ICAR-National Research Centre for Integrated Pest Management, Pusa, New Delhi

Weekly Status Report on Insects Pests & Diseases of Crops

Name of Institute: ICAR - INDIAN INSTITUTE OF SPICES RESEARCH, KOZHIKODE 673 012, KERALA
Date: 12.01.2017 - 18.01.2017

Crop	Crop Stage	Location (with GPS)	Major Insect Pests		Major Plant Diseases		Other Pests (Nematodes, Rat, etc.) (Scientific Name)	Pest Advisories
			Name (Scientific Name)	Status (Low, Medium & Severe)	Name (Scientific Name)	Status (Low, Medium & Severe)		
Black pepper	**(a) Harvesting** **(b) Nursery**	Idukki, Kozhikode, Wayanad (Kerala), Kodagu (Karnataka), Tamil Nadu	**Mealybug** (*Planococcus* sp., *Ferrisia virgata*) (Nursery)	Low	**Stunted disease** (*Cucumber mosaic virus*, *Piper yellow mottle virus*) **Slow decline** (*Meloidogyne incognita*., *Radopholus similis*) **Anthracnose (***Colletotrichum gloeosporioides***)** (Nursery) **Basal wilt** (*Sclerotium rolfsii*) (Nursery) **Viral infection** (Nursery)	Low Medium Low Low Low to Medium	**Nematodes** (*Radopholus similis*, *Meloidogyne incognita*) (Nursery)	**Field:** **Stunted disease** Regular monitoring. Remove infected vines and destroy by burning or burying deep in soil. Control the vector (mealy bugs) by drenching neem oil (0.5%). **Slow decline** Remove and destroy severely affected vines. Apply neem cake @ 500g/vine and biocontrol agents like *Pochonia chlamydosporia* or *Trichoderma harzianum* @ 50 g/vine and metalaxyl-mancozeb (0.125%) may also be applied. **Nursery:** **Anthracnose** Spray Bordeaux mixture (1%). **Basal wilt** Remove and destroy affected cuttings along with defoliated leaves. After periodic sanitation, the cuttings should be drenched with Bordeaux mixture (1%).

								Viral infections Regular inspection and removal of infected plants. Regular monitoring for insects and spray with neem oil (0.5%) whenever infestation is noticed. **Mealy bug** Spray neem oil (0.5%), once infestation is noticed. **Nematodes** Apply *Pochonia chlamydosporia* @ 1g/bag.
Cardamom	**Harvesting**	Idukki, Wayanad (Kerala), Kodagu (Karnataka)	**Thrips** (*Sciothrips cardamomi*)	Low	**Leaf blight** (*Colletotrichum gloeosporioides*) **Katte/Mosaic** (*Cardamom mosaic virus*) **Chlorotic streak** (*Banana bract mosaic virus*)	Medium Low Low		**Leaf blight** Maintain optimum shade level by providing 40-60% filtered light. **Katte/ Mosaic** Prompt inspection of plantation, detection and rouging of virus sources (infected plants/ volunteers) to reduce re-infection. The removed plants may be burnt or buried deep in soil. Removal of natural hosts like *Colocasia* and *Caladium* to destroy breeding sites and check population build-up of the vector. **Chlorotic streak** Prompt inspection of plantation, detection and rouging of virus sources (infected plants/ volunteers) to reduce re-infection. The removed plants may be burnt or buried deep in soil. **Thrips** Spray quinalphos (0.075%).

Vanilla	**Vegetative**	Karnataka			**Leaf spot** (*Colletotrichum vanillae*) **Stem rot** (*Fusarium oxysporum* f. sp. *vanillae*) **Viral diseases** (*Bean common mosaic virus, Bean yellow mosaic virus, Cucumber mosaic virus, Cymbidium mosaic virus*)	Low Low Low		**Leaf spot** Provide 50% shade in the plantation. Spray Bordeaux mixture (1%) at 15 – 20 days interval. **Stem rot** Remove and destroy infected plant parts. Apply *Trichoderma harzianum* and *Pseudomonas fluorescens* (cfu 10^8) 50 g per vine. **Viral diseases** Regular inspection and removal of infected plants. The removed plants may be burnt or buried deep in soil. Control of vector (aphids) may be undertaken by spraying neem oil (0.5%).