

A new species of *Nastus* Nees (Gramineae) from Sumba

by

SOEJATMI SOENARKO

Herbarium Bogoriense
Indonesia

Summary

An illustrated description of *Nastus reholtumianus* S. Soenarko is presented and this new species is compared with *N. rudimentifer* Holtt. and *N. obtusus* Holtt.

When Holttum (1956) transferred the Malesian species of *Oreiostachys* Gamble to *Nastus* Nees, three species of *Nastus* were known from New Guinea. In 1967 he described four more species and Bor (1972) added one to these; thus there are now eight species endemic to New Guinea. Outside New Guinea there is one species; it occurs in Java.

In most of the Malesian *Nastus* the spikelets are more or less cylindrical, thus the fourth and the fifth glumes, lemma and palea are rounded at the back (except those in *N. schlechteri* (Pilger) Holtt., in which they are more or less 1-keeled), with usually prominent nerves; moreover the palea is bifid. A plant collected by Mr. Iboet from the island of Sumba (Indonesia) has characteristically small and laterally compressed spikelets, lightly 1-keeled glumes, lemma and palea, with prominent middle nerve and several (usually 6) faintly lateral nerves, and acuminate palea. These structures, together with the leaf size (up to 8 cm long and 14 mm wide) differentiate the Sumba plant from the other Malesian *Nastus*, and it is regarded here as a new species, *N. reholtumianus*. The near relatives of this new *Nastus* are *N. rudimentifer* Holtt. and *N. obtusus* Holtt. which have similar panicle with spreading branches and short-tipped lower glumes. However, this new species differs in several respects from the two latter; their characters are compared in the table below:

characters	reholtumianus	rudimentifer	obtusus
leaf-blade of flowering branch	4.5-8 cm long 7-14 mm wide	(8) 10-12 cm long 15-27 mm wide	12-15 cm long 12-15 mm wide
spikelet	± laterally compressed 5-7 mm long	± cylindrical 12 mm long	± cylindrical 13-20 mm long
rachilla extension	absent	present, sometimes absent	usually absent
lemma	6 mm long, glabrous	10 mm long, glabrous	14-17 mm long, with appressed hairs on the back
palea	acuminate	bifid	bifid

Nastus reholtumianus S. Soenarko, *sp. nov.*, *N. rudimentifer* Holtt. affinis sed spiculis 5-7 mm longis, latere compressis, lemmate 6 mm longo, lamina 8 longa differt. TYPUS: Sumba, *Iboet* 443 (holotypus, BO).

