INHERITANCE STUDIES IN STIZOLOBIUM SPP.

This is in the nature of a preliminary report, the work at present having only proceeded as far as the production of an F 1 generation. The following data are therefore presented for the guidance of whoever shall continue the work.

Stizolobium P.Br. (= Mucuna, Adams) is a genus of the Leguminosae with some 35 species, several of which are of economic value, notably the Florida velvet bean, used as a fodder. M. pruriens is the cowitch, the pods of which have particularly objectionable hairs. The varieties used in the present work were :-

Chinese velvet bean	S. niveum
Lyon bean	S. niveum
Yokohama velvet bean	S. hassjoo
Florida velvet bean	S. deeringianum
Bush velvet bean	S. deeringianum
Osceola velvet bean	(Florida velvet x Lyon bean)
Tracy velvet bean	Probably Yokohama x S. capitatum
Bengal Bean	S. (species unknown)

Tables of comparison of the characters of the F 1 plants with those of the two parents are given below.

M S X 1. Chinese velvet (♀) x Bengal Bean (♂) - 8 plants.

The F 1 here reproduces all the characters of the female (Chinese) parent, including cream coloured flowers (whereas in all other cases white flowers are recessive to coloured) and is judged not to be a hybrid. This was the first cross made, and the correct time for pollination had not been determined.

M S X 2. Chinese velvet (♀) x Yokohama velvet (♂) - 4 plants.

Character	Chinese velvet	Hybrid	Yokohama velvet.
Flower Colour	Cream coloured	Standard light purple. Wings purple. Keel tinged. Calyx light green No hairs.	Standard and wings purple, w. a lighter Keel. Calyx light green. No hairs on calyx.
Seed Pattern	Seed kidney shaped. Silvery ash-grey, w. faint streaks on sides, and sometimes spots on edges.	Seed identical with that of Chinese (female) plant.	Seed kidney shaped. Darker ash-grey than Chinese, but