

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: 08.03.2019 – 14.03.2019

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	Nursery/ Bearing stage	Idukki, Kozhikode, Wayanad (Kerala), Kodagu (Karnataka) ,Tamil Nadu	Scale insects (<i>Protopulvinaria</i> <i>longivalvata</i> , <i>Lepidosaphes</i> <i>piperis</i> , <i>Unaspis</i> sp.) (Field)	Medium	Stunt disease (<i>Cucumber</i> <i>mosaic virus</i> , <i>Piper yellow</i> <i>mottle virus</i>)	Low	Nematodes (<i>Radopholus</i> <i>similis</i> , <i>Meloidogyne</i> <i>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</i> <i>chlamydosporia</i> or <i>Trichoderma</i> <i>harzianum</i> @ 50 g/vine and metalaxyl-mancozeb (0.125%) may also be applied. Scale insects Spray neem oil (0.5%), once infestation is noticed. Root mealybug Drench neem oil (0.5%), once
			Root mealybug (<i>Planococcus</i> sp.) (Field)	Medium	Anthracnose (<i>Colletotrichum</i> spp.) (Nursery)	High		
			Pollu beetle (<i>Lanka</i> <i>ramkrishnai</i>) (Field)	Low	Basal wilt (<i>Sclerotium</i> <i>rolfsii</i>) (Nursery)	Low		
			Mealybug (<i>Planococcus</i> sp., <i>Ferrisia</i> <i>virgata</i>) (Nursery)	Medium	Viral infection (Nursery)	Low		

								<p>infestation is noticed.</p> <p>Pollu beetle Spray neem oil (0.5%), once infestation is noticed.</p> <p>Nursery:</p> <p>Anthracnose Spray Bordeaux mixture (1%).</p> <p>Basal wilt Remove and destroy affected cuttings along with defoliated leaves. After periodic sanitation, the cuttings should be drenched with carbendazim (0.2%) or 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 and scale insects Spray neem oil (0.5%), once infestation is noticed.</p> <p>Nematodes Apply <i>Pochonia chlamydosporia</i> @ 1g/bag.</p>
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Cardamom	Flowering	Idukki, Wayanad (Kerala), Kodagu (Karnataka)	Thrips (<i>Sciothrips cardamomi</i>) Shoot borer (<i>Conogethes punctiferalis</i>)	Medium Low	Leaf blight (<i>Colletotrichum spp.</i>) Katte/Mosaic (<i>Cardamom mosaic virus</i>) Chlorotic streak (<i>Banana bract mosaic virus</i>)	Medium Medium 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 <i>Colocasia</i> and <i>Caladium</i> 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. Shoot borer Spray quinalphos (0.075%). Thrips Spray quinalphos 25%EC (0.075%) after undertaking thrashing.
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Vanilla	Bean maturing/ Harvesting	Karnataka			<p>Premature yellowing and bean shedding (<i>Colletotrichum vanillae</i>)</p> <p>Root and stem rot (<i>Fusarium oxysporum</i> f.sp. <i>vanillae</i>)</p> <p>Viral diseases (<i>Bean common mosaic virus</i>, <i>Bean yellow mosaic virus</i>, <i>Cucumber mosaic virus</i>, <i>Cymbidium mosaic virus</i>)</p>	<p>Medium</p> <p>Low</p> <p>Low</p>		<p>Premature yellowing and bean shedding Provide 50% shade in the plantation. Spray carbendazim – mancozeb (0.25%) at 15 – 20 days interval.</p> <p>Root and stem rot Soil drenching with copper oxychloride @ 0.25% followed by spray with carbendazim (0.25%) at monthly interval.</p> <p>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%).</p>
Ginger & Turmeric	Rhizome	Karnataka, Kerala	Rhizome scale (<i>Aspidiella hartii</i>)	Medium	Dry rot (<i>Macrophomin a phaseolina</i>)	Medium		<p>Rhizome scale Harvest the rhizomes on time, discard severely infested rhizomes. Store seed rhizomes in sawdust + <i>Strychnos nuxvomica</i> leaves (dried) after seed treatment.</p> <p>Dry rot Seed treatment with Mancozeb (0.25%) was found to be effective.</p>

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