I. INTRODUCTION

About 200 species of the genus Coleus have been described from such diverse areas as Africa, Madagascar, the Malayan Archipelago, the East Indies, Australia and the Philippine Islands. It ranges from annual to perennial in life form and from branching herbs to small shrubs in habit.

Several members of the genus exhibit coloured foliage and for this reason have been used as ornamental plants throughout the world, although the genus is native to the Old World. Boye and Rife (1938) consider the history of cultivation to indicate the probable derivation of the 200 odd varieties from crosses between four species. In Trinidad, under favourable conditions of moisture and shade, two cultivated "species" have become well established as "escapes". These are C. atropurpureus and C. blumei.

Within the species identified as Coleus blumei, there is a considerable range of variation in respect of the intensity and distribution of pigments, and also in shape and texture of the leaves. The species would, therefore, seem to provide excellent material for genetical investigation.

This paper is a report on the continuation of the work of Smartt (1954), who collected and classified a total of fourteen clones, as cuttings. Five of these were taken from wild populations growing under cacao and the remainder were obtained from local nurseries and private gardens.

After a hybridisation programme had been started, it was discovered that the clones were heterozygous and subsequent work has been principally concerned with resolving this material into pure lines, as a prelude to further investigation.