

Register of Australian Herbage Plant Cultivars

A. Grasses

2. Ryegrass

Lolium perenne L. (perennial ryegrass) cv. Tasdale

Reg. No. A-2a-6

Registered October 1968

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Origin

This cultivar originated as a local ecotype from an old pasture at the Scottsdale School Farm which had been sown down prior to 1929. The first seed collection was made by the Tasmanian Department of Agriculture in 1953 and this was tested in spaced plant and small sward trials between 1954 and 1958. The line was subsequently included in district field trials between 1959 and 1966 and, on the basis of these tests, submitted for registration by the Department of Agriculture without any form of deliberate selection as a new, distinct, and superior cultivar. Recommended for registration by the Tasmanian Herbage Plant Liaison Committee and registered October 1968. It was released and certified by the Tasmanian Department of Agriculture and breeder's seed is held by that Department.

Morphological description

On an individual plant basis cv. Tasdale is not distinguishable from other perennial ryegrass cultivars, but compared to cv. Grasslands Ruanui and cv. Tasmanian No. 1 the population as a whole differs in the following respects. It is a slightly deeper shade of green, more erect, and mature leaves are 1-2 mm broader than fully developed leaves on either of these cultivars. It has a lower tiller number per plant, a lower leaf/stem ratio, and it forms a more open sward during the early stages of establishment. Maturity is early mid season with Tasdale flowering approximately 5 days earlier than Grasslands Ruanui.

Agronomic characters

Since 1958 Tasdale has been tested at 13 sites in the main pastoral regions around Tasmania, with annual rainfall averages ranging from 460-1120 mm. These tests were conducted in the form of replicated grass-clover swards comparing the dry matter production and persistence of cv. Tasdale with the main commercial cultivars of perennial ryegrass under intermittent grazing for a 4-5 yr period. The results showed that Tasdale was generally more productive and more persistent than Grasslands Ruanui over a wide range of environments. It was more productive than Tasmanian No. 1 in autumn, winter, and spring and more persistent under severe moisture stress. It was more productive than cv. Victorian during the summer, autumn, and winter but it did not differ significantly from this cultivar in persistence.

Continuation of these trials for a further 3-4 yr period corroborated the above result and showed that Tasdale was more productive than each of the other varieties in all seasons, with the largest percentage differences occurring in the autumn and winter; and the differences were greater in the low than the high rainfall areas (1).

There are no apparent differences in the rates of germination and seedling growth between Tasdale, Grasslands Ruanui, and Tasmanian No. 1 during the first month but Tasdale has a subsequent higher growth rate and recovery throughout the establishment phase and during the autumn, winter, and early spring in established swards. From the first month after germination the number of tillers produced in the new cultivar is less than for Tasmanian No. 1, but tiller growth and tiller recovery is generally more rapid than for either of the commercial cultivars.

Tasdale is similar to cv. Tasmanian No. 1 in susceptibility to rust and winter injury. *In vitro* tests have not shown any consistent difference in digestibility as compared with cv. Tasmanian No. 1 and cv. Grasslands Ruanui at similar stages of growth.

References

1. Martin, G.J. (1971). Tasdale - a new perennial ryegrass. *Tasm. J. Agric.* **42**, 80-3.