Register of Australian Herbage Plant Cultivars

A. Grasses
3. Phalaris
Phalaris aquatica L. (phalaris) cv. Siro Seedmaster

Reg. No. A-3a-2
Registered prior to December 1971

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Origin

Bred by J.R. McWilliam and H.E. Schroeder, Division of Plant Industry, CSIRO, from material introduced from Argentina (C.P.I.24947 and 25779). These introductions were both of the variety Pergamino No. 1(El Gaucho), which was developed in Argentina and is closely related to and virtually indistinguishable from Australian phalaris, the original seed having been sent to Argentina from Australia. The Argentina material had, however, a higher average seed retention and a greater range of variation for this character than Australian phalaris. Selection with major emphasis on seed retention and minor emphasis on seedling vigour and plant habit was effected by the truncation method using independent culling levels. Seed released in 1965. Seed certified in New South Wales, Victoria, and South Australia.

Morphological description (1-3)

Morphologically almost indistinguishable from Australian phalaris in vegetative characters. The inflorescence, however, has a shorter main axis and shorter and stiffer secondary branches making it more compact; the individual florets are also more closely packed. The seed is somewhat shorter and broader than that of cv. Australian, the ratios of length-width being 2.19 and 2.69 respectively.

Agronomic characters (1-3)

Siro Seedmaster is similar in all important agronomic characteristics to Australian phalaris except that seed is not shed from the inflorescence so readily at maturity. Agronomic characters tested include seasonal and total annual yields of herbage, establishment, seedling vigour, maturity time, and digestibility. In comparative trials, however, conducted in Tasmania this cultivar has been found less competitively vigorous and vegetatively productive than cv. Australian (4).

In trials at Canberra seed set per inflorescence in cv. Siro Seedmaster was similar or even greater than in Australian; the percentage of seed retained per inflorescence was 78 compared with 32 in Australian; and the yield of clean seed per ha 454 kg compared with 163 kg.

References

1. McWilliam, J.R. (1963). Selection for seed retention in *Phalaris tuberosa* L. *Aust. J. Agric. Res*. **14**, 755-64.
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4. Martin, G.J. (1970). Grasses for improved pastures. *Tasm. J. Agric*. **41**, 10-14.