I - INTRODUCTION

Parasitic nematodes of plants occur in most soils and they often become a problem. During the past twenty years, the use of nematicidal chemicals has increased rapidly. (3, 19)

At present there is competition in the search for new and better nematicides. In order to fulfil the requirements of an ideal nematicide, a chemical must be effective against nematodes, weeds, diseases, easy to apply, long residual effect, non-phytotoxic and reasonably priced.

The use of nematicides will be necessary, for the following reasons:

Firstly, crop rotation may not be a profitable proposition because many species of nematodes have several alternative host plants, and also a particular area often includes a complex of nematode species. (3)

Secondly, modern farming practices require usually, intensive production of limited numbers of crops. This favours an increase in the numbers of plant parasitic nematodes.

Thirdly, even though crop rotations may reduce damage done by nematodes, the best control practices designed for nematode control are often not economical or are not entirely successful in controlling all types of destructive nematodes.

Fourthly, on the other hand farms which are geared towards high production cannot attain this level without nematode control.

Finally, in certain breeding situations it is possible to develop nematode resistant plants, but often these plants are not acceptable commercially or do not satisfy commercial requirements. (17)

About twenty different chemicals and combinations of nematicidal chemicals are currently manufactured. These nematicides are highly volatile compounds and even though they may be highly effective, the nematode population may rapidly build up during a single season. (3)

Presently the Shell Chemical Corporation has developed a non-volatile residual type compound showing nematicidal activity especially against root-knot nematodes (Meloidogyne spp.) ; this experimental nematicide is called SD 7727 (2,4-dichlorophenyl methanesulfonate). (14)

The purpose of this experiment is to test effects of this compound on the tobacco plant.