

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, KOZHICODE 673 012, KERALA

Date: 14.12.2017 – 20.12.2017


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

			<i>(Protopulvinaria longivalvata)</i> (Nursery)				<p>infestation is noticed.</p> <p><b>Pollu beetle</b> Spray neem oil (0.5%), once infestation is noticed.</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 carbendazim (0.2%) or 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 and scale insects</b> Spray neem oil (0.5%), once infestation is noticed.</p> <p><b>Nematodes</b> Apply <i>Pochonia chlamydosporia</i> @ 1g/bag.</p>
Cardamom	Harvesting	Idukki, Wayanad (Kerala), Kodagu (Karnataka)	<p><b>Thrips</b> (<i>Sciothrips cardamomi</i>)</p> <p><b>Shoot borer</b> (<i>Conogethes punctiferalis</i>)</p>	Low Medium	<p><b>Leaf blight</b> (<i>Colletotrichum</i> spp.)</p> <p><b>Katte/Mosaic</b> (<i>Cardamom mosaic virus</i>)</p>	Medium 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</p>

					<p><b>Chlorotic streak</b> (<i>Banana bract mosaic virus</i>)</p>	Low	<p>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</b> Spray quinalphos (0.075%).</p> <p><b>Thrips</b> Spray quinalphos 25%EC (0.075%) after undertaking thrashing.</p>
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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>
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(Nodal Officer) C.M. Senthil Kumar  
 Name: C.M. Senthil Kumar  
 Designation: Senior Scientist (Agr. Ento.)  
 ICAR-ISR, Kozhikode

  
 निदेशक Director  
 भारतीय मसाला फसल अनुसंधान संस्थान  
 Director/Head of Institution  
 Indian Spices Research  
 कालिकट Calicut-673 012  
 केरल Kerala, भारत India