

# 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: 22.12.2016 – 28.12.2016

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) Maturing	Idukki, Kozhikode, Wayanad (Kerala), Kodagu (Karnataka), Tamil Nadu	<b>Pollu beetle</b> ( <i>Lanka ramakrishnai</i> )	Low	<b>Stunt disease</b> ( <i>Cucumber mosaic virus</i> , <i>Piper yellow mottle virus</i> ) <b>Slow decline</b> ( <i>Meloidogyne incognita</i> , <i>Radopholus similis</i> ) <b>Anthracnose</b> ( <i>Colletotrichum gloeosporioides</i> )	Low	<b>Nematodes</b> ( <i>Radopholus similis</i> , <i>Meloidogyne incognita</i> ) (Nursery)	<b>Field:</b> <b>Stunt 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
	(b) Nursery		<b>Mealybug</b> ( <i>Planococcus</i> sp., <i>Ferrisia virgata</i> ) (Nursery)	Low		Low		

					<p><b>Anthracnose</b> (<i>Colletotrichum gloeosporioides</i>) (Nursery)</p> <p><b>Basal wilt</b> (<i>Sclerotium rolfsii</i>) (Nursery)</p> <p><b>Viral infection</b> (Nursery)</p>	<p>Low</p> <p>Low</p> <p>Low to Medium</p>		<p><i>Trichoderma harzianum</i> @ 50 g/vine and metalaxyl-mancozeb (0.125%) may also be applied.</p> <p><b>Anthracnose</b> Spray Bordeaux mixture (1%) or mancozeb (0.1%).</p> <p><b>Pollu beetle</b> Spray neem oil (0.5%)</p> <p><b>Nursery:</b> <b>Anthracnose</b> Spray Bordeaux mixture (1%).</p> <p><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%).</p> <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)	<p><b>Shoot borer</b> (<i>Conogethes punctiferalis</i>)</p> <p><b>Thrips</b> (<i>Sciothrips</i>)</p>	<p>Low</p> <p>Low</p>	<p><b>Leaf blight</b> (<i>Colletotrichum gloeosporioides</i>)</p> <p><b>Katte/Mosaic</b> (<i>Cardamom</i>)</p>	<p>Medium</p> <p>Low</p>		<p><b>Leaf blight</b> Maintain optimum shade level by providing 40-60% filtered light. Spray Bordeaux mixture (1%) @ 0.5-1 litre/plant.</p>

			<i>cardamomi</i> )		<i>mosaic virus</i> ) <b>Chlorotic streak</b> ( <i>Banana bract mosaic virus</i> )	Low		<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>Shoot borer and thrips</b> Spray quinalphos (0.075%).</p>
<b>Vanilla</b>	<b>Harvesting</b>	Karnataka			<p><b>Leaf spot/Leaf rot/Bean shedding</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</i></p>	Low  Low  Low		<p><b>Premature yellowing and bean shedding</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</p>

					<i>virus, Cymbidium mosaic virus)</i>			plants may be burnt or buried deep in soil. Control of vector (aphids) may be undertaken by spraying neem oil (0.5%).
<b>Ginger</b>	<b>Maturing</b>	Kerala, Karnataka, Tamil Nadu			<b>Leaf spot</b> ( <i>Phyllosticta zingiberi</i> )	Low		<b>Leaf spot</b> Spray Bordeaux mixture (1%) when the initial symptoms appear. Care should be taken that the spray solution should reach lower surface of the leaves also.
<b>Turmeric</b>	<b>Maturing</b>	Kerala, Tamil Nadu, Andhra Pradesh, Telangana			<b>Leaf spot</b> ( <i>Colletotrichum capsici</i> )	Medium		<b>Leaf spot</b> Spray Bordeaux mixture (1%).