

ABSTRACT

The growth, cultural requirements, crude protein content and amino acid composition of different cultivars of winged bean (Psophocarpus tetragonolobus (L.) D.C.) were investigated in Jamaica.

All cultivars were photosensitive, although they differed in their response to daylength. Flowering appeared to be restricted to a daylength less than 12 h. The optimum time of planting for high pod and seed yield was June/July. Crude protein content of all plant parts ranged from 3.9 to 33.9 g per 100 g dry matter, with the mature seeds having the highest value.

The winged bean responded favourably to water as measured in terms of growth and nodulation. Twenty per cent of field capacity was found to be the lower limit, below which, plants became stunted in growth and nodules did not develop.

Growth and nodulation were not differentially affected by combined nitrogen, phosphorus and calcium when applied at different levels.

The winged bean grew vigorously and produced much vegetative growth in the field. Plants were more affected by pests than diseases. Root knot nematode (Meloidogyne spp.) was noted.

Out of the sixteen cultivars studied, four cultivars are recommended for further investigation in Jamaica; Chimbu Illinois, Florida K11, CADP 2 and TPT2.