

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

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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	Pollu beetle (<i>Lanka ramakrishnai</i>)	Low	Stunt disease (<i>Cucumber mosaic virus</i> , <i>Piper yellow mottle virus</i>)	Low	Nematodes (<i>Radopholus similis</i> , <i>Meloidogyne incognita</i>) (Nursery)	Field: Stunt 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 <i>Pochonia chlamydosporia</i> or <i>Trichoderma harzianum</i> @ 50 g/vine and metalaxyl-mancozeb (0.125%) may also be applied. Pollu beetle Spray neem oil (0.5%) Nursery: Anthracnose Spray Bordeaux mixture (1%). Basal wilt Remove and destroy affected cuttings along with defoliated leaves. After periodic sanitation,
	(b) Nursery		Mealybug (<i>Planococcus</i> sp., <i>Ferrisia virgata</i>) (Nursery)	Low	Slow decline (<i>Meloidogyne incognita</i> , <i>Radopholus similis</i>)	Medium		
						Anthracnose (<i>Colletotrichum gloeosporioides</i>) (Nursery)		
					Basal wilt (<i>Sclerotium rolfsii</i>) (Nursery)	Low		
					Viral infection (Nursery)	Low to Medium		

							<p>the cuttings should be drenched with Bordeaux mixture (1%).</p> <p>Viral infections Regular inspection and removal of infected plants. Regular monitoring for insects and spray with neem oil (0.5%) whenever infestation is noticed.</p> <p>Mealy bug Spray neem oil (0.5%), once infestation is noticed.</p> <p>Nematodes Apply <i>Pochonia chlamydosporia</i> @ 1g/bag.</p>
Cardamom	Harvesting	Idukki, Wayanad (Kerala), Kodagu (Karnataka)	<p>Shoot borer (<i>Conogethes punctiferalis</i>)</p> <p>Thrips (<i>Sciothrips cardamomi</i>)</p>	<p>Low</p> <p>Low</p>	<p>Leaf blight (<i>Colletotrichum gloeosporioides</i>)</p> <p>Katte/Mosaic (<i>Cardamom mosaic virus</i>)</p> <p>Chlorotic streak (<i>Banana bract mosaic virus</i>)</p>	<p>Medium</p> <p>Low</p> <p>Low</p>	<p>Leaf blight Maintain optimum shade level by providing 40-60% filtered light. Spray Bordeaux mixture (1%) @ 0.5-1 litre/plant.</p> <p>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 <i>Colocasia</i> and <i>Caladium</i> to destroy breeding sites and check population build-up of the vector.</p> <p>Chlorotic streak Prompt inspection of plantation, detection and rouging of virus sources (infected plants/volunteers) to reduce re-infection.</p>

								The removed plants may be burnt or buried deep in soil. Shoot borer and thrips Spray quinalphos (0.075%).
Vanilla	Harvesting	Karnataka			Leaf spot/Leaf rot/Bean shedding (<i>Colletotrichum vanillae</i>) Stem rot (<i>Fusarium oxysporum</i> f. sp. <i>vanillae</i>) Viral diseases (<i>Bean common mosaic virus</i> , <i>Bean yellow mosaic virus</i> , <i>Cucumber mosaic virus</i> , <i>Cymbidium mosaic virus</i>)	Low Low Low		Premature yellowing and bean shedding Provide 50% shade in the plantation. Spray Bordeaux mixture (1%) at 15 – 20 days interval. Stem rot Remove and destroy infected plant parts. Apply <i>Trichoderma harzianum</i> and <i>Pseudomonas fluorescens</i> (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%).