

## ICAR-National Research Centre for Integrated Pest Management, Pusa, New Delhi

### Weekly Status Report on Insects Pests & Diseases of Crops

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Date: 30.05.2016 - 05.06.2016

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	Vegetative	Idukki, Kozhikode, Wayanad (Kerala), Kodagu (Karnataka)	<b>Scale insects</b> ( <i>Lepidosaphes piperis</i> , <i>Marsipococcus marsupialis</i> )	Medium	<b>Yellowing</b> (due to slow decline) – <b>Nematodes</b>	Medium	<b>Nematodes</b> ( <i>Radopholus similis</i> , <i>Meloidogyne incognita</i> )	<b>Scale insects</b> Clip off and destroy severely infested plant parts. Spray dimethoate (0.1%) after harvest. Repeat spraying after 21 days to control the infestation completely. (Initiate control measures during early stages of pest infestation). <b>Mealy bug</b> Mealybug infestation on aerial portion can be controlled by spraying dimethoate (0.1%) on affected vines. <b>Yellowing</b> Maintain adequate shade. Provide irrigation. <b>Stunt disease</b> Regular monitoring. Remove infected vines and destroy by burning or burying deep in soil. Control the vector (mealy bugs) by
			<b>Mealybug</b> ( <i>Planococcus</i> sp., <i>Ferrisia virgata</i> )	Medium	<b>Stunt disease</b> ( <i>Cucumber mosaic virus</i> , <i>Piper yellow mottle virus</i> )	Medium		
	Nursery			<b>Foliar infection</b> (due to <i>Phytophthora capsici</i> )	Low			

							<p>drenching with chlorpyrifos (0.075%).</p> <p><b>Foliar infection due to <i>Phytophthora capsici</i></b></p> <p>After the receipt of few monsoon showers, all the vines are to be drenched at a radius of 45-50 cm with copper oxychloride 0.2% @ 5-10 litres/vine. A foliar spray with Bordeaux mixture 1% is also to be given. Alternatively, drenching and spraying with potassium phosphonate 0.3% @ 5-10 litres/vine (drench) or potassium phosphonate 0.3% @ 5-10 litres/vine (drench) also may to be given.</p>
					<p><b>Foliar infection due to <i>Phytophthora capsici</i> (Nursery)</b></p>	<p>Low to Medium</p>	<p><b>Foliar infection due to <i>Phytophthora capsici</i></b></p> <p>If foliar infection is noticed, spray Bordeaux mixture (1%) and drench with copper oxychloride (0.2 %). Alternatively, metalaxyl 0.01% (1.25 g/litre) or potassium phosphonate 0.3% (3 ml/litre) could also be used.</p>

<b>Cardamom</b>	Vegetative/ Panicle initiation/ Capsule formation	Kodagu (Karnataka)	<b>Shoot fly</b> ( <i>Formosina flavipes</i> )	Low	<b>Leaf blight</b> ( <i>Colletotrichum gloeosporioides</i> )	Medium	<p><b>Shoot fly</b> Remove and destroy the affected shoots at ground level. Spray quinalphos (0.05%).</p> <p><b>Panicle/Shoot borer</b> Spray quinalphos (0.075%) coinciding with emergence of panicles and new shoots.</p> <p><b>Thrips</b> Under Karnataka conditions, spray Fipronil (0.005%) or Spinosad (0.0135%) after undertaking thrashing. Ensure irrigation after thrashing.</p> <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</p>
		Kodagu (Karnataka)	<b>Panicle/Shoot borer</b> ( <i>Conogethes punctiferalis</i> )	Low	<b>Katte/Mosaic</b> ( <i>Cardamom mosaic virus</i> )	Medium	
		Idukki, Wayanad (Kerala),	<b>Thrips</b> ( <i>Sciothrips cardamomi</i> )	Low	<b>Chlorotic streak</b> ( <i>Banana bract mosaic virus</i> )	Low	

		Kodagu (Karnataka)			<b>Azhukal/Capsule rot</b> ( <i>Phytophthora nicotianae</i> var. <i>nicotianae</i> and <i>P. meadii</i> )	Low	<p><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>Azhukal/Capsule rot</b> Trashing and cleaning of the plant basin need to be carried out. Regulate thick shade. Prevent water logging by providing adequate drainage. Destroy disease affected portions and plant debris. Prophylactic sprays with Bordeaux mixture (1%). Alternatively, fosetyl-aluminium (0.2%) or potassium phosphonate (0.3%) can be used. Drench plant basin with copper oxychloride (0.2%).</p>
<b>Vanilla</b>	Vegetative/ flowering/ bean formation	Karnataka			<b>Premature yellowing and bean shedding</b> ( <i>Colletotrichum vanillae</i> )	Medium	<p><b>Premature yellowing and bean shedding</b> Provide 50% shade in the plantation. Provide mist irrigation (4 – 6 hours during pollination). Spray carbendazim – mancozeb (0.25%) at 15 – 20 days interval.</p> <p><b>Viral diseases</b> Regular inspection and removal of infected plants. The removed plants</p>
					<b>Viral diseases</b> ( <i>Bean common mosaic virus</i> , <i>Bean yellow mosaic virus</i> ,	Medium	

					<i>Cucumber mosaic virus, Cymbidium mosaic virus)</i>		may be burnt or buried deep in soil. Control of vector (aphids) may be undertaken by spraying dimethoate (0.05%).
<b>Ginger</b>	Planting	Kerala, Karnataka, Tamil Nadu	<b>Rhizome scale</b> ( <i>Aspidiella hartii</i> )	Low	<b>Soft rot</b> ( <i>Pythium</i> spp – <i>P. aphanidermatum</i> and <i>P. myriotylum</i> )		<b>Soft rot</b> Seed rhizomes are to be selected from disease free gardens. Treat seed rhizomes with mancozeb (0.3%) or metalaxyl mancozeb (0.125%) for 30 minutes before planting. <b>Rhizome scale</b> Treat seed rhizomes with quinalphos (0.075%) (for 20-30 minutes) before planting, if infestation persists.
<b>Turmeric</b>	Planting	Tamil Nadu, Andhra Pradesh, Telangana	<b>Rhizome scale</b> ( <i>Aspidiella hartii</i> )	Low	<b>Rhizome rot</b> ( <i>Pythium aphanidermatum</i> )		<b>Rhizome rot</b> Treating the seed rhizomes with mancozeb (0.3%) for 30 minutes prior at the time of planting. <b>Rhizome scale</b> Treat seed rhizomes with quinalphos (0.075%) (for 20-30 minutes) before planting, if infestation persists.