WHILE the use of legumes for green manuring and forage has received a great deal of attention both in the temperate zones and in the tropics, little information is available on the seed production possibilities of many of the species that show promise in tropical and sub-tropical agriculture. Seed production becomes important whenever extensive acreages are planted and particularly when a new variety or species is disseminated to farmers and planters.

LITERATURE CITED

In a study of the agronomic possibilities of the velvet bean (*Stizolobium deer-ingianum*) in Florida, Scott (4) obtained seed yields of from 20 to 48 bushels per acre using different varieties. A perfect stand seemed to be the most important factor in the determination of yield due particularly to the spreading nature of the plants.

Kennedy and Madson (2) reported on seed production experiments with the mat or moth bean (*Phaseolus aconitifolius*) in California. In a spacing experiment at Kearney Park yields of from 1,557 to 2,614 pounds per acre were obtained. At the University Farm, Davis, yields averaged 715 pounds per acre. This species is an important food crop in India but has never gained much favor in the United States.

Seed yields of several *Crotalaria* species have been reported by McKee (3). At McNeill, Mississippi, in 1927, *Crotalaria spectabilis* yielded at the rate of 890 to 992 pounds per acre. At Gainesville, Florida, seed yields were much lower for four *Crotalaria* species, ranging from 16.5 to 657 pounds per acre. Timson (6) stated that sunn hemp (*Crotalaria juncea*) at the Salisbury Experiment Station usually yields from 400 to 800 pounds of seed per acre. The yields are uncertain due to the presence of a *Vermicularia* blight which sometimes severely attacks the crop. No data are given on the effect of spacing, but for seed production sunn hemp is usually planted in rows 15 to 20 inches apart using about 20 pounds of seed per acre.

Shaw and Khan (5) have reported seed production tests with the pigeon pea (*Cajanus indicus*) and the gram (*Cicer arietinum*). Pigeon pea yields usually range from 600 to 1,800 pounds per acre and the yields of various gram types range from 400 to 1,000 pounds per acre.

In considering alfalfa (*Medicago sativa*), there is a great deal of uncertainty and variability in seed production. Hughes and Henson (1), in generalizing on seed yields in the United States, say that in the corn belt the yields run from 2 to 3 bushels per acre and in the arid west 4 to 6 bushels per acre are common.

EXPERIMENTAL METHODS

In recent years a large number of legumes have been introduced to Hawaii by the Hawaii Agricultural Experiment Station and other local research agencies.

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2Agronomist. The author is indebted to Makoto Takahashi, Frank Mercado, and H. F. Willey for assistance in the collection of the field data.

3Figures in parenthesis refer to "Literature Cited," p. 799.