

# 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: 19.01.2017 - 25.01.2017

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	Idukki, Kozhikode, Wayanad (Kerala), Kodagu (Karnataka), Tamil Nadu	<b>Mealybug</b> ( <i>Planococcus</i> sp., <i>Ferrisia</i> <i>virgata</i> ) (Nursery)	Low	<b>Stunted disease</b> ( <i>Cucumber</i> <i>mosaic virus</i> , <i>Piper yellow</i> <i>mottle virus</i> )	Low	<b>Nematodes</b> ( <i>Radopholus</i> <i>similis</i> , <i>Meloidogyne</i> <i>incognita</i> ) (Nursery)	<b>Field:</b> <b>Stunted disease</b> 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%). <b>Slow decline</b> Remove and destroy severely affected vines. Apply neem cake @ 500g/vine and biocontrol agents like <i>Pochonia chlamydosporia</i> or <i>Trichoderma harzianum</i> @ 50 g/vine and metalaxyl-mancozeb (0.125%) may also be applied. <b>Nursery:</b> <b>Anthracnose</b> Spray Bordeaux mixture (1%). <b>Basal wilt</b> Remove and destroy affected cuttings along with defoliated leaves. After periodic sanitation, the cuttings should be drenched with Bordeaux mixture (1%).
	<b>Slow decline</b> ( <i>Meloidogyne</i> <i>incognita</i> , <i>Radopholus similis</i> )				Medium	<b>Anthracnose</b> ( <i>Colletotrichum</i> <i>gloeosporioides</i> ) (Nursery)		

								<p><b>Viral infections</b> Regular inspection and removal of infected plants. Regular monitoring for insects and spray with neem oil (0.5%) whenever infestation is noticed.</p> <p><b>Mealy bug</b> Spray neem oil (0.5%), once infestation is noticed.</p> <p><b>Nematodes</b> Apply <i>Pochonia chlamydosporia</i> @ 1g/bag.</p>
<b>Cardamom</b>	<b>Harvesting</b>	Idukki, Wayanad (Kerala), Kodagu (Karnataka)	<b>Thrips</b> ( <i>Sciothrips cardamomi</i> )	Low	<p><b>Leaf blight</b> (<i>Colletotrichum gloeosporioides</i>)</p> <p><b>Katte/Mosaic</b> (<i>Cardamom mosaic virus</i>)</p> <p><b>Chlorotic streak</b> (<i>Banana bract mosaic virus</i>)</p>	Medium  Low  Low		<p><b>Leaf blight</b> Maintain optimum shade level by providing 40-60% filtered light.</p> <p><b>Katte/ Mosaic</b> 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 <i>Colocasia</i> and <i>Caladium</i> to destroy breeding sites and check population build-up of the vector.</p> <p><b>Chlorotic streak</b> 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.</p> <p><b>Thrips</b> Spray quinalphos (0.075%).</p>

Vanilla	Vegetative	Karnataka			<p><b>Leaf spot</b> (<i>Colletotrichum vanillae</i>)</p> <p><b>Stem rot</b> (<i>Fusarium oxysporum</i> f. sp. <i>vanillae</i>)</p> <p><b>Viral diseases</b> (<i>Bean common mosaic virus</i>, <i>Bean yellow mosaic virus</i>, <i>Cucumber mosaic virus</i>, <i>Cymbidium mosaic virus</i>)</p>	<p>Low</p> <p>Low</p> <p>Low</p>	<p><b>Leaf spot</b> Provide 50% shade in the plantation. Spray Bordeaux mixture (1%) at 15 – 20 days interval.</p> <p><b>Stem rot</b> Remove and destroy infected plant parts. Apply <i>Trichoderma harzianum</i> and <i>Pseudomonas fluorescens</i> (cfu 10<sup>8</sup>) 50 g per vine.</p> <p><b>Viral diseases</b> 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%).</p>
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