

INTRODUCTION.

This paper deals with the mode of inheritance, and linkage relationships, of certain characters in *Ricinus communis*, L., the castor-oil plant. *Ricinus* would appear to be a very satisfactory plant for genetic work. It is easily grown; under tropical conditions it is comparatively quick growing; and it is remarkably free from serious pests and diseases. There are a number of well-marked varieties with distinct characteristics; they intercross readily, and the hybridising technique is simple. Tischler⁽¹⁾ gives the haploid chromosome number as ten, so as the work proceeds, it should soon be possible to establish linkage groups and chromosome maps.

In the work, the results from which are described in the following paper, each cross was made and each family was planted and with the primary object of studying the inheritance of a particular character, or the linkage relationships of a particular pair of characters. As the work proceeded fresh characters were discovered and advantage has been taken of the various crosses in which they appeared to study the mode of inheritance and linkage relationships of the factors which govern their appearance. Thus with a few of the newly discovered factors, the method of inheritance and the linkage relationships are not so fully worked out, nor presented in the exact manner that they would have been, had the writer had an opportunity of continuing this study in the field.

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