

GENERAL INTRODUCTION

Vegetables are particularly susceptible to the depredations of insect pests. In the United States of America, where insecticides are just as important as manures in agricultural practice, Shropshire (12) concludes that "losses from insect damage constitute one of the largest items of expenses in vegetable production".

In the West Indies the annual losses are undoubtedly great, but there is no organised effort to effect control. Wilson (17) states that vegetable crops are especially liable to insect attack, and estimates that a loss of no less than 20 per cent. of the total value of the crop is caused by their ravages. Wolcott (13) asserts that chemical control is little practised as the damage done to vegetables is less spectacular than for example an area of sugar cane blighted by froghopper. Further, new insect pests, for which no empirical method of control can be suggested may appear and render production difficult or impossible. Pickles (11) states that in Trinidad losses are usually accepted by vegetable growers and control is seldom attempted, due to the high cost of materials, difficulty of application, and the effect of heavy rainfall.

Vegetables like cauliflower and tomato, however, are highly profitable when grown free from pests and can therefore bear the cost of control by insecticides.

The aim of the present investigations was to find the most effective measures of controlling the major insect pests of cauliflower, tomato and egg-plant. The entire work was done at the College farm from November 1941 to September 1942.

Cauliflower is the most remunerative of all vegetables grown in the Caribbean area. Its worst pest is the webworm, Hellula phidilealis Walk., which is the limiting factor in production. The tomato is widely grown in the West Indies and is the most important

vegetable produced for export. The major pest of tomato is the mole-cricket, Scapteriscus vicinus Scud., which sometimes causes the complete loss of crop. The egg-plant is one of the most generally used vegetable in the native diet. The flea beetle, Epitrix parvula F., is responsible for considerable damage to this crop.