Register of Australian Herbage Plant Cultivars

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

cv. Schofield
Reg. No. B-12a-1
Registered prior to December 1971

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Origin

This cultivar, which is naturalised in northern Queensland, has been derived from several introductions of material from Brazil. The earliest introductions were made in 1933, one by the Queensland Department of Agriculture and Stock (10), a second (C.P.I 5630) by CSIRO (2). The CSIRO introduction performed well on light soils in trails at Gatton and later at Fitzroyvale near Rockhampton in Queensland, and at the Kimberley Research Station, Western Australia (6). The Department of Agriculture and Stock introduction grew well in initial trials at Sarina, Tully, and Innisfail in north Queensland and was later tested extensively in northern (10) and southern Queensland (11). Seed has been available commercially for many years under the popular name of 'stylo'. The cultivar name for this line was applied by the Queensland Herbage Plant Liaison Committee in 1966.

Morphological description (4, 7)

An erect herbaceous perennial which may become more prostrate under grazing pressure. Main stem branches above soil level; old ligneous stems slightly pilose on one side; herbaceous stems 60-90 cm pilose with long glandular hairs. Leaves pinnately trifoliate; stipules bidentate, adnate to base of petiole, 3-5 nerves on each side, same indumentation as herbaceous stems; free portion of petiole 6-15 mm long. Leaflet elliptic, 15-55 mm long and 7-13 mm wide, with some long hairs on the lower surface on the mid vein. Inflorescence consists of several spikes of a few flowers crowded into terminal heads; the spikes are sessile in unifoliate bracts and are hirsute or pilose with viscid yellowish hairs and there is no axis rudiment; there is one inner and one outer bracteole to each flower which has a yellow corolla. The pod is a glabrous lomentum with one fertile articulation and a very small beak. Seeds yellowish brown, unsymmetrically subreniform with the radicle end short and curved, averaging 1.75 mm long and approximately 264 000/kg. Chromosome number 2n = 20 (4).

Cv. Schofield is easily distinguished from cv. Oxley because the latter has an underground crown and finer stems with smaller leaflets.

Agronomic characters (1-4, 8-12)

cv. Schofield is adapted to frost-free or nearly frost-free humid tropical conditions with an annual rainfall of 1500 mm or more. There is some evidence that it is highly efficient in phosphorus uptake and will certainly grow on a wide range of soils of inherent low fertility. Growth commences with the spring rains and reaches a peak during late summer. It requires a day length of less than 12 hours for flowering; in the more northern latitudes in Queensland, flowering commences in late May or June; in the south during April. Flowering is rather diffuse. It is more suitable therefore for the long growing season of the humid coastal forest and ti-tree country north of the tropic of Capricorn.

A high proportion of hard seed is produced and the seed falls at maturity: spread from seed is good in most situations.

Unlike other *Stylosanthes* cultivars such as Oxley, cv. Schofield readily nodulates with indigenous *Rhizobium* strains and with commercial cowpea inoculant (8). It possibly does not fix nitrogen as well as some other tropical legumes but after 4-6 years grass benefits from association with it.

It combines well with Guinea and molasses grasses under lenient grazing but does not tolerate vigorous creeping grasses like pangola. It is intolerant of short defoliation under close cycle of grazing,

and under such treatment its content in a mixed pasture is rapidly depleted. The green material is not very palatable to cattle in early stages of growth but is readily eaten at maturity.

References

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