Register of Australian Herbage Plant Cultivars

B. Legumes
8. Lucerne
a. Medicago sativa L. (lucerne)

cv. Siro Peruvian
Reg. No. B-8a-4
Registered prior to December 1971

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Origin

The cultivar Hairy Peruvian originated from an ecotype in the Chilean-Peruivan region of South America from material introduced during the period of the Spanish conquest (2). It was introduced into the U.S.A. from Peru by the U.S.D.A. in 1899 (18). CSIRO introduced material from the U.S.A in 1930 (C.P.I. 1353), and on a number of subsequent occasions. Results of trials in Australia were rather conflicting (1, 7, 8, 9, 12, 13, 15). These different results were primarily attributable to variations between the lines of Hairy Peruvian tested (16). Material derived from one particular introduction (C.P.I. 21611) was multiplied under the aegis of the South Australian Department of Agriculture, a foundation seed area established at Wanbi Research Station, and seed from it first certified in 1964-5, under‘ the name Hairy Peruvian. The South Australian Herbage Plant Liaison Committee renamed it Siro Peruvian in 1967.

Morphological description

Habit is erect and compared with Hunter River the stems are coarser and less leafy and the leaflets larger and thicker. It cannot readily be distinguished from cv. African. The leaflets of Siro Peruvian do not have the dense pubescence which is a feature of most lines of Hairy Peruvian in the U.S.A. (18). Seeds are slightly larger than Hunter River and average 350 000-360 000/kg.

Agronomic characters (3-7, 10, 11, 14, 15, 17)

Siro Peruvian is a non-dormant winter type with a long growing period and the ability to make winter growth in mild climates. It is more susceptible to frost damage than Hunter River. Under mild winter temperatures it has given higher yields in late autumn and winter than Hunter River. In spring and summer, yields comparable with or a little higher than Hunter River obtained in most locations. Under hot summer conditions with irrigation Deniliquin, N.S.W., and at Biloela in Queensland, Siro Peruvian gave much higher summer as well as winter yields than Hunter River.

Recovery after cutting is rapid. Persistence, however, is poor and stands are short-lived; on the Tablelands of New South Wales crops thin out after 3-4 years; at Narrabri, N.S.W., under dry land conditions, autumn-winter yield dropped behind that of the Hunter River during the third season; while at Deniliquin, N.S.W., lack of persistence compared with Hunter River was more marked under irrigation than dryland conditions.

Nodulation requirements are the same as for Hunter River.

References

1. Angove, P.C. (1941). Lucerne growing on Eyre Peninsula. *J. Dep. Agric. S. Aust.* **45**, 273-82.
2. Bolton, J.L. (1962). *Alfalfa* (Leonard Hill Books Ltd., London.)
3. Cameron, D.G. (1966). New lucernes for Queensland. *Qd. Agric. J.* **92**, 553-5.
4. Campbell, B.G. (1966). Personal communication. Tasm. Dep. Agric., Hobart.
5. Crawford, E.J. (1968). Seasonal production and persistence of a collection of introduced lucernes. *Aust. J. Exp. Agric. Anim. Husb.* **8**, 691-4.
6. Daday, H. (1965). Performance of lucerne varieties on the South Coast of N.S.W. *Aust. J. Exp. Agric. Anim. Husb.* **5**, 44-5.
7. Daday, H., Mottershead, B.E., and Rogers. V.E. (1961). Performance and interactions in varieties of lucerne (*Medicago sativa* L.) *Aust. J. Exp. Agric. Anim. Husb.* **1**, 67-72.
8. Dunne, T.C. (1935). Lucerne varieties. Row trials at Muresk. *J. Dep. Agric. West. Aust.* **12**, 184-5.
9. Edye, L.A., Haydock, K.P., and Saunders, A.M. (1961). Cereal and Pasture Plant Breeders' Conference, Canberra.
10. Launders, T.E. (1970). Production and persistence of six lucerne cultivars at Narrabri, New South Wales. *Aust. J. Exp. Agric. Anim. Husb.* **10**, 745-8.
11. Leach, G.J. (1971). The yield and survival of lucerne lines in the upper south-east of South Australia. *Aust. J. Exp. Agric. Anim. Husb.* **11**, 186-93.
12. McTaggart, A. (1937). Lucerne culture. Introduced varieties compared with the standard variety (Hunter River) under F.C.T. conditions. *J. Coun. Scient. Ind. Res. Aust.* **10**, 212-15.
13. McTaggart, A. (1943). Lucerne culture. Old and new introduced varieties compared in yield with the standard variety (Hunter River) under F.C.T. conditions. *J. Coun. Scient. Ind. Res. Aust.* **16**, 124-8.
14. Rogers, V.E. (1961). Lucerne variety trails at Deniliquin, N.S.W. *Aust. J. Exp. Agric. Anim. Husb.* **1**, 60-6.
15. Rogers, V.E. (1963). A comparison of two Spanish lucernes with Hunter River and Hairy Peruvian lucerne at Deniliquin, N.S.W. *CSIRO Aust. Div. Pl. Ind. Fld. Sta. Res.* No.2(2), pp. 35-40.
16. Rogers, V.E. (1966). Personal communication. CSIRO Div. Plant Ind., Deniliquin, N.S.W.
17. Rogers, A.L., and Bailey, E.T. (1968). A lucerne variety trial in south-western Australia. *CSIRO Aust. Div. Pl. Ind. Fld. Sta. Res.* No.7, pp. 37-46.
18. Westover, H.L. (1946). Alfalfa varieties in the United States. U.S. Dep. Agric. Fmrs'. Bull. 1731.