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To

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The Editor,

Sir,

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

**Field inspection for Root wilt Disease and Farmer Scientist
Interactive Meeting at Pollachi**

Coconut plantations are frequently attacked by pests and diseases posing serious threat to coconut production and farmers' livelihood. In recent times, a phytoplasma disease called Kerala root wilt was reported from some of the districts bordering Kerala. Hence, to ascertain the occurrence and severity of root wilt disease and to create awareness among farmers, field inspection cum farmers' scientist interactive meeting was organised at Kanjampatti village, Pollachi South, Coimbatore district on 26.05.2022. The programme was headed by the Director, Centre for Plant Protection Studies, Tamil Nadu Agricultural University, Coimbatore. The team comprised of the Professor and Head, Dept. of Plant Pathology, TNAU, Coimbatore, Professor and Head, Coconut Research Station, Aliyarnagar, scientists from TNAU, Assistant Directors of Agriculture, Agricultural officers, and progressive farmers. Field inspection showed moderate root wilt infection especially in poorly maintained plantations. Following the field visit, an interactive meeting was organized for creating awareness on the management of root wilt disease. During the meeting, Dr.M.Shanthi, the Director, CPPS and scientists of TNAU elaborated the nature of the disease, mode of spread, symptoms, integrated management strategies and mass multiplication of 'Cococon' for root wilt management. Some of the progressive farmers have shared their experience with the other farmers. About 20 farmers have participated in the meeting and benefitted. The programme was coordinated by Assistant Director of Agriculture and Agricultural officers, State Department of Agriculture, Pollachi South.

In continuation of the field inspection, the Director, CPPS and TNAU scientists have visited the root wilt management research plot in the plantation of Th. Varadharaj at Kaliyappa Koundanputhur village, Anamali Taluk, to know the effectiveness of the treatment and discussed on further ways for the successful management of root wilt disease.

Coconut root wilt disease symptoms

In general, flaccidity, yellowing and marginal necrosis are the predominant symptoms. Affected leaflets become curved and bent downwards along the entire length and form a structure resembling the ribs of mammals. Reduction in the number of leaves and successive leaves become smaller, shorter and narrower resulting in the stunting of plants and reduction in the size of coconuts. Rotting of roots is considered to be one of the major symptoms. Flowering is delayed when palms were affected severely. The spadixes are small, weak and do not open normally and drying of spathe and necrosis of spikelets occur from tip to downwards. Shedding of immature nuts and poor quality of nuts/copra from the affected trees can reduce the yield potential. The disease is transmitted by phloem feeding lace wing bug (*Stephanitis typicus*) and plant hopper (*Proutista moesta*). Unopened pale-yellow leaflets of spindle leaves are more susceptible to leaf rot disease and causes reduction in photosynthetic area, disfiguration of the palms and reduction in yield apart from attracting a number of insects that feed, multiply and cause further damage.

Integrated management strategies for coconut root wilt disease

Continuous monitoring of the plantation for root wilt disease incidence. Provision of proper drainage facilities and complete eradication of severely diseased palms. Application of 50 kg farm yard manure, 5 kg neem cake, 1.3 kg urea, 2 kg super phosphate and 3.5 kg of muriate of potash per tree per year in two equal splits at six month intervals. Soil application of 100 g *Trichoderma asperellum* and 100 g *Bacillus subtilis* by mixing with 5 kg farm yard manure per tree at three month intervals. In addition, soil application of 100 g azospirillum, 100 g phosphobacteria and 50 g VAM fungus mixing with 5 kg farm yard manure per tree at six month intervals will help plants in better nutrient uptake. Root feeding of TNAU coconut tonic @ 40 ml per tree

mixed with 160 ml of water at six month intervals. To manage the leaf hoppers and lace wing bug, neem powder 200 g or fipronil 0.3 G mixed with equal proportion of sand should be applied at the base of the crown. Pour hexaconazole 5 EC (2.0 ml + 300 ml water) in the crown region at 45 day intervals for managing leaf rotting symptom.

Mass multiplied 'Cococon' from Tamil Nadu Agricultural University should be applied @ 2 litre per tree mixed with 8 litre water at three month intervals around root zone. For mass multiplication, 5 liter mother culture of 'Cococon', 10 kg jaggery, 5 litre curd and 500 gram sodium chloride (common salt) are to be mixed with 150 liters of water and grown for 5-7 days by covering the container with gunny bags.

The farmers can contact the Professor and Head, Department of Plant Pathology, TNAU, Coimbatore through phone (0422-6611226), for further information and clarifications.

Public Relations Officer