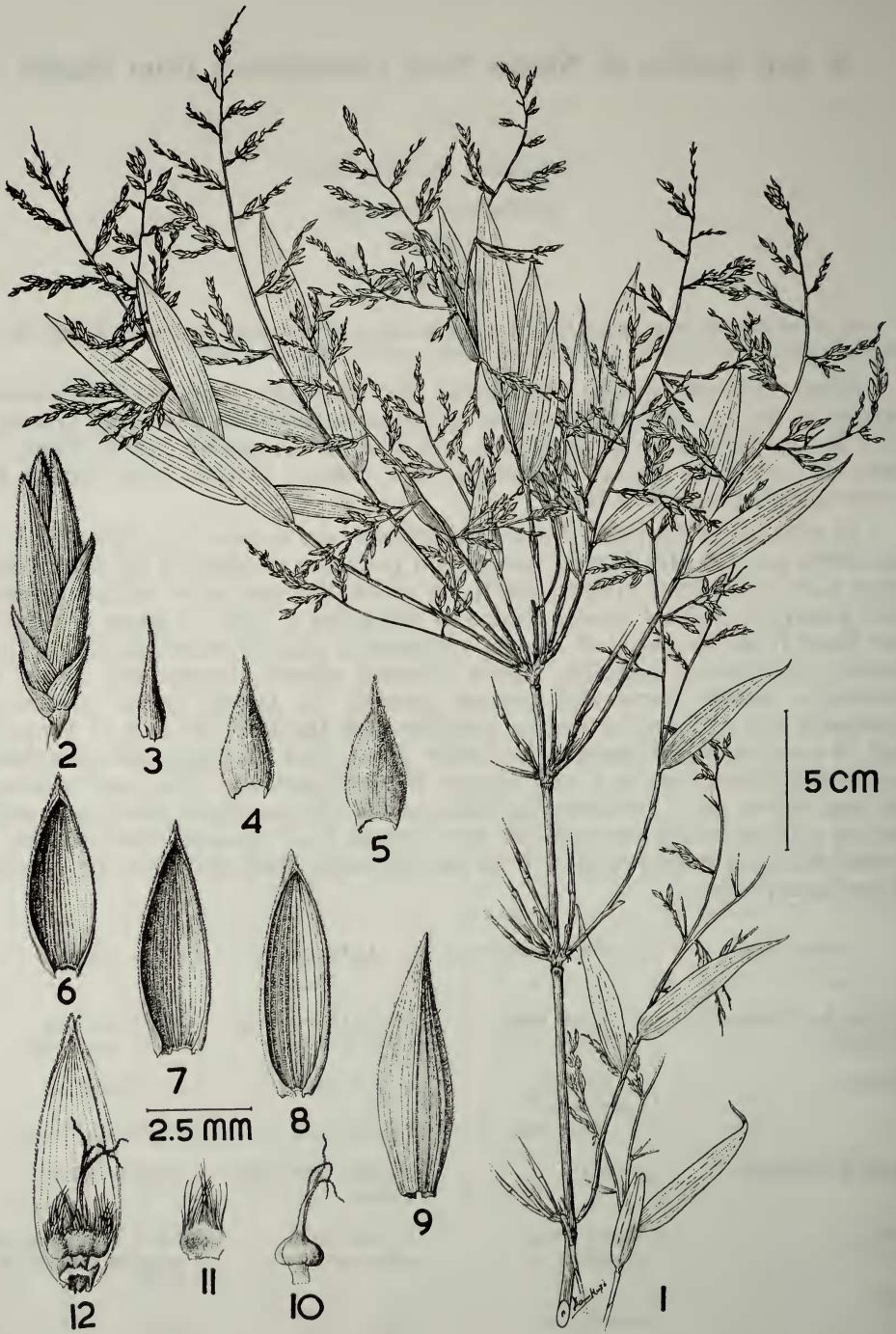


Fig. 1. *Nastus reholtumianus* sp. nov. 1, flowering branches; 2, spikelet; 3-7, glumes I — V respectively; 8, lemma; 9, palea; 10, ovary; 11, lodicule; 12, spikelet after removing the glumes and lemma.

Culm not seen, upper part bearing flowering branches 3.5 mm diam., either solid or hollow, with annular woody ring below each node; branches glabrous, 3–8 in each node. Culm-sheath not seen. Flowering branch 11–22 cm long; leaf-blades 4.5–8 cm long, 7–14 mm wide, oblong-lanceolate, glabrous, acuminate, rounded at the base; leaf-sheath glabrous; ligule less than 1 mm long; auricle up to 1 mm long, fringed (fringe 1–2 mm long). Inflorescence open panicle with spreading branches, main axis and branches with minute appressed hairs. Spikelet more or less laterally compressed, up to 7 mm long, glabrous; glume I: 1.5 mm long, narrowly ovate, 1-keeled on the back, with mucronate apex; glume II: 2.5 mm ovate, slightly 1-keeled on the back, mucronate; glume III: 3.5 mm long, slightly 1-keeled on the back, ovate, faintly 6-nerved with conspicuous median nerve (and so are the median nerves of glumes I and II); glume IV: 5.5 mm long, ovate to ovate-oblong, boat-shaped, acuminate, 3 mm wide, faintly 7-nerved; glume V: more or less similar to glume IV, but slightly longer; lemma and palea more or less equal, 6 mm long, ovate-oblong, acuminate, boat-shaped to slightly compressed; lodicule 1 mm long with fringes; ovary stalked with conical fleshy apex, glabrous, the stalk often elongates up to 2 mm long; rachilla extension absent; stamens 6, anthers 2.5 mm long. (Fig. 1).

Sumba. Mangiliwari near Maomaru, 9. V. 1925, *Iboet 443* (BO, holo).

The author dedicates this new species to Prof. R. E. Holttum who has contributed so much to the knowledge of S. E. Asian bamboos, especially of Malaya and New Guinea, and has encouraged the author in studying Malesian bamboos. Thanks are due to Sdr. Damhuri (Herbarium Bogoriense) for preparing the figures.

References

- Bor, N. L. (1972). A new species of *Nastus* from New Guinea. *Öst. Bot. Z.* **120**: 87–91.
- Holttum, R. E. (1956). The bamboo-genera *Nastus* and *Chloothamnus*. *Kew. Bull.* **10**: 591–594.
- (1967). The bamboos of New Guinea. *Kew Bull.* **21**: 263–292.