Register of Australian Herbage Plant Cultivars

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

cv. African
Reg. No. B-8a-3
Registered prior to December 1971

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Origin

Derived from seed introduced into the U.S.A. by the United States Department of Agriculture in 1924 from Hegazi in Egypt (2). In California it did well in tests (11). Seed was produced form plants surviving after several years, and African became commercially available by 1948 (11). Foundation seed is maintained by the California and Arizona Agricultural Experiment Stations (2). The earliest introduction to Australia was made by CSIRO in 1954 (C.P.I. 18402). CSIRO and several State Departments of Agricultural tested it at a number of locations (3-9). Seed from C.P.I. 21610, an introduction from Vaughan Seed Co., New York, obtained in 1956 was multiplied under the aegis of the South Australian Department of Agriculture and first certified by it in 1962-63.

Morphological description

Habit of growth is upright with fewer but slightly coarser and taller-growing stems and larger and thicker leaflets than cv. Hunter River. It is thus very similar in general appearance to Siro Peruvian and difficult to distinguish from that cultivar; flower colour may tend slightly more to the purple shade. The seed are slightly larger than those of Hunter River and average about 396 000/kg.

Agronomic characters

Results of experience in Australia agree with reported performance of this cultivar in the U.S.A. (1, 2, 11). It has little winter dormancy and makes good growth in very early spring and late autumn; it is, however, susceptible to early and late frosts. Growth under high summer temperatures is good provided adequate moisture is available. It possesses a high degree of seedling vigour and establishes rapidly and recovers quickly after cutting.

In trials at Milton and Deniliquin in New South Wales and in South Australia, African gave greater winter yields than Hunter River. In colder situations, however, dry matter loss through frost was large: 50-70% damage to dry matter having been estimated for the New South Wales Tablelands. At Deniliquin, under irrigation and with high summer temperatures, African outyielded Hunter River but in other locations where lower summer temperatures obtained the yield of African was not much, if any, greater than Hunter River during summer. It is less persistent than Hunter River, stands rapidly thinning out after 3-4 years. It is also reported more sensitive to waterlogging damage than Hunter River. It flowers 3-4 days before Hunter River (4). Nodulation requirements same as for Hunter River.

Its profitable usage would seem dependent on the production of better growth than Hunter River under conditions of mild winter temperatures and/or high summer temperatures under irrigation.

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