भारत

To



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<u>F.No 3-6/2022-23/IPM/Advisory</u> भारतसरकार/ Government of India

कृषि एवं किसान कल्याण मंत्रालय / Ministry of Agriculture & Farmers Welfare कृषि एवं किसान कल्याण विभाग / Department of Agriculture & Farmers Welfare वनस्पति संरक्षण, संगरोध एवं संग्रहनिदेशालय / Directorate of Plant Protection, Quarantine & Storage एनएच4, फरीदाबाद(हरियाणा) – 121 001/ NH-IV, Faridabad (Haryana) – 121 001

Dated: 15 .07.2022

 The Director Agriculture, Govt. of Kerala Vikas Bhavan, Thiruvananthapuram- 695033 Kerala 2. The Director of Agriculture Govt. of Tamil Nadu Chennai- 600005 Tamil Nadu

Sub: Advisory on Rugose Spiralling Whitefly (RSW) Aleurodicus rugioperculatus Martin on Coconut in Kerala & Tamil Nadu - regarding.

Sir,

I have the honour to bring to your kind notice that the Rugose Spiralling Whitefly (RSW) *Aleurodicus rugioperculatus* is an invasive destructive insect pest was reported at Moderate intensity in 16 ha of area from Peruvembu, chittore & Kozizamparu villages of Palakkad district in Kerala & in 25 ha of coconut plantation from Kudavasal block, Thiruvarur district of Tamil Nadu state as per surveys conducted by CIPMC, Ernakulm & CIPMC, Trichy respectively.

The immature and adult whiteflies have a sucking feeding habit Extensive feeding of the insect leads to the excretion of honey dew which subsequently gets deposited on the upper surface of the leaves. Honey dew excrement, being sweet and watery, attracts ants and encourages growth of the fungus Capnodium sp. Which causes disfigurement of hosts and affects the photosynthetic efficiency of the plant. Females lay eggs with irregularly spiralling deposits of white flocculent wax surrounding each egg in a semi-circular spiralling fashion on the underside of leaves.

As a polyphagous pest with more than 200 host plants, occurance of this pest has been viewed seriously in the coconut and oil palm growing regions of South India. Therefore the following strategies are suggested for management of the pest

- Installation of yellow sticky traps @ 5 /acre is recommended to monitor the RSW. RSW adults are found to be active during morning between 06.00A.M. to 10.00 A.M. and in evening dusk time between 6PM to 10.00 P.M., hence Installation of yellow light traps can be done @1 No./acre between 06.00 A.M. to 10.00 A.M. and 06.00 P.M. to 10.00 P.M. to monitor the RSW.
- Avoid transplanting of affected coconut seedlings.
- Adopt proper spacing as per the recommendation.

To be contd....

- Application of optimum recommended doses of fertilizers on the basis of soil^π health card (soil-testing)
- Coconut leaflets can be dislodged by forced water spray, targeting the lower surface of the leaflets.
- Installation of yellow sticky traps on the palm trunk @ 15 /acre is recommended to manage the RSW.
- Installation of yellow light traps
- Encourage build-up of parasitoid (*Encarsia* sp.)in the orchards and re-introduce parasitized pupae in the whitefly-infested orchards.
- Conserve and augment predators of RSW such as *Chrysoperla* and Coccinellids which are available in the field. Release 1st instar larvae of green lacewing (*Chrysoperla* sp./ *Mallada* sp.) @ 4000 per acre
- Spray of entomopathogenic fungus *Isaria fumosorosea* @ 5ml/l of water mixed with detergent/ Khadi soap @ 5g/l can be done at fortnightly intervals to manage the RSW infestation.
- Sooty mould (*Capnodium* sp.) growth on the leaf surface can be flaked out by spraying 2.5% of maida paste solution mixed with detergent/ Khadi soap @ 5g/ 1. or 1% Starch solution mixed with detergent/ Khadi soap @ 5g/ 1
- In severe cases, spray only neem oil 0.5% or NSKE 5% and avoid spraying any form of insecticides
- Regular survey and monitoring at least at weekly intervals should be conducted for early detection of the pest and decision making based on AESA (considering P:D ratio)

For this purpose, regular meetings with State Pest Surveillance & Advisory Unit (SPSAU) and District Pest Surveillance and Advisory units (DPSAU) may be conducted. The hot spots of RSW should be identified for survey and teams may be constituted for regular monitoring of RSW situation and adoption of need based plant protection measures to avoid economic loss. Timely supply of quality bio-pesticides for the control of FAW on Maize should be ensured.

In view of the above, it is requested to monitor the Coconut/oil palm plantations on regular basis and if major incidence of RSW is reported by the farmers, extension functionaries and even through newspapers or other sources, survey of the affected fields may be conducted immediately and the concerned officials at the district/ division/ block may be advised to take the suitable plant protection measures immediately. The detailed information may also be sent to the Directorate through email ppa@nic.in or appa.ipm-ppqs@gov.in urgently to apprise the same to Department of Agriculture & Farmers Welfare.

Encl: as above

Yours faithfully

(Dr.J.P.Singh) Plant Protection Adviser

Copy for information:

- 1. Joint Secretary (PP), DA&FW, Krishi Bhawan, New Delhi-110001.
- 2. PPS to PPA
- 3. Officer In-charges, CIPMCs- Ernakulum & Trichy with directions to conduct regular survey in the area and necessary follow up with state government.