

CONCISE PROGRESS REPORT

UTIS KETUDAT

Tobacco Experiment Station, Mae-Jo, Cheing Mai, Thailand

1. Collecting root-knot nematode populations.

— Ecological studies:— Ten samples of soil and egg masses collected from different host plants and different locations were shipped to the N.C. State University, Raleigh, U.S.A.

— Differential host tests were carried out in the glasshouse by using egg masses collected from plants of 3 different locations, and it was found that plants were infected by *M. javanica*.

2. Nematicide tests in the glasshouse and in the field.

Three nematicides were applied to flue-cured tobacco at transplanting when the soil

was infected with root-knot nematode, *M. javanica*. It was found that Vydate L (1410) at the concentration of 1:100 sprayed 3 times at two-week interval gave the best control and Temik 10 G at the rate of 0.3 g/plant was better than Furadan 3 G at the rate of 2.0 g/plant.

3. Breeding for flue-cured tobacco resistant variety to the root-knot nematode, *M. javanica*.

The sources of resistance were derived from the wild variety, *Nicotiana knightiana*. The cross breeding was started 5 years ago and now the final self-pollination is in progress.