INTRODUCTION.

An investigation into the genetics of certain species of Stizolobium was started at the Imperial College of Tropical Agriculture, Trinidad, in 1924. Crosses in that year were made by McKinstry (1) and successive generations were investigated by various workers. The objects of the work were, first, to determine the method of inheritance of various characters involved, and second, to select homozygous strains superior to existing forms of Stizolobium used as cover crops. Six crosses were made originally, but of these only three were carried on into the F_2 and F_3, while in the F_4, progeny from the Chinese Velvet X Tracy Velvet cross only was raised.

The present work is a continuation of that on the Chinese Velvet X Tracy Velvet cross and forms an account of the characters appearing in the F_5 generation. In order to connect up previous work, the inheritance of the various factors will be traced through all previous generations.

The parents of the Chinese Velvet X Tracy Velvet cross are:-

Chinese Velvet	S. niveum.
Tracy "	S. hasjoo x S. capitatum.

A description of these has been given in detail by Haigh (1) and will not be reproduced here. Reference should be made to that work or to that of Taylor (1).

The various characters investigated are:-

1. Presence or absence of cotyledonary pattern.
2. Colour of hairs on the growing point.
3. Flower colour.
4. Colour of the pod hairs.

5. The type of hair on the pod.

6. Occurrence of stinging hairs on the pods.

7. The inheritance of white stinging pod hairs.