Register of Australian Herbage Plant Cultivars

B. Legumes 12. Stylo a. *Stylosanthes guianensis* (Aubl.) Sw. var. *guianensis* (stylo)

cv. Cook Reg. No. B-12a-3 Registered September 1971

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Origin

Derived from seed collected (C.P.I. 38754) in Colombia in 1965, by W.T. Atkinson of the New South Wales Department of Agriculture, the exact site of collection being 83 km from Bogata on the road to Villavicencio. This locality (lat. 4°N, long, 77°W.) has an altitude of 1250 m and an annual rainfall of 3960 mm, with an 11-month growing season. This seed is identical with C.P.I. 40368 which derived from a subsample (taken as P.I.208547) by the United States Department of Agriculture from the original collection.

C.P.I. 38754 (Q.11075) was selected from a number of other introduced lines from a preliminary screening trial over several seasons conducted jointly by the Queensland Department of Primary Industries and the CSIRO Division of Tropical Pastures. It was then subjected to comparative field trials by the Queensland Department of Primary Industries at South Johnstone over several seasons.

Submitted by the Queensland Department of Primary Industries and recommended for registration by the Queensland Herbage Plant Liaison Committee. Registered September 1971.

Morphological description

cv. Cook is a robust, erect to semi-erect perennial which can attain a height of 120 cm. Stems and leaves are densely pubescent and viscous. The stipules, which partly clasp the stem, are a bright red. The leaflets are lanceolate, both surfaces pubescent and dark green in colour. The flowers are surrounded by 2 reddish hairy bracteoles and have an orange-coloured standard with purple stripe down the centre. The wings are a lighter yellow. Seeds are yellow, yellow-brown, or olive-green, unsymmetrically reniform with the radicle end short and curved, and an average length of 2.5 mm.

Cook differs from cv. Schofield in having stems that are densely pubescent rather than slightly pilose on one side only; leaflets more lanceolate than elliptic and green to blue-green in colour; and an orange instead of yellow standard.

Agronomic characters

Cook is a mid-season flowering type at South Johnstone, where it flowers eight weeks earlier than cv. Schofield. It has proved to be vigorous, aggressive, and high-yielding at all stages and has established well with a range of grasses both stoloniferous and tufted. It has in fact tended to suppress grass yield at initial harvests in one experiment at South Johnstone. It competes well with weeds and has regularly shown lower weed levels in the cv. Schofield. It nodulates readily with the standard inoculant (based on CB756) for the species.

Cook has given higher yields than cv. Schofield during all seasons of the year and, in particular, it has given very good cool season yields; it is able more fully to utilise the moisture and temperature conditions in the wet tropics at this time of the year.

Being much earlier flowering and seeding than cv. Schofield, it is anticipated that Cook will be particularly useful in extending the areas in which perennial *Stylosanthes* species can be grown in tropical areas of northern Australia.

Reference

1. Harding, W.A.T., and Cameron, D.G. (1972). New pasture legumes for the wet tropics. *Qd. Agric. J.* **98**, 394-406.