

treated soil, egg plants 206 percent more and millet 46 percent more. Other crops also yielded much better after the soil was treated.

The same men with J. B. Smith published in *Phytopathology* the results of a study on the use of chloropicrin for the control of nematodes in tomato greenhouses. They found that chloropicrin and carbon disulfide injected into the soil gave results that compared favorably with those secured by steam sterilization. Dosages of chloropicrin which delayed initial nematode infection until an extensive root system had developed were sufficient to give normal yields.

P. A. Young, of Texas, writing in *Phytopathology*, reported that chloropicrin injected into sandy soil at rates of 250 to 450 pounds to the acre usually controlled all or most of the *Fusarium* wilt troubles with tomatoes, and the root nematode of watermelons, besides killing weed seeds such as those of Johnson grass, crabgrass and pigweed.

A Russian investigator, Mr. Schepetilnikova, found that flax sick soils treated in the laboratory with chloropicrin and tested periodically showed no *Fusarium* or *Asterocystis* spores. The beneficial effect extended into the following year.

THE LEAF CUTTING ANT

While there have been no reports of the leaf cutting ant damaging turf, E. V. Walter, L. A. Seaton and A. Mathewson in the United States Department of Agriculture, Circular 494, state that few plants are immune to attack. Reports have been received of damage to cereal and forage crops in Texas by the species, *Atta texana*. It is not impossible, therefore, that this ant may attack turf.

The ant cuts green vegetation, carries it into its nest and on this decaying vegetation grows a crop of a special fungus on which it feeds. The ants are good gardeners and carefully keep down all fungi not wanted. The ants in a nest range in size from the queens through fighters to the smallest workers. The latter are the gardeners. Larger workers gather pieces of leaves and once they start on a particular tree or crop they seldom let up until all the foliage is stripped.

The best control so far worked out is with carbon disulfide. Under Texas conditions the authors advise that this be injected into the nests between late February and early April as during this time the queens are likely to be in the center of the nest. Later they leave the nest and establish homes of their own, increasing the centers of infection.