STANGERIA

There is only one species in this genus which occurs in the eastern Cape and Natal. The description of the species serves for the genus also. The genus is named in honour of Dr. William Stander who sent specimens overseas and who became surveyor general of Natal.

Stangeria eriopus (*Kunze*) Nash in New York Bot. Gard. 10: 164, pl. 62 (1909). Lomaria eriopus Kunze in Linnaea 13: 152 (1839).

Fig. 8, 18, 19, 20.



Fig. 18.—Stangeria eriopus: Prof. R. H. Compton and Miss Courtenay-Latimer investigate the tall forest form in the Kentani district.



Fig. 19.—Stangeria eriopus: a grassland form near Ngoye in Zululand, with male cone.

A perennial herb with male and female cones on separate plants; plants have a large variously shaped tuberous main root up to 10 cm diam. continuous with the main stem. Stem subterranean, branched or unbranched, with 1–4 leaves from the top of each stem or branch. Leaves somewhat fern-like, very variable in size, 25 cm–2 m tall, divided into separate pinnae or leaflets; leaflets in 5–20 opposite or subopposite pairs, the lowermost shortly stalked, the uppermost somewhat united, entire on the margin or serrulate or lobed, acute or rounded at the tip, the median ones up to 40 cm long and 6 cm broad. Cones solitary from each stem, stalked, silvery pubescent at first becoming brownish with age: male cone more or less cylindric, narrowed to the apex, 10–15 cm long and up to 3 cm in diam. with numerous spirals of scales overlapping upwards and toothed on the margin: female cone ovoid-elliptic, up to 18 cm long, 8 cm diam.; scales stalked and shield-like, overlapping tightly upwards, irregularly toothed on margin: seeds red, up to 3·5 cm long, 2·5 cm diam. with fleshy covering and hard thin inner shell enclosing the endosperm.

Stangeria eriopus occurs in coastal grassveld and forest from Bathurst district in the eastern Cape to northern Zululand. No doubt vast numbers of plants were eradicated along the Natal coast as sugar cane fields replaced the natural vegetation, and the expansion of the pineapple industry in the eastern Cape is causing a similar diminution in the distribution of Stangeria eriopus in that area.

Controversy has existed for over a hundred years whether to recognize one or more species of *Stangeria* because of the very obvious difference between some plants found in open grassveld and those found in high forest. It seems that the different forms are adaptations to the varying habitat conditions and there is no clear line of distinction between the different growth forms. In open grassveld the leaves are often not more than 1 ft tall, the leaflets are hard and rounded at the tip and the rootstock may have up to 10 or 12 short underground branches. Within forests the leaves may attain a height of over 6 ft with correspondingly luxuriant leaflets and single stems. But the cones, which are most important in classification, are relatively uniform throughout, for which reason no subdivision seems justified.