

A NEW SPECIES OF *SPOROBOLUS* (SPOROBOLINAE) IN SOUTH AFRICA

Sporobolus sp. (*Smook* 3429) in Gibbs Russell *et al.*: 313 (1990) is hereby named.

Sporobolus oxyphyllus *L.Fish*, sp. nov., *S. virginico* (L.) Kunth affinis sed foliis convolutis, paniculo aperto axe principali visibili, habituque differt; etiam *S. pungenti* (Schreb.) Kunth affinis, a quo partibus omnibus parvioribus brevioribusque differt.

TYPE.—North-West, 2625 (Delareyville): Barberspan, (–DA), *Ellis* 3628 (PRE, holo.).

Mat-forming perennial with robust rhizomes. *Culms* erect, up to 500 mm tall, branched at base; nodes pale to dark purple or black, glabrous, commonly covered by leaf sheaths. *Leaf sheaths* persistent, strongly ribbed in upper half, veins becoming less numerous and obvious nearer base, sometimes flushed with purple, glabrous,

except sheath mouth with hairs up to 1.5 mm long. *Ligule* with a fringe of hairs 0.2 mm long. *Leaf blades* stiff, pungent, convolute, 20–90(–115) × 1.5–4.5 mm, apex boat-shaped, veins numerous, midrib usually not distinct, glabrous, adaxial surface with prickles and papillae; margins smooth or scabrid. *Inflorescence* an open, ovate panicle, 30–100 × 10–30 mm, rarely contracted, extending above main leaves, but often closely associated with uppermost leaf; branches smooth or with scattered prickles, primary branches not in whorls, ascending to spreading at about 45° from main axis, lower part without spikelets; yellow to red, glabrous pulvinus present in axils of branches. *Spikelets* 1.8–2.4 mm long, pallid to grey-green sometimes flushed purple, these colours often mixed on same spikelet, palea usually obvious, being darker than rest of spikelet. *Glumes* unequal, obtuse to acute, sometimes apiculate, 1-nerved, nerve thickening towards apex, upper 1/2 scabrid; lower glume 1.0–1.6 mm



FIGURE 7.—Habit of *Sporobolus oxyphyllus*, $\times 0.7$. Artist: Sibonela Chiliza.

long; upper glume nearly as long as or as long as spikelet, but length of both glumes variable even within same panicle. *Lemma* ovate-elliptic, acute at tip, 1-nerved. *Palea* as long as spikelet to slightly longer, 2-keeled, with a deep median groove. *Stamens* 3; anthers 1.2–1.4 mm long, pallid, yellow to greenish often flushed purple. *Caryopsis* ellipsoid, strongly laterally compressed, up to 1.1 mm long. *Flowering time*: November to February with one specimen collected June. Figure 7.

Distribution and habitat: *Sporobolus oxyphyllus* occurs in the drier parts of the interior of South Africa, namely in the southern North-West, western Free State and the Eastern and Northern Cape bordering the Free State

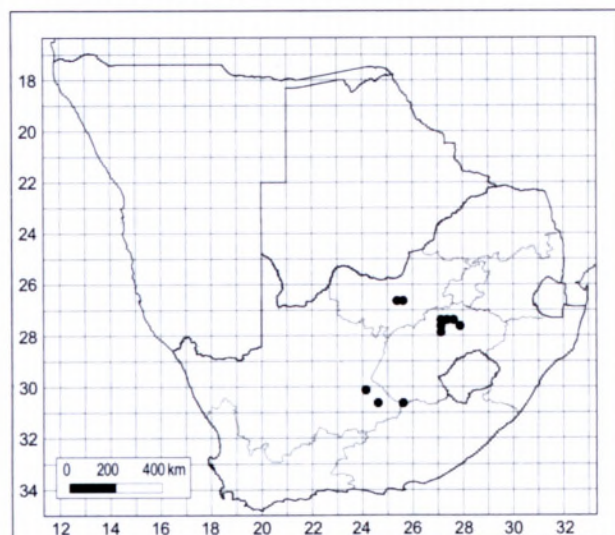


FIGURE 8.—Known distribution of *Sporobolus oxyphyllus*.

(Figure 8). It forms dense stands and is locally abundant in areas of high 'sodic' soils especially at the edges of salt pans and in salt vleis. It has been recorded growing in water and is often found growing in association with *Cynodon dactylon*.

Relationships: *Sporobolus oxyphyllus* is similar to *S. virginicus* (L.) Kunth which is found in saline areas in coastal localities throughout the world in the tropics and subtropics with some inland localities with sodic conditions. In the *Flora of southern Africa* (FSA) region, *S. virginicus* occurs along the coast, whereas inland localities lie mostly east and northeast of the distribution area of *S. oxyphyllus* in KwaZulu-Natal (2632CD; 2632AB), Mpumalanga (2231BA, -CC) and Limpopo (2228DA, 2230CA). It also differs in having a dense, spike-like panicle and leaves which are cauline and not mostly basal. *S. pungens* (Schreb.) Kunth [*S. arenarius* (Gouan) Duval-Jouve] from the Mediterranean, appears to be even more similar, with open panicles and a comparable growth form, but in *S. oxyphyllus*, all parts especially the plant itself and the spikelets are larger and longer.

Etymology: the specific epithet *oxyphyllus* refers to the sharply pointed leaves.

Other specimens examined (all housed in PRE)

NORTH-WEST.—2625 (Delareyville): Paardefontein, (-CB), Allan 174; Farm Boskop, (-CB), Smook 6273; Barberspan, (-DA); Davidse & Loxton 6026; Zimbatis 4, 10.

FREE STATE.—2727 (Kroonstad): Middelpruit Noord, (-CA), Scheepers 1654. 2825 (Boshof): Du Plessis Dam, (-AD), Peyer 1077; Berlyn, (-BC), Muller 1299; Myburgs Pan, Lynfontein Farm, (-DB). Edwards 4152. 2826 (Brandfort): Bulfontein, (-AC), Smook 2721; Krugersdrift Dam Nature Reserve, (-CC), Muller 1906.

NORTHERN CAPE.—3024 (De Aar): near Potfontein station, (-AA), Acocks 13532; Farm Biesiespan, (-DA), Smook 3429.

EASTERN CAPE.—3025 (Colesberg): Oviston, (-DA), Anderson 349.

ACKNOWLEDGEMENTS

Thanks go to Dr O.A. Leistner for the Latin description, Dr T. Cope of the Herbarium, Royal Botanic Gardens,

Kew (K) for his advice, Ms H. Steyn for the map, Mr S. Chiliza for the illustration, G. Germishuizen for the editing and all those that helped in finalizing this paper.

1990. Grasses of southern Africa. *Memoirs of the Botanical Survey of South Africa* No. 58.

L. FISH*

REFERENCE

GIBBS RUSSELL, G.E., WATSON, L., KOEKEMOER, M., SMOOK, L., BARKER, N.P., ANDERSON, H.M. & DALLWITZ, M.J.

* National Herbarium, South African National Biodiversity Institute,
Private Bag X101, 0001 Pretoria.
MS. received: 2005-05-26.