

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

(lobi inclusi), inter lobos aristatum, obscure 10-nervatum nervis convergentibus in aristam ductis, extus fimbria media obliqua transversa interrupta instructum, saepe margine (ab medio deorsum) pilosa; lobi anguste lanceolati acuminati scaberuli ad 7 mm longi; arista ad 15 mm longa geniculata contorta; callus 1·5 mm longus truncatus vel obtusus latere pilosus. *Palea* ad 9 mm longa, apice breviter 2-lobata. *Antherae* 4 mm longae.

NATAL.—Bergville: Cathedral Peak Forest Research Station, fairly frequent on ridges of spur leading to Organ Pipes Pass, *Killick* 1727 (PRE, holotype); 1831; very locally common on Organ Pipes Ridge, *Killick* 3450; N.E. slopes on the Camel, *Esterhuyzen* 12874; Mhlwazeni Valley, Cathkin Peak Area, *Edwards* 2453.

A wiry, densely tufted perennial up to 90 cm tall. *Culms* erect, simple, glabrous, obscurely striate, 1-noded; nodes mostly basal with the upper internodes long. *Leaves* mostly basal, glabrous; sheaths striate, sericeous on the adaxial surface near the ligule especially on and near the mid-nerve, glabrous abaxially, basal sheaths compressed, short, stramineous, hard, shiny, upper sheaths long, rounded or slightly compressed, pale green or tinged with purple; ligule a ciliate fringe up to 1·0 mm long; blades up to 40 cm long, linear, rigid, tightly involute or canaliculate, pungent, smooth. *Inflorescence* a contracted, usually interrupted panicle up to 17 cm long, rigid; rhachis subangular, striate, glabrous; branches solitary or binate, lower up to 5 cm long, upper shorter; pedicels 3–20 mm long, subterete or angular, minutely scaberulous, sparingly hairy at the apex. *Spikelets* up to 23 mm long, golden-yellow, shiny, 3–4-flowered; rhachilla internodes up to 2 mm long, glabrous or ciliolate on the margins, apex explanate, rounded. *Glumes* lanceolate, subequal, up to 2 cm long, scarious, glabrous, golden-yellow, shiny, apex acuminate; midnerve prominent, lateral nerves 3–5, obscure, $\frac{1}{3}$ the length of the glume, usually converging and fusing with the midnerve. *Lemma* membranous, lanceolate, deeply bi-lobed, up to 13 mm long (including the lobes), awned from between the lobes, obscurely 10-nerved with the nerves converging and passing into the awn, glabrous adaxially, abaxially with 2–3 tufts of hair forming a median oblique transverse interrupted fringe on either side of the midrib, often pilose on the margin from the middle downwards, otherwise glabrous, tufts of hair up to 5 mm long; lobes narrowly lanceolate, acuminate, sometimes shortly mucronate, scaberulous, up to 7 mm long, awn up to 15 mm long, flattened, narrowing upwards, scaberulous, geniculate, twisted in the lower half; callus 1·5 mm long, truncate to obtuse, laterally pilose, hairs up to 1·5 mm long. *Palea* up to 9 mm long, narrowly lanceolate, membranous, sharply keeled with a nerve in each keel, keels minutely ciliate; apex shortly 2-lobed. *Anthers* 4 mm long.

Danthonia aureocephala is a winter-flowering grass occurring on ridges in mountain grassveld at high altitudes in the Cathedral Peak area of the Natal Drakensberg. It is a hard wiry grass characterized by the shiny, golden-yellow appearance of the spikelets.

This species is very closely related to *Danthonia davyii* C. E. Hubbard described from Mt. Mlanje, Nyasaland. When compared with the description of *D. davyii* (Kew Bull. 1939, 645) and with *Drummond and Robson* 5835, deposited in the National Herbarium, Pretoria, the spikelets of *D. aureocephala* were found to be larger in all parts with the panicle contracted and dense instead of lax, and the glumes lanceolate instead of narrowly lanceolate.

