

I. INTRODUCTION

It has been ^{SH}known, (McColloch, 1926), that 95 % of all known species of insects spend some part of their life histories in the soil. Many of these are pests of crops, and it is therefore of importance that the agriculturist should know something of the arthropod fauna of the soil he cultivates.

It is a well established fact that the composition - both specifically and numerically - of the Soil Fauna varies with relation to climatic and topographic factors the world over. In Temperate countries the work of Morris, Cameron, Ford, (in England), Tragardh (in Sweden), King, Jacot, and McColloch (in North America), has provided a mass of information from which a number of important conclusions have been drawn. In the tropics, however, very little work - apart from that of Dammenman (in Java), and Van Zwaleuwenberg (in Hawaii), has been done, and virtually nothing is known of the effects soil type or seasonal variations in rainfall, temperature, and other climatic factors, have on the composition of the soil fauna.

The purpose of the present investigation is accordingly three-fold:-

- (1) To devise adequate techniques for sampling the areas under observation, and for the extraction of fauna from the soil samples.
- (2) To undertake preliminary work on the fauna of a number of different soil types under natural forest and estate cacao respectively in order to determine whether or not there is a significant difference between the faunas of different pedologic environments, and
- (3) To undertake preliminary work on the effect of seasonal variations in climate on the fauna of the same soil type under quite different vegetative conditions.

It is to be regretted that wartime restrictions on time and transport have not allowed the original sampling schedule to be maintained, and the results obtained from the abbreviated schedule, although of considerable interest, are not as comprehensive as had been hoped.