

profit susceptible plants on land which, before treatment, would not produce them profitably. The reduction, in some cases, amounted to apparent extermination.

#### THE DOSE

The thoroughness of the control will depend upon several factors. The dose is one of the most important. This will depend much upon the depth of the soil or the depth to which the nematodes are found. The character of the soil is, apparently, also important. In one case, a dose of  $\frac{1}{2}$  ton per acre on the very light, sandy, pineapple soils (old established dunes) about Fort Pierce, seem to have produced as good results as 2 or 3 tons on the Station farm at Gainesville.

#### MANNER OF APPLICATION

The manner of application is a very important factor. Cyanamid even when in solution does not penetrate the soil to any considerable depth. It is quickly absorbed by certain constituents of the soil called colloids. The scarcity of these compounds in the sandy soils of the Fort Pierce section probably accounts for the comparative effectiveness of the small dose mentioned above. It is probably this absorption by the colloids which is responsible for the poor results obtained when the material was applied in solution. The top layer of the soil absorbs the material and the nematodes in the deeper layers escape. The same results followed when all of the dose was applied as a top dressing to the plowed land and then disked in. It is therefore necessary to mix the material with the soil as thoroly as practicable. Under farm conditions it would seem that this is best accomplished by spreading somewhat more than half of the amount on the surface, plowing it under as deeply as possible, and then adding the remainder and disking it in thoroly. This method was found most successful on the test plots.

A more uniform distribution can be obtained with a fertilizer spreader and as a uniform distribution is very important, the use of one is strongly recommended. In some cases when the land was not plowed as deeply as desired, the practice of following the plow with a bucket of cyanamid and sprinkling the material in the bottom of the furrow was resorted to. On a small garden plot it is practical to have the cyanamid hoed or spaded in, thus securing a more even distribution.

It is best to choose a dry period for the application of cyanamid as the material will mix better with dry earth. In