

No. 43. On a new Indian *Urochloa*

BY

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Among the grasses in the Rijks-Herbarium I found an undetermined *Panicum*, received from the British Museum, collected in the Bombay Presidency by Mr. YOUNG. This plant is very interesting as it belongs to a small group of about 18 species in general appearance very similar to the genus *Brachiaria* as accepted by American authors.¹⁾

In the genus *Brachiaria* the spikelets are placed with the first glume towards the axis (adaxial), but in the group forming the genus *Urochloa*, the first glume is turned away from the rachis (spikelets abaxial). Nearly all the species of *Urochloa* have a very obtuse apex of the fertile valve, ending in a fine mucro.

This genus is not recognized by HITCHCOCK and CHASE, because the *Panicum reptans*, L. is placed by them among the true *Panicum* species.²⁾ STAPF however makes the combination *Urochloa reptans*³⁾, and although the position of the spikelets is the same as in the genuine *Urochloa* species, the fertile valve is not rounded at the apex and only slightly apiculate. On the other hand there are among true *Brachiaria*'s some species with a very obtuse valve and a long fine mucro, e. g. the very curious *Brachiaria ophryodes*, CHASE (Mexico: Monterrey, State of Nueva Leon, type collection, HITCHCOCK no. 5538, Amer. Gr. Nat. Herb. no. 401!) and the *Brachiaria Meziana*, HITCHC. (Mexico: BOURGEOU no. 222!, 439!). Thus the character of the obtuse mucronated valve is not in correlation with the position

¹⁾ AGNES CHASE, The North American species of *Brachiaria* in Contr. U. S. Nat. Herb. XXII (1920) p. 331.

²⁾ HITCHCOCK and CHASE, The North American species of *Panicum* in Contr. U. S. Nat. Herb. XV (1910) p. 361.

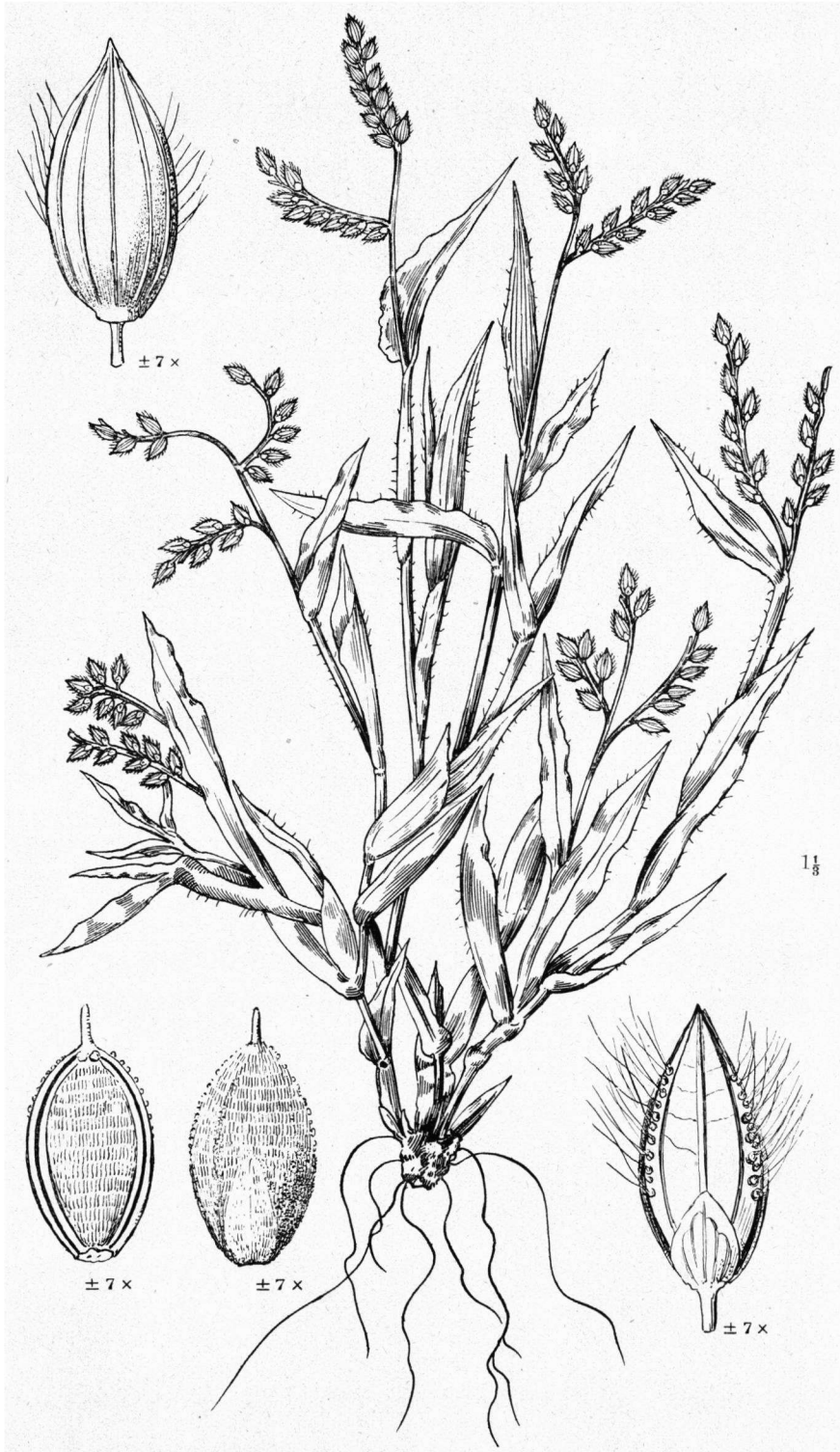
³⁾ O. STAPF in PRAIN, Flora of tropical Africa IX (1920) p. 6011.

