

**NOVITATES GABONENSES 52.
A NEW VARIETY WITHIN THE
SPOROBOLUS INDICUS COMPLEX (GRAMINEAE)**

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SUMMARY

Within the polymorphic *S. indicus* complex a new variety, var. *saxicola* Sosef & Ngok Banak, is being distinguished, based on its small habit, short and narrow leaves and especially its lax panicle with short primary branches.

Key words: *Sporobolus*, grasses, inselbergs, taxonomy, Africa, Gabon.

INTRODUCTION

In 2003, during fieldwork in eastern Gabon within the framework of a research project on Inselbergs (Ngok Banak, 2003), the second author collected material of a grass which the first author could not attribute to any known taxon. It appeared to belong to the *Sporobolus indicus* (L.) R.Br. complex (Clayton, 1965). The taxa distinguished within this highly polymorphic group are given the status of species by some authors (e.g., Clayton, 1965; Jovet & Guédès, 1968; Clayton et al., 1974; Cope, 1999) whereas others regard them as mere varieties of a single species (Simon, 1982; Baaijens & Veldkamp, 1991; Van der Zon, 1992; Sosef, 1999). Differences between the taxa within the complex are slight and intermediates occur on a regular basis.

After further study of the available literature, and consultation with another grass specialist, Dr. J.F. Veldkamp (Nationaal Herbarium Nederland, Universiteit Leiden branch), it was agreed that the material deserved new taxon status.

Because the spikelet structure of the new material is almost identical to that of *Sporobolus indicus* (L.) R.Br. var. *pyramidalis* (P. Beauv.) Veldk. (= *S. pyramidalis* P. Beauv.) and plant habit is vaguely similar to that of the *S. jacquemontii* Kunth-form belonging to the same variety, it was decided that in this particular case the attribution of the level of variety was more appropriate than that of distinct species. Besides that, the main features that distinguish it from this and other related taxa might be related to the extreme habitat in which the plants were growing (see Ecology below), which further supports our choice of the variety level.

The plants stand out because they form dense tussocks with very short and narrow leaves, possess almost leafless and short culms, and especially because of the very lax panicles with very short and distant primary branches.

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Fig. 1. a. Habit; b. inflorescence; c. secondary branch; d. spikelet; e. lower glume (all after the type material).

Besides that, the seemingly paired spikelets represent a strange phenomenon. The pairs are composed of a sessile and a pedicelled spikelet, as is the rule in the tribe Andropogoneae. The same situation was observed in material belonging to the *S. jacquemontii*-form. This feature is believed to be caused by the fact that the secondary branches are reduced, leaving just the most basal sessile spikelet and a second spikelet sitting on top of the reduced secondary branch.

DESCRIPTION

***Sporobolus indicus* (L.) R.Br. var. *saxicola* Sosef & Ngok Banak, var. nov.** — Fig. 1

Sporoboli indici var. *pyramidalis* similis, habitu minore, foliis brevioribus (2–15 cm) angustioribus (0.7–2 mm), panícula laxissima ramulis primariis brevissimis (0.4–1.5 cm) distantibus differt. — Typus: *L. Ngok Banak, A. Moungezai & P. Mbazza 1766* (holo WAG; iso LBV), Gabon, Ogooué-Ivindo, Mt Sassamongo, rocky plateau W of Sassamongo village, 0° 49' 71" N, 13° 28' 06" E, 485 m alt., prairie humide. Herbe de 0.20 m environ, inflorescence rouge violacée, 15 May 2003.

Perennial, caespitose, completely glabrous *grass*; culms erect, only 0.5–0.8 mm in diameter at the base, 12–33 cm long, striate, bearing only 1 or 2 reduced leaves. Leaves mostly basal; sheaths 3–20 mm long, striate; blades convolute, 2–15 cm long, 0.7–2 mm wide, with smooth margins; ligule a minute membranous rim of 0.2 mm set with short cilia. *Panicle* very lax, 2.5–13 cm long; primary branches solitary, quite distant, 0.4–1.5 cm long, with spikelets from the base. *Spikelets* generally in pairs, one sessile and one pedicelled, gaping, 1.4–1.6 mm long, brownish; lower glume obtuse, 0.4–0.5 mm long, about 1/3 of the length of the spikelet, veinless; upper glume obtuse to acute, 0.5–0.8 mm, up to half as long as the spikelet, indistinctly 1-veined; lemma acute, as long as the spikelet, 1-veined; palea similar to the lemma, 2-veined; anthers 3. Grain ellipsoid, c. 0.8 mm long.

Ecology — Sassamongo Mountain has, similar to the nearby Belinga and Boka-Boka Mountains, base rock rich in iron giving rise to ferralitic soils (EDICEF, 1983). The type specimens were collected on a rocky plateau with shallow soils. The plants were growing in a depression that was regularly wet carrying a herbaceous vegetation dominated by *Utricularia andogensis*, *Habenaria procera*, *Tricapelemma* species, *Heterotis rupicola* and *Xyris* species.

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