

## CYCADACEAE

**Encephalartos inopinus** *R. A. Dyer* sp. nov., foliolis lineari-attenuatis 14–21 cm longis 8–13 mm latis 13–21-nervatis infra glaucis facile distinguitur.

Planta basi ramosa; rami cylindrici usque 2 m longi, 17–23 cm diam. *Folia* 80–110 cm longa, petiolis 10–20 cm longis; rhachis rectus nonnunquam superne leviter tortus, glaber, pulvino dense bruneo-lanato usque 3·5 cm longo et 4·5 cm lato, foliolis infimis spinosis reductis; foliola media patenti-recurva lineari-attenuata, 14–21 cm longa, 8–13 mm lata, infra glauca, pungentia, marginibus integris vel rariter margino inferne apicem versus 1–2 dentibus minutis instructis. *Strobili* ignoti.

TRANSVAAL: Lydenburg; between Penge and Kromellenboog, cult. Johannesburg, *van Hoepen* PRE 29663; Kromellenboog about 1 mile east of Asbestos mine on south facing krans, *Els* photo; *Dyer* 5788 (PRE, holotype).

*Rootstock* freely branched from base; stems up to about 2 m long, 17–23 cm diam. (including the persistent leaf bases); bracts lanceolate, 4·5 cm, long tomentose. *Leaves* 80–110 cm long including petiole 10–20 cm long; rhachis nearly straight, sometimes slightly up-curved and twisted towards apex, glabrous except for woolly back of pulvinus, flat or ridged on upper surface towards base, rounded on under surface, 8–13 mm thick; pulvinus up to 3·5 cm long, 4·5 cm broad, with dense brown wool on back readily rubbed off, shrinking in size and wearing down considerably with age to about 1·5–2 cm long; leaflets glabrous, glaucous on under surface when young, becoming green with age, base or foot inserted parallel to axis, pungent, with entire margin or occasionally with 1–2 minute teeth on the lower margin near, and directed towards apex, those leaflets above middle of leaf directed slightly upwards and outwards and sometimes recurving, not overlapping, reduced in size near apex of rhachis, those about the middle spreading more or less at right angles from rhachis, those below directed slightly downwards and slightly falcate, 1–2 cm distant from each other and reduced in size rather abruptly to 2–6 prickles on either side of the rhachis; median leaflets linear-attenuate, 14–21 cm long, 8–13 mm broad in the lowest  $\frac{1}{3}$  and from there gradually tapering to the slender pungent apex, only slightly narrowed at base, not very rigid, with 13–21 veins evident but not raised on the lower surface. *Cones* unobserved.

This species is established on two specimens from the Lydenburg district of the Transvaal. One of these is now in cultivation in Johannesburg, collected in 1955 by Dr. Helmoed van Hoepen from a parent plant some distance from Penge and which appears to have since perished in the wild state. The other is in the wild state, discovered more recently by Mr. C. A. Els about one mile east of Kromellenboog on a krans rising sheer from the Steelpoort river. This plant was investigated in August 1964 by an expedition from the Botanical Research Institute consisting of Dr. L. E. Codd,

Miss I. C. Verdoorn, Mrs. E. van Hoepen and the writer, guided by Mr. Els. A local Bantu claims to know of the presence of about 3 more plants on the mountains a few miles further east of Kromellenboog. No other species is known within many miles of this area.

To which of the known species of *Encephalartos* this one is most nearly related is not a simple matter to decide. It is remarkable in how many inconspicuous ways it differs from those species to which it bears a general resemblance. The free branching into relatively slender trunks is noteworthy but not of specific importance and it is mainly the leaf characters which attract critical attention. The pulvinus is broad for its length; the rhachis is glabrous even at an early stage and it often has a slight twist towards the apex; the comparatively long linear-attenuate leaflets are gracefully spreading recurved and deflexed towards the base, glaucous on the under surface at first and becoming green with age, and the basal ones are reduced to prickles. Its foliage is certainly amongst the most graceful in the genus. Cones are unrecorded.

The coincidence of the discovery of an "unexpected" new species of *Encephalartos* and on a farm with the name "Onverwagt", prompted the choice of the specific epithet.