Register of Australian Herbage Plant Cultivars

B. Legumes3. Lablab-MacrotylomaLablab purpureus (L.) Sweet (lablab bean) cv. Highworth

Reg. No. B-3a-2 Registered December 1973

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Origin

Introduced as CPI 30212 in Dr. Parberry's Asian collection in August-September 1961 from the Agricultural Research Institute, Coimbatoire, South India, and subsequently tested as Q 6059 at Parada Research Station, Queensland Department of Primary Industries from April 1963.

Q 6059 was selected from a range of *Lablab purpureus* lines because of its early flowering and high seed yielding ability coupled with adequate foliage dry matter production. After preliminary screening at the Queensland Department of Primary Industries Research Station at Parada, Biloela, and Brigalow Research Station, it was subjected to detailed field testing at the Brigalow Research Station, Theodore, for use as a pulse and forage legume in subcoastal central Queensland where the early onset of frosts prevents reliable seed production from cv. Rongai.

Submitted by the Queensland Department of Primary Industries and recommended for registration by the Queensland Herbage Plant Liaison Committee. Registered December 1973.

Morphological description (1,2)

A vigorous summer growing herbaceous annual or short-lived perennial; twining in habit when established in spring and early summer and more upright when established in late summer and autumn. Highworth is of midseason maturity, with flowering commencing 3 or 4 weeks earlier than cv. Rongai in north Queensland (1), and up to 6 weeks earlier in central Queensland (2).

Plants of Highworth are morphologically similar to Rongai. In contrast with the white flowers and light brown seeds of cv. Rongai, Highworth flowers are purple; seeds black, when fully mature with some dark brown when ripening is hastened. Highworth also has a small purplish band visible near the leaf axil, which is absent in Rongai. There are 4,000-6,000 seeds per kg.

Agronomic characters (2)

From experimental work in Queensland, Highworth is the best pulse type available in *Lablab purpureus*. At the same time it gives worthwhile forage yields in contrast to earlier flowering lines. Animal production on green Highworth is comparable to that with cv. Rongai and its early growth and erect habit also offer possibilities of a hay crop. It is a dual purpose forage and pulse crop especially in subtropical and subcoastal areas of Queensland.

In contrast to cv. Rongai, flowering and pod maturity of Highworth are earlier and more uniform. The plants are erect, pods are borne above the main body of the foliage, facilitating seed harvest. There is little shattering of seed. In north Queensland total forage yield has been at least equal to that of cv. Rongai and pulse yields have been higher in areas susceptible to frosts. Similar results have been recorded in central Queensland where seed yield of cv. Rongai is very unreliable while yields of Highworth have been higher than 1,000 kg/ha and seed set is reliable.

References

1. Staples, I.B. (1970). Personal communication. Qd. Dept. Primary Industries, Parada.

2. Wildin, J.H. (1973). Personal communication. Qd. Dept. Primary Industries, Brisbane.