

I N T R O D U C T I O N

The addition of organic manures to the soil is practically universal under all systems of permanent agriculture. It is true that recently the use of artificial, inorganic fertilisers in Western Agriculture has tended, in some cases, to replace the more expensive farmyard manure. However, it is still generally believed that the maintenance of fertility of most soils is only possible where organic manures are used to balance losses of humus from the soil.

Under systems of mixed agriculture the production of farmyard, or pen manure is usually sufficient to keep up the humus content of the soil. However, where stock are scarce, or absent, other methods have to be resorted to. Green manuring presents one alternative, but better results have been obtained by the use of artificial organic manures, or "composts". Such manures may be prepared by the decomposition of crop residues, and other waste materials, until a product resembling soil humus is obtained.

Under the supervision of Professor R.C. Wood, several students have studied the process of composting at the Imperial College of Tropical Agriculture, Trinidad. This dissertation gives an account of the continuation and amplification of that work during the period of October 1936 to June 1937.

In part one all relevant previous work has been reviewed and discussed. Experiments on composting conducted by the writer on the College Farm are described in part two, while field experiments, designed to test some of the composts made, are described in part three. Finally, the results of these experiments are discussed in the light of previous work on the subject.