D. aureocephala is also related to three other species of *Danthonia*, all of which occur in the Drakensberg area of Natal. They are *D. drakensbergensis* Schweick., *D. macowanii* Stapf and *D. stereophylla* J. G. Anderson. Together with *D. davyii* C. E. Hubbard, they form a more or less distinct group in the genus. In order to facilitate

the identification of this new species a short key which includes all the closely allied species is given:

1. Lobes of the lemma adnate, less than 2 mm long, acute, awnless, median awn up to 6 mm long, straight, rarely somewhat bent and twisted..... (i) *D. macowanii*
 Lobes of lemma well developed, acute, acuminate or awned, median awn 8–20 mm long, geniculate and with a twisted base..... 2
2. Base of the leaf-blades hairy above the ligule; lobes of the lemma awned, lobes including the awns 3–9 mm long..... 3
 Base of the leaf-blades glabrous or scabrid above the ligule, lobes of the lemma acute or acuminate, rarely with awns up to 2 mm long..... 4
3. Lemma (including lobes and awns) up to 1 cm long; leaf-blades usually breaking above the ligule, the remaining portion ultimately splitting and recurving outwards, hairs on the lemma arranged in distinct tufts..... (ii) *D. drakensbergensis*
 Lemma (including lobes and awns) 1·1–1·6 cm long; leaf-blades not breaking off and splitting above the ligule; hairs on lemma not in distinct tufts but arranged in a more or less continuous band along the margins..... (iii) *D. stereophylla*
4. Lemma (including the lobes) up to 8 mm long; palea up to 7 mm long; glumes narrowly lanceolate, panicle lax, yellow or yellow-brown; spikelets dull..... (v) *D. davyii*
 Lemma (including the lobes) 1·1–1·3 cm long; palea 8–9 mm long; glumes lanceolate; panicle laxly contracted, golden-yellow; spikelets shiny..... (iv) *D. aureocephala*

(i) *D. macowanii* Stapf in Fl. Cap. 7: 527 (1899). Type: Cape.—Somerset East: on the banks of streamlets near the summit of Bosch Berg, and rarely in the bed of the Little Fish River, 4,800 ft., *MacOwan* 1986.

DISTRIBUTION.—From the south-eastern and eastern Cape, Basutoland, Natal and the eastern Transvaal. Usually found along streambanks in mountainous areas at altitudes ranging from 3,000 to 9,000 ft.

(ii) *D. drakensbergensis* Schweickerdt in Fedde Rep. XLIII: 88 (1938). Type: Cape.—Barkly West: summit of Doodmans Krans Mountain, 2,900 m, *Galpin* 6903.

DISTRIBUTION.—Barkly East and Maclear districts of the north-eastern Cape, the Drakensberg area of Natal and Basutoland and at Mariepskop in the north-eastern Transvaal. Usually growing on streambanks and seepage areas at altitudes higher than 6,000 ft.

(iii) *D. stereophylla* J. G. Anderson in Bothalia 7, 2: 419 (1960). Type: Natal.—Bergville: Cathedral Peak Forestry Station, 7,400 ft, *Killick* 1184.

DISTRIBUTION.—Occurs in the Drakensberg area of Natal and Basutoland usually on rocky outcrops or on dry basalt cliffs at altitudes ranging from 6,000–11,000 ft.

(iv) *D. aureocephala* J. G. Anderson, sp. nov. Type: Natal.—Bergville: Cathedral Peak Forest Research Station, fairly frequent on ridges of spur leading to Organs Pipes Pass, *Killick* 1727.

DISTRIBUTION.—Found only in the Bergville district and usually growing on ridges in mountain grassveld at altitudes ranging from 3,450–9,000 ft.

(v) *D. davyii* C. E. Hubbard in Kew Bull. 501 (1936); Fl. of Trop. Afr. 10, 1: 137 (1937). Type: Nyasaland.—Mt. Mlanje, on steep grass slopes of the Lichenya Gorge, 1950 m, *Burt Davy* 2068/29.

DISTRIBUTION.—Nyasaland and Southern Rhodesia on steep grass slopes and in rocky situations at altitudes higher than 6,000 ft.

NEW COMBINATIONS AND NEW SPECIES IN THE ARISTIDEAE

Stipagrostis sect. **Schistachne** (*Fig. & De Not.*) *de Winter*, comb. nov.

Schistachne *Fig. & De Not.* in *Mem. Acad. Sci. Tor.* 2, 12: 252 (1851).

