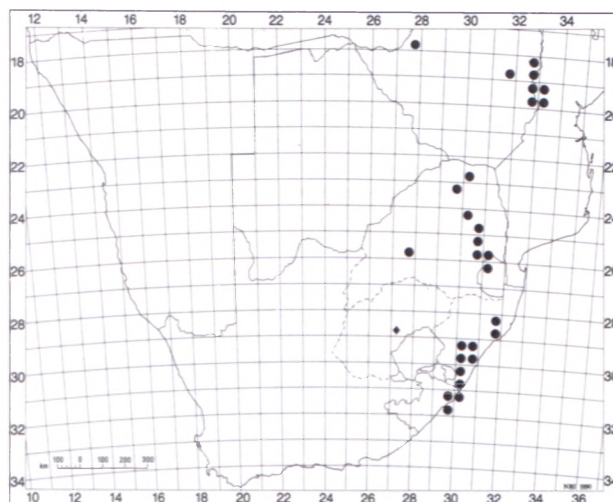


FIGURE 11.—*Oleandra distenta* Kunze. Presently known distribution, ●; new locality at Korannaberg, ◆.

widely creeping rhizomes are attached to cracks at the base of a sandstone cliff of the Clarens Forming (Figure 12).

During summer water constantly seeps through the cracks in the sandstone. During the first part of the day the colony is fully exposed to sunlight, but according to Schelpe & Anthony (1986) and Burrows (1990), the species rarely grows in full sun. During the dry season the plant is frequently deciduous, dropping most of its fronds (Burrows 1990; Jacobsen 1983; Schelpe & Anthony 1986).

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FIGURE 12.—Typical habitat of *Oleandra distenta* Kunze at Korannaberg. A, fern colonies; B, dolomite sill; C, cliff face.

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