of the spikelet and we can separate the two genera only by looking how these spikelets are placed on the rhachis, but it is not always easy to find the correct disposition in the dried and pressed herbarium specimens.

The genus *Urochloa* is a very curious one. In nearly all the species occur parallel states, one with glabrous and one with pubescent spikelets. The glabrous state is predominant in some species and the pubescent state rare or not yet known, in other species the pubescent form is common. But in this genus we find another very striking character, as some species have a submarginal fringe of long hairs appressed to the side nerves of the lower floret (generally called the third glume). These hairs are spreading when the fruits become mature. It seems that the presence or absence of this fringe is not in correlation with the pubescence or glabry of the spikelets. Among African species and also in an Indian one we find this fringe equally on the spikelets with or without pubescence. In the wellknown *Urochloa trichopus*, STAPF (= *Panicum trichopus*, HOCHST.) the state with the submarginal fringe is common. *Urochloa Helopus*, STAPF (= *Panicum Helopus*, TRIN.) is an example for a species with glabrous or pubescent spikelets, the pubescent state sometimes having the submarginal fringe. This combination is very rare and hitherto only known from a collection gathered by JACQUEMONT near Poona in India. The courtesy of Dr. STAPF enabled me to get an idea of this very rare state. This was of a great importance for me, the Poona plant coming nearest to the new species I intended to describe.

Urochloa marathensis HENR. nov. spec. (= *Panicum marathense* HENR. in Herb. Lugd. Batav.).

Annua, nana sed robusta, glauca, ex geniculis inferioribus ramosa; culmi humiliores, striati, glaberrimi, paucinodes, nodis pubescentibus. Vaginae teretes vel leviter compressae, striatae, inferiores hiantes, superiores arctae, omnes pilis basi tuberculatis hirsutae, internodiis breviores. Ligula brevissima, pilis longis stipatus. Laminae e basi cordata lineari-lanceolatae, sensim acutatae, plus minusve 3 cm longae, 5—7 mm latae, planae, utrinque, sed praesertim pagina superiore, pilis patulis basi tuberculatis parce vestitae, margine incrassato distincte undulato, pilis longis tuberculatis fimbriato. Racemi 2—3 inter se plus minusve 1 cm distantes, 2 cm longi, crassi, erecto-patuli vel demum reflexi, rhachi subtrigona, basi in axillis pilosa, spiculis plus duplo angustiore, leviter undulata, angulis scaberula, ceterum glabra, pedicellos solitarios edente. Spiculae biserialae, late ellipticae, acutissimae, 4 mm longae, inversae, antice



subplanæ, postice valde convexæ, virides, glabræ; glumæ steriles valde inæquales, gluma I tertiam spiculam subæquans, subobtusa, 5-nervis, gluma II spiculam æquans, acutissima, elevato-7—9-nervis, gluma III priori isomorpha plana, 5-nervis, dorso glabra, sed prope marginem tuberculatim echinulata, nisi inferne et superne prope marginem glabra, in axilla paleam floris abortivi foventi; palea inferior floris hermaphroditi quam glumæ præcedentes brevior, ex elliptico apice rotundata, rigida, opaca, bruneo-straminea, optime rugulosa, longe caudata, 5-nervis, inferne bullata; palea superior dense punctulato-rugulosa, bicarinata, marginibus inflexis laevibus.

Hab. India orient.; Southern Maratha Country and North Canara; Bombay Presidency. Collected and presented by A. P. YOUNG, Esq., I. N. anno 1884 ex Herbario Musei Britannici in Herb. Lugd. Batav. sub no. 908.92—2300.

Var. *velutina* HENR. nov. var. Differt a typo spiculis dense pubescentibus.

Hab. Cum præcedente YOUNG legit, in Herb. Lugd. Bat. sub no. 908.83—143.

The only species of the genus *Urochloa* that comes near to the new one is the already mentioned *Urochloa Helopus*, STAFF. If more material will be found the *Urochloa marathensis* may prove to be identical with this species, but the hairs of the fringe in the Poona plant are not springing from papillæ as in the new species, where they are imbedded on crateriform glandlike tubercles. The fertile valve is very bullate in the lower part, and on the back of the fruit just below the long mucro there are two nodules (evidently the thickened ends of the marginal nerves of the two paleæ). I never saw them so manifest in the allied *Urochloa Helopus*. These characters combined with the glaucous aspect of the plant seem to me sufficient to separate the two species.