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KUSWATA KARTAWINATA  
MIEN A. RIFAI

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## AEGOPOGON (GRAMINEAE) IN MALESIA

J. F. VELDKAMP

*Kijksherbarium; Leiden, the Netherlands*

## ABSTRACT

*Aegopogon ceucliroides* Willd. var. *ceuchroides* is recorded for the first time from Malesian area based on a collection from Mt. Michael (Papua New Guinea). A description is provided.

## ABSTKAK

*Aegopogon ceuchroides* Willd. var. *emtchrykles* direkam untuk percamu kali dari Kawasan Malesia, berdasarkan koleksi dari Gunung Michael (Papua Nugini). Sebuah pertelaan disajikan.

In June 1979 Mr. K. Kerenga, Lae, Papua New Guinea, visited the summit of Mt. Michael, ca. 3750 m high. Among his collections was a curious grass (LAE 74443), said to cover large areas by sprawling, which has turned out to be *Aegopogon ceuchroides* Willd. var. *ceuchroides*. Neither the species, not the genus was so far known from Malesia, and as I think existing descriptions may not always be within reach of Malesian botanists a short generico-specific description is given here based on the New Guinea collection. The plant is especially conspicuous for the one-sided panicle with paired, much-bristled spikelets that drop off as small burs.

The genus of three species is restricted to subtropical America, while our species occurs from Northern Mexico to Bolivia and Venezuela. This distribution would seem to make introduction hardly likely on a mountain only rarely visited by local people and even less outsiders. The latter would be mainly Australian, but the genus has not yet been reported from that continent (Simon in Techn. Bull. Bot. Br. Dept. Prim. Industr., Brisbane 3: 1—89. 1978).

The relationship is according to the older authors with the Zoysieae, but lately the (Jhlorideae) have been suggested (Stebbins & Crampton in Rec. Adv. Bot.: 133—145. 1961; Tiirpe in Lilloa 33: 259—282, 1973; Eohl, Ft *Coslarisensis* 15: 26—28, 1890), with an affinity to *Boueloua* (Clayton & Richardson: 37—48. 1973). Actually these tribes seem to be extremely close with the Zoysieae mainly distinguished because the

spikelets fall entire and/or in sometimes much modified bur-like grouplets. The use of modifications of the diaspore to distinguish tribes, or even genera for that matter, seems artificial to me, useful for keys of course, but hazardous in phylogeny because of polyphyletic parallelism.

#### AEGOPOGON CENCHROIDES Willd. var. CENCHROIDES

*Aeyopoyon cenchroides* Humb. & Bonpl. ex Willd., *Sp. PL*, ed. 4, Trin. *ill Mem. Ac. Sc. St. Pétersb.* VI, 5: 7.-11840; 4, 2: 89ft. 18(0:6; Hitch, in *Contr. U.S. Nat. Hb.* 24, &: 40:7. 1&2T; Beetle in *Univ. Wyoming... Publ.* 13: 21. 1948; Poht *Fl. Costaric* 16: 26, f. 3. 1980. — *A. cenchroides*, var. *cenchroides*: *Ttirpe in Lilloa* 33: 267, f. 2 1973. — Type: *Humbold & Bonpl-and s.n.* in *Hb. Willd.* 1637 (B, holo, n.v.; IDC 7440!), Venezuela, Caracas, Cumana.

Foi "fuftheT" sytiO "n" ymy "see". B^etl'e, He.\*; where' a" generic rerMoK is "given.

Small, wiry, glabrous perennial, branching extra-vaginally at base, rooting in the decumbent nodes. Ligule ± triangular, (1.3—)2—2.35 mm long, scarios, glabrous, fimbriate. Blades ascending to patent, flat, flaccid, 2—4.3 cm by 1—1.7 mm, scaberulous. Inflorescence a unilateral pseudo-spike, 3—4 cm long, of ca. 20 clusters of paired, unequally pedicelled, laterally compressed, 1-flowered spikelets in two rows along two sides of a triquetrous rachis. Clusters falling as a bur-like entity with the common, up to 0.5 mm long, setulose common stipe. • Subsessile spikelets bisexual. Pedicel up to 0.5 mm long, setose. Glumes subequal, slightly obovate-linear-lanceolate, 2.25—2.5 by 0.3—0.4 mm, about as long as the body of the lemma, membranous, midrib scaberulous, apex bilobed, lobes rounded to acutish, with a 1.1—1.2 mm long arista from the sinus. Rachilla-process absent. Lemma ovate-lanceolate, sulcately 3-nerved, finely scaberulous in a slightly transverse pattern, membranous, rounded on the back, callus obconical, not articulating, glabrous, ca. 0.35 mm long, body ca. 2.5 mm long, apex 3-lobed, lobes 1.1—1.35 mm long, aristate, the central arista longest, 5.8—7 mm long, slightly wavy. Palea lanceolate, sulcately 2-nerved, finely scaberulous, body 2.85—3.25 mm long, apex biobed lobes with 0.6—0.75 mm long aristas. Anthesis 3, 2—2.2 mm long, yellow. Stigmas laterally exerted, purple. Caryopsis not present, in extra-Malesian material oblong with a subbasal, punctiform hilum and an embryo ca. 0.3 times as long as the fruit. Pedicelled spikelet much smaller, from reduced to the glumes and lemma and neuter, to ca. subequal and apparently bisexual. Pedicel »p to 1 mm long.

There are: some differences between-the. above and .descriptions, et other specimens.. The plants are .always....described, as..annual,.but..the presence of extra-vaginal branching and cataphylls points" at a long-lived habit (see also Trin., 1840). The spikelets are strictly paired here, while triads seem to be the rule. The pedicelled spikelets may be bisexual,

at least with well-developed anthers and plumose stigmas as in the sessile spikelets, but they are reportedly at most male elsewhere. The lobes of the glumes seem to be narrower with less developed lobes, while the anthers are longer than the 2 mm described. Hitchcock (1927) and Pohl (1980) have mentioned an extreme morphological variability in the development of the clusters and spikelets, so these characters may fall within the existing pattern, which has so far never been described adequately.

Anatomy of the leaf has been described by Turpe (1973), while Pohl (1980) gave as chromosome numbers  $n = 20, 30, 40$ .

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