

# Register of Australian Herbage Plant Cultivars

## A. Grasses

### 9. Forage Sorghum

#### *Sorghum* spp. hybrid. (sweet Sudan grass hybrids) cv. Piper

Reg. No. A-9c-3

Registered December 1968

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#### Origin

This variety was bred at the Wisconsin Agricultural Experimental Station, Madison, through a series of crosses between the variety Tift and a selection of lines low in hydrocyanic acid obtained from the Texas and Kansas Agricultural Experiment Stations. Repeated testing and selection from the crosses yielded Piper, which was released in 1950 by the Wisconsin Agricultural Experimental Station (1). This Station currently holds breeder's seed (3). It is listed among the varieties eligible for certification under the O.E.C.D. scheme (3). It is classified in this listing as a variety of *Sorghum sudanense* (Piper) Stapf.

Seed of Piper was introduced by the New South Wales Department of Agriculture from the United States Department of Agriculture in 1961, and grown for seed increase under isolation. Piper was then grown by the New South Wales Department of Agriculture in comparative tests with other commercially used Sudan grasses and forage sorghum hybrids. Seed was also distributed by the Department for trial by other institutions and organizations. Certified by the New South Wales Department of Agriculture in 1966-67.

It was submitted for registration by the New South Wales Department of Agriculture and recommended for registration by the New South Wales Herbage Plant Liaison Committee in November 1968. Registered December 1968.

#### Morphological description (2,4)

Growth is rather more vigorous and plants generally taller than in Lahoma and SS.6 sweet Sudan grasses. Leaves have blue-green colour intermediate between that of SS.6 and Lahoma and white midribs as opposed to the cloudy or greenish mid-ribs of the two sweet Sudan grass varieties. It is early-maturing and mostly dry-stalked. Seed colour is mixed with both light and dark-coloured seeds; the number of seeds per kg approx. 100,000.

#### Agronomic characters (2)

Tests since 1964-5 have shown Piper to be a little inferior in yielding ability to some of the improved forage sorghum hybrids and in all trials it has significantly outyielded both SS.6 and Lahoma sweet Sudan grasses.

Piper shows strong seedling vigour and grows rapidly under good conditions. It tillers prolifically and rapidly within a few days after grazing if moisture is available and temperatures are suitable. Its early recovery from grazing appears to be more rapid than with the hybrid forage sorghums.

While growth and production during the late spring and summer months may be a little less than the hybrids, the autumn growth appears to be better. Compared with SS.6 and Lahoma Sudan grasses, summer yield of Piper is 25-50% greater and yield of autumn forage appears to be double.

It is comparatively low in prussic acid potential. In some American locations it has shown resistance to leaf blight and other diseases but observations in this regard have not been made in New South Wales.

## References

1. Hanson, A.A. (1959). Grass varieties in the United States. U.S.D.A. agric. Handb. No. 170.
2. Launders, T.E. (1968). Piper - a new Sudan grass that rivals hybrid forages for grazing. *Agric. Gaz. N.S.W.* **79**, 130-3.
3. O.E.C.D. (1967). List of cultivars eligible for certification under the O.E.C.D. scheme. AGR-T(67)3. (FAO, Paris.)
4. Pickett, R.C. (1955). Sudan grass (*Sorghum vulgare sudanense*) in Kansas. Kans. Agric. Exp. Stn Circ. 311, 28, pp.