Register of Australian Herbage Plant Cultivars

A. Grasses

6. Panic

Panicum maximum Jacq. (Panic or Guinea grass) cv. Hamil

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Origin

This form of Panicum maximum is derived from seed supplied to Mr. Jack Hamil of Daintree, north Queensland, in 1935 by Mr. C.T. White, then Government Botanist in Queensland. No records exist of the original source from which Mr. White obtained the seed. It spread from the farm of Mr. Hamil and came to the notice of Mr. D.O. Otherton, Director of Tropical Agriculture and Stock, in 1956. He named it Hamil grass after the man who had pioneered it.

Morphological description (1 et al)

A tall, tufted perennial, possessing shortly creeping rhizomes, and rooting freely from stem nodes when coming into contact with moist soil. It may reach 2.4-3.0 m or even 4 m (4) in height and is more robust and coarser in appearance than the ordinary commercial Guinea grass and in these respects more like the giant or Coloniao type. Leaves are blue-green (4), broad, flat, long, and tapering to a fine point, prominently veined and with slightly scabrid margins; blades and sheaths are softly hairy and less hairy than ordinary Guinea grass; hairs usually tubercle-based. Ligule consists of a ring of short hairs or bristles and no auricles are present. The inflorescence is a large open panicle with lower branches tending to be whorled. The spikelets 3.0-3.5 mm long, glabrous, and flushed with purple, are 2-flowered; the upper floret fertile. The lower glume is 5-nerved and 1/4-1/3 length is spikelet, the upper is the same length as the sterile lemma; the fertile lemma is hard and finely but distinctly transversely ridged or wrinkled; the palea is rather similar to the lemma but with two slight ribs. Commercial seed usually consists of the spikelets; the outer glumers and sterile lemma rub off easily, however, leaving the lemma and palea closely investing the caryopsis; seeds about 2.25-2.50 mm long, ellipsoidal, straw-coloured, and approx. 1,600,000 per kg.

Agronomic characters (1-4)

Is summer-growing and adapted to frost-free, warm, and moist conditions such as obtain in the higher rainfall areas of the northern coastal region of Queensland. Is most suited to fertile scrub soils. Maximum growth occurs during the wet season and under suitable conditions of soil and climate gives high forage yields. Its use and management are much the same as for ordinary Guinea grass. During the wet season whilst growth is most active the stems and leaves are succulent and palatable to cattle. In the dry season after haying off, however, cv. Hamil appears less palatable than most other summergrowing grasses. Seed set is poor but is rather higher than in most other varieties of Panicum maximum. Probably predominantly opomictic as most other types of Panicum maximum (5).

References

- 1. Atherton, D.O. (1963). Personal communication. Qld. Dep. Agric. and Stock, Brisbane.
- 2. Atkins, A.V. (1966). Personal communication. Agric. Branch, N.T. Admin, Darwin.
- 3. Douglas, N.J., and Luck, P.E. (1964). Farmers' guide to tropical pastures in south-east Queensland. *Qd agric.* **90**, 583-94.
- 4. Walsh, S.R. (1959). Improved pastures will fatten cattle in far North. Qd agric. J. 85, 576-92.
- 5. Warmke, H.E. (1954). Apomixis in Panicum maximum. *Am. J. Bot.* **41**, 5-11.