Stipagrostis uniplumis (*Licht.*) *de Winter*

var. **intermedia** (*Schweick.*) *de Winter*, comb. nov.

Aristida gracilior (*Pilger*) var. *intermedia* in *Bothalia* 4, 1: 124 (1941).

Aristida congesta *R. & S.*

subsp. **congesta**.

subsp. **barbicollis** (*Trin. & Rupr.*) *de Winter*, comb. nov.

Aristida barbicollis *Trin. & Rupr.*, *Gram. Stip.* 135 (1842).

Stipagrostis namibensis *de Winter*, sp. nov., *S. hermannii* (*Mez*) *de Winter* affinis, sed aristis brevioribus (1.4–2.5 cm), glumis acutis (non acuminatis) firmioribus latioribus differt.

Gramen annuum ad 20 cm altum. *Culmi* simplices 2–3 (4)-nodosi, geniculato, ascendentes. *Panicula* nonnihil contracta. *Spiculae* pallidae. *Glumae* inaequales-glabrae, chartaceae, lanceolatae; inferiores superioribus longiores, c. 8–9 mm longae; 3–4 (5)-nervatae, apice subobtusum vel acutum, emarginatum; superiores 3-nervatae, 6–7 mm longae. *Lemma* glabrum, laeve, 3.5–4 mm longum (callum inclusum), inter apicem lemmatis basin columnae articulatum; columna 2.5–5 mm longa; aristae 3, centrali plumosa 1.4–2.5 cm longa, lateralibus glabris tenuissimis; callus acutus pilosus. *Palea* parva squamiformis. *Lodiculae* 2, membranaceae, nervis paucis. *Antherae* 3, valde anguste oblongae. *Ovarium* glabrum, stylis distinctis, stigmatibus plumosis. *Caryopsis* anguste elliptica 2–2.5 mm longa; embryo caryopseos c. $\frac{1}{2}$ aequans; hilum caryopseos $\frac{1}{2}$ aequans atro-brunneum.

SOUTH WEST AFRICA.—Omaruru Distr., 11 miles E. of Omaruru River mouth, in depressions where water collects after rain on bare gravel flats, *de Winter & Hardy* 8119 (PRE, holotype; K, M, BOL, WINDHOEK, SRGH, US).

Stipagrostis ramulosa *de Winter*, sp. nov., *S. sabulicola* (*Pilger*) *de Winter* affinis, sed planta parviori, glumis brevioribus, aristis longioribus, inflorescentiis laxioribus, spiculis paucioribus differt.

Gramen perenne, valde dense caespitosum, multo ramosum ad 30 cm altum et 1 m diam., foliis tenuibus. *Culmi* graciles, a nodis fasciculati, multo nodosi. *Foliorum vaginae* laeves vel carina scaberulae. *Ligula* floccosa. *Foliorum laminae* filiformes, ad 10 cm longae. *Panicula* laxa elongata, spiculis paucis (6–20). *Spiculae* 1-florae, pallidae. *Glumae* subaequales, lanceolatae, acuminatae, 3-nervatae, inferiores 8–9 mm longae, superiores 7–8 mm longae. *Lemma* tubulosum, 3-nervatum, glabrum, laeve, 2.5 mm longum (callum inclusum), prope apicem articulatum; columna conica inanis, c. 1 mm longa; aristae 3, plumosae, excurrentes apice nudo, subaequales vel laterale, leviter breviores, centrali 1.2–1.5 cm longa, lateralibus 1.0–1.3 cm longis. *Palea* squamiformis, parva, c. 1 mm longa. *Lodiculae* 2, membranaceae, obtusae vel acutae, nervis paucis. *Stamina* 3; antherae anguste oblongae, c. 2 mm longae. *Ovarium* glabrum, stylis distinctis, stigmatibus plumosis, angustis. *Caryopsis* anguste elliptica, 2–2.5 mm longa embryo caryopseos $\frac{3}{4}$ aequans; hilum caryopseos aequans.

SOUTH WEST AFRICA.—Outjo Distr., Unjab River Mouth 12.9 miles N. of Torra Bay on coast road, sandy river bed, *de Winter & Hardy* 8197 (PRE, holotype; K, M, BOL, WINDHOEK, SRGH, US).