## 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: 08.12.2016 – 14.12.2016

	Crop Stage	<b>Location</b> (with GPS)	Major Insect Pests		Major Plant Diseases		Other Pests	
Сгор			<b>Name</b> (Scientific Name)	Status (Low, Medium & Severe)	<b>Name</b> (Scientific Name)	Status (Low, Medium & Severe)	(Nematodes, Rat, etc.) (Scientific Name)	Pest Advisories
Black pepper	(a) Bearing	Idukki,	Pollu beetle	Low	Stunt disease	Low	Nematodes	Field:
	stage	Kozhikode, Wayanad	(Lanka ramakrishnai)		(Cucumber mosaic virus,		(Radopholus similis,	<b>Stunt disease</b> Regular monitoring. Remove infected
	(b) Nursery	(Kerala), Kodagu (Karnataka),	Mealybug (Planococcus sp., Ferrisia	Low	Piper yellow mottle virus) Slow decline	Low	<i>Meloidogyne</i> <i>incognita</i> ) (Nursery)	vines and destroy by burning or burying deep in soil. Control the vector (mealy bugs) by drenching
		Tamil Nadu	virgata) (Nursery)		(Meloidogyne incognita., Radopholus similis) Anthracnose			neem oil (0.5%) Slow decline Remove and destroy severely affected
					(Colletotrichum gloeosporioides)	Low		vines. Apply neem cake @ 500g/vine and biocontrol agents like <i>Pochonia</i> <i>chlamydosporia</i> or <i>Trichoderma</i>
					Anthracnose (Colletotrichum gloeosporioides) (Nursery)	Low		<i>harzianum</i> @ 50 g/vine and metalaxyl- mancozeb (0.125%) may also be applied. <b>Anthracnose</b>
					Basal wilt (Sclerotium rolfsii) (Nursery)	Low		Spray Bordeaux mixture (1%) or mancozeb (0.1%). <b>Pollu beetle</b> Spray neem oil (0.5%)
					(Nursery)	Low to Medium		Nursery: Anthracnose Spray Bordeaux mixture (1%). Basal wilt Remove and destroy affected cuttings

							along with defoliated leaves. After periodic sanitation, the cuttings should be drenched with Bordeaux mixture (1%). <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. <b>Mealy bug</b> Spray neem oil (0.5%), once infestation is noticed. <b>Nematodes</b> Apply <i>Pochonia chlamydosporia</i> @ 1g/bag.
Cardamom	Harvesting	Idukki, Wayanad (Kerala), Kodagu (Karnataka)	Shoot borer (Conogethes punctiferalis) Thrips (Sciothrips cardamomi)	Low	Leaf blight (Colletotrichum gloeosporioides) Katte/Mosaic (Cardamom mosaic virus) Chlorotic streak (Banana bract mosaic virus)	Medium Low Low	Leaf blightMaintain optimum shade level by providing 40-60% filtered light. Spray Bordeaux mixture (1%) @ 0.5-1 litre/plant.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. <b>Shoot borer and thrips</b> Spray quinalphos (0.075%).
Vanilla	Bean maturing	Karnataka	Premature yellowing and bean shedding (Colletotrichum vanillae)Viral diseases (Bean common mosaic virus, Bean yellow mosaic virus, Cucumber mosaic virus, Cymbidium mosaic virus)	Low	Premature yellowing and bean sheddingProvide 50% shade in the plantation. Spray Bordeaux mixture (1%) at 15 – 20 days interval.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%).
Ginger	Rhizome development and bulking	Kerala, Karnataka, Tamil Nadu	Leaf spot (Phyllosticta zingiberi)	LOw	Leaf spot 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.
Turmeric	Rhizome development and bulking	Kerala, Tamil Nadu, Andhra Pradesh, Telangana	Leaf spot (Colletotrichum capsici)	Medium	Leaf spot Spray Bordeaux mixture (1%).