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To
The Editor,

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Sir,

I request that the following matter may kindly be published in your esteemed daily:

How to Reduce Nematode Populations in Soil

Nematode population density in soil is one of the major factor which limits the crop yield. The population build up is due to so many factors like availability of favourable host, soil moisture, soil temperature, soil types etc.

Economic threshold level

Department of Nematology, Tamil Nadu Agricultural University is taking up various measures to reduce nematode populations in soil. Dr. M. Sivakumar and Dr. S. Subramanian Professors told that generally a population level of one infective juvenile per cc of soil is the ETL for majority of nematodes. For some endoparasites like lesion nematodes the ETL level / is still low as 0.5 nematodes per cc soil.

The population densities especially females increased when the food availability is more whereas the female population is greatly reduced during adverse conditions when the food availability is less. During such conditions more males will be produced which are non feeding ones. They remain live for about a day or two and die. This is the natural adoptions to tide over the adverse situations.

Normally the population of plant parasitic nematodes are high during the crop, seasons like Kharif and Rabi where the nematode gets more nutrient supply in soil. The populations are low during fallow periods and also during severe drought conditions.

Ways of reducing the nematode populations in soil without deterioration of soil health

Amending the soil with organic additions is the one of the important methods of reducing the soil nematode populations. Organic amendments like Farm Yard Manure deoiled cakes, press mud, green manuring, green leaf manuring etc.

How organic amendments works to reduce nematodes in soil

- ❖ The organic amendments on decomposition releases enormous heat which are sufficient to kill nematodes.
- ❖ During decomposition of organic manures lot of metabolic by products and organic acids are produced which are toxic to nematodes.
- ❖ Organic amendments improve the structure and texture soil, and the alternations are harmful to nematodes.
- ❖ The metabolic byproducts of organic amendments help to improve the growth of nematode antagonistic microflora in soil.
- ❖ Some of the amendments like neem cake itself toxic to nematodes due to the flavanoids present in the soil.

In order to sustain the soil health, the soil is to be properly maintained with sufficient organic amendments which forms the substrate for the growth of nematode antagonistic microflora.

Public Relations Officer