

clawed. *Filaments* 3.2–3.8 and 3.4–4 mm long. *Anthers* 1.7–2.1 mm long. *Ovary* linear; style short; ovules 20–28. *Siliqua* 2.5–4 cm long, 2–2.7 mm broad, linear, margin straight; valves 1-nerved, finely net-veined; style 1–2.5 mm long, slender, straight. *Seeds* 1.7–1.8 by 1.5–1.6 mm, reniform-circular, narrowly winged.

*Heliophila laciniata* is allied to but differs from *H. carnososa* in being an annual and it differs from *H. crithmifolia* in the leaves, which have the lobes spaced along the whole length of the leaf, the larger flowers, and the smaller seeds which tend to be broader than long. Our species is known from only a few collections from an area south-west of Springbok. They were collected during July and September. The flowers are white, becoming mauve.

W. MARAIS

### 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.

R. A. DYER

#### GRAMINEAE

*Eriochrysis brachypogon* Stapf subsp. *australis* J. G. Anderson, subsp. nov. a typo robustiore (ad 1.3 m longa) differt.

*Folia* ad 8 mm lata, undique dense pilosa. *Spiculae sessiles* 5–6 mm longae, apice glumae inferioris inaequaliter 3-lobata vel acuta, apice glumae superioris cuspidata vel breviter aristata. *Lemma* floris superioris 3 mm longa. *Spiculae pedicellatae* 4–5 mm longae. *Antherae* 3 mm longae.

SWAZILAND.—Mbabane district: Forbes Reef, swamp, *Compton* 30488 (PRE, holotype).

TRANSVAAL.—Ermelo district: Athole Pasture Research Station, vlei, *Norval* 100. Pietersburg district: Woodbush, *Wager* 22960; *Worsdell* s.n. no locality.

This subspecies is apparently rare and has so far been collected only in the Mbabane district of Swaziland and the Ermelo and Pietersburg districts of the Transvaal, where it grows in swampy areas at an altitude of approximately 4,500–6,000 ft. Professor R. H. Compton, who collected it in Swaziland, reports that, although occurring only as scattered individuals, they are conspicuous plants, standing high above the general level of the vegetation in one of the several small swamps between Forbes Reef and the top of the Komati Pass.

It is readily distinguished from typical *Eriochrysis brachypogon* by its more robust habit, the wider culm leaves which are densely and softly hairy on both surfaces and by the spikelets which are larger in all parts.

*Danthonia aureocephala* J. G. Anderson, sp. nov. *D. davyii* C. E. Hubbard affinis, sed paniculis contractis plerumque interruptis, spiculis maioribus plumis lanceolatis differt.

*Gramen* perenne dense caespitosum ad 90 cm altum. *Folia* ad 40 cm longa stricte involuta vel canaliculata purgentia; vaginae intus prope ligulam sericeae. *Paniculae* contractae plerumque interruptae. *Glumae* lanceolatae ad 2 cm longae aureae nitidae, nervo medio prominenti, nervis lateralibus 3–5 obscuris  $\frac{1}{3}$  glumae aequantibus convergentibus nervo medio confluentibus. *Lemma* valde bilobatum ad 13 mm longum