Register of Australian Herbage Plant Cultivars

A. Grasses
13. Rhodes

Chloris gayana Kunth. (Rhodes grass) cv. Callide

Reg. No. A-13a-3 Registered September 1967

Published in the 2nd Edition of Register of Australian Herbage Plant Cultivars 1972

Origin

Introduced as "Giant Rhodes grass" by the Queensland Department of Agriculture and Stock (Q.3307) in 1953, from Mpwapwa Pasture Research Station in Tanganyika (5). In Kenya this variety is known as Mpwapwa and in Tanzania as Kongwa (1,2). It was re-introduced from Australia into Kenya under the name cv. Australian (2). Callide was first established at Biloela Research Station in central Queensland, where its excellent agronomic performance largely prompted its release in August 1963 by the Queensland Plant Liaison Committee under the cultivar name Callide. Submitted and recommended for registration by the Queensland Herbage Plant Liaison Committee. Registered September 1967.

Morphological description (3,5,6)

Callide belongs to the "Giant" group of Rhodes grasses and as such is coarser in appearance than the fine-leaved Katambora, Pioneer, and Samford. Generally all parts of the plant are larger than corresponding parts in Pioneer, e.g. its leaves are broader and between 6-9 cm wide. It is strongly stoloniferous. The glumes surrounding the seed are more hairy than those of Pioneer. It is a tetraploid, chromosome number 2n = 40 (8).

Agronomic characters (3-6)

It is adapted to the same general region as Pioneer though there is some evidence that it is less drought-tolerant and like Samford appears better suited to the coastal and subcoastal areas of the subtropics of Queensland. The main flowering period is in April, and it is thus slightly earlier than Samford. Seed is rarely ready for harvest before June at Biloela. Like Samford, its late-flowering habit gives it an advantage over Pioneer, in that it remains productive and leafy well into autumn and its late summer production is often far superior. Palatability is good even when mature, and in animal studies intake has been 1 1/2 times that of Pioneer and also higher than Samford (7). It produces a good yield of seed, though the more hairy glumes have prevented the winnowing or gravity grading of seed being entirely successful in cleaning the seed. Like Samford it has responded well to both nitrogen fertilizer and irrigation.

References

- 1. Bogdan, A.V. (1961). Intra variety variation in Rhodes grass (*Chloris gayana* Kunth.) in Kenya. *J. Br. Grassld. Soc.* **16**, 238-9.
- 2. Bogdan, A.V. (1969). Review article: Rhodes grass. Herb. Abstr. 39(1), 1-13.
- 3. Davidson, Dorothy E. (1966). Five pasture plants for Queensland. Qd. Agric. J. 92, 460-6.
- 4. Douglas, N.J., and Luck, P.E. (1964). Farmers' guide to tropical pastures in south-east Queensland. *Qd. Agric. J.* **90**, 583-94.
- 5. Grof, B. (1961). Two pasture grasses show promise. *Qd. Agric. J.* **87**, 741-2.
- 6. Hall, R.L. (1967). Personal communication. CSIRO Div. Trop. Pastures, St. Lucia, Old.
- 7. Milford, R. (1967). Personal communication. Cooper Lab., CSIRO Div. Trop. Pastures, Lawes, Qld.
- 8. Pritchard, A.J., and Gould, K.F. (1964). Chromosome number in some introduced and indigenous legumes and grasses. CSIRO Aust. Div. Trop. Past. Tech. Pap. No. 2.