

Register of Australian Herbage Plant Cultivars

A. Grasses

9. Forage Sorghum

Sorghum spp. hybrid. (forage sorghum hybrids) cv. Sudax SX-11A

Reg. No. A-9d-1

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Origin

Cv. Sudax SX-11A is the F1 cross between selected lines of male sterile grain sorghum and Sudan grass and was initially tested and selected at Lubbock, Texas. It was first released in Australia in 1961 and is closely related to Sudax 11 which was produced by the Dekalb Agricultural Association Inc. of Illinois, U.S.A., in 1958. Sudax SX-11A is a F1 hybrid and does not breed true in succeeding generations. The type is maintained solely through the parental lines which are the property of the Dekalb Agricultural Association Inc. of Illinois, and are propagated under arrangement by the Dekalb Shand Seed Company Pty. Ltd., of Tamworth, N.S.W.

Morphological description (4)

An annual or short-lived perennial, 3-3.6 m high at maturity, usually 30-60 cm taller than Greenleaf Sudan grass and of a general purple colour. The stem is slender but thicker than in Sudan grass, juicy, and reasonably sweet; it produces more tillers than the sweet sorghums but not as many as Sudan grass. The leaves are usually 8 or 9 per stem and have cloudy midribs. The inflorescence is of the Sudan grass type, large and spreading, rather lax, and sparsely fruited. The glumes are black, non-pubescent, long with acute apices, and have a hard texture; awns are present. The stigmas are yellow at flowering. The F1 grain is red, ovoid, with starchy endosperm and no nucellar layer; it threshes free of the glumes. The F2 grain produced from the F1 plant is brown with semi-persistent glumes.

Agronomic characters

Sudax SX-11A is adapted to areas where Sudan grass and forage sorghums are successful. It is normally an annual but may persist for more than one season if irrigated in the dry season (1). It is killed by frost but stalks may remain juicy for some time (3).

Like other sorghums it requires reasonably high soil temperatures for germination (2). It makes very rapid growth under favourable conditions, recovers quickly after grazing, and gives high yields (2,3,5,6). Highest yields are obtained under frequent cutting or grazing (6). Grown for summer grazing it has given yields similar to Zulu and 25-100% higher than the sweet Sudan grasses Lahoma and SS.6, under both dry land and irrigated conditions (6). Grown for autumn and winter forage it has again given similar yields to Zulu and similar or much greater yields than popular sweet sorghum varieties (6). It is not very suitable for hay but makes excellent silage (2).

In the Darwin area, dry matter production is almost as high as bulrush millet in the wet season and crude protein content is higher (1). It gives excellent all-season production; is superior to *Sorghum alnum* because of its greater resistance to disease and higher productivity and to bulrush millet because of its greater production under irrigation in the dry season (1).

References

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