

## OBJECT OF INVESTIGATION.

The object of this investigation is to establish strains of sunflowers, which will set a high proportion of viable seed and show desirable characteristics when grown as a cover crop or green manure, under the climatic conditions of Trinidad.

The methods adopted in this investigation are concerned with:-

1. Breeding methods and selection.
2. Experimentation and observations.

## INTRODUCTION.

The sunflower may be grown for several purposes and has a variety of uses. These will be dealt with later.

In Trinidad, the economic functions of sunflowers as a crop, depend principally upon the ability of the sunflower to grow as an efficient cover crop or green manure.

Furthermore, strains of sunflowers must be grown which are capable of providing a source of cheap home-grown seed, as it would be uneconomic to import seed for these relatively unproductive purposes.

Past experience of growing sunflowers in Trinidad has shown that imported strains tend to produce a low percentage of viable seed.

During the past two years and this year, breeding work and selection have been concerned with producing vigorous leafy plants, which set a high proportion of sound seed.

The selection of strains has been supplemented and facilitated by experimentation and observations on the type and habit of growth of the sunflower plant.

The botany and genetics of the sunflower having been extensively reviewed by the two previous workers, it has been the aim of the present writer to give greater consideration to the economic and agricultural aspects of the subject.