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: 19.10.2017 - 25.10.2017

			Major Insec	t Pests	Major Plant D	Diseases	Other Pests	
Сгор	Crop Stage	Location (with GPS)	Name (Scientific Name)	Status (Low, Medium & Severe)	Name (Scientific Name)	Status (Low, Medium & Severe)	(Nematodes, Rat, etc.) (Scientific Name)	Pest Advisories
Black pepper	Nursery/	Idukki,	Mealybug	Medium	Stunt disease	Low	Nematodes	Field:
	Vegetative/	Kozhikode,	(Planococcus		(Cucumber		(Radopholus	Stunt disease
	Spike formation	Wayanad	sp., Ferrisia		mosaic virus,		similis,	Regular monitoring. Remove
		(Kerala),	virgata)		Piper yellow		Meloidogyne	infected vines and destroy by
		Kodagu	(Nursery)		mottle virus)		incognita)	burning or burying deep in soil.
		(Karnataka),	Scale insect	Low	Slow decline	Medium	(Nursery)	Control the vector (mealy bugs) by
		Tamil Nadu	(Protopulvinari		(Meloidogyne			drenching neem oil (0.5%).
			a longivalvata)		incognita.,			Slow decline
			(Nursery)		Radopholus			Remove and destroy severely
					similis)			affected vines. Apply neem cake @
					Foliar	Low		500g/vine and biocontrol agents like
					infection/Foot			Pochonia chlamydosporia or
					rot			Trichoderma harzianum @ 50
					(Phytophthora			g/vine and metalaxyl-mancozeb
					spp.) Anthracnose	Low		(0.125%) may also be applied. Foliar infection/Foot rot
					(Colletotrichum	LOW		Follow strict phytosanitation. After
					gloeosporioides)			the receipt of few monsoon showers,
					Anthracnose	Low		all the vines are to be drenched at a
					(Colletotrichum	LOW		radius of 45-50 cm with copper
					gloeosporioides)			oxychloride 0.2% @ 5-10
					(Nursery)			litres/vine. A foliar spray with

					Viral infection (Nursery)	Low	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. Anthracnose Prophylactic spraying with Bordeaux mixture (1%) or carbendazim - mancozeb (0.1%). Nursery: Anthracnose Spray Bordeaux mixture (1%). Viral infections Regular inspection and removal of infected plants. Regular monitoring for insects and spray with neem oil (0.5%) whenever infestation is noticed. Mealy bug and scale insect Spray neem oil (0.5%), once infestation is noticed. Nematodes
							Nematodes Apply <i>Pochonia chlamydosporia</i> @ 1g/bag.
Cardamom	Vegetative/ Panicle initiation/	Idukki, Wayanad (Kerala),	Thrips (Sciothrips cardamomi)	Medium	Leaf blight (Colletotrichum gloeosporioides)	Low	Leaf blight Maintain optimum shade level by providing 40-60% filtered light.
	Capsule formation	Kodagu (Karnataka)			Azhukal/Capsul e rot (Phytophthora nicotianae var. nicotianae and P. meadii)	Medium	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

			(C ma Cl (B	atte/Mosaic Cardamom osaic virus) hlorotic streak Banana bract osaic virus)	Low	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. Azhukal/Capsule rot 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%). Thrips Spray quinalphos 25%EC (0.075%)
						after undertaking thrashing.
Vanilla	Vegetative	Karnataka	(C va	eaf spot Colletotrichum unillae)	Low	Leaf spot Provide 50% shade in the plantation. Spray Bordeaux mixture (1%) at 15
				e m rot Fusarium	Low	– 20 days interval. Stem rot
				cysporum f. sp.		Remove and destroy infected plant
			va	nillae)		parts. Apply Trichoderma
			Vi	iral diseases	Low	harzianum and Pseudomonas

					(Beancommonmosaicvirus,Beanyellowmosaicvirus,Cucumbermosaicmosaicvirus,Cymbidiummosaic virus)		<i>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%).
Ginger	Vegetative	Karnataka, Kerala	Leaf roller (Udaspes folus) Shoot borer (Conogethes punctiferalis)	Low High	Soft rot (Pythium aphanidermatum and P. myriotylum) Bacterial wilt (Ralstonia solanaceraum) Leaf spot (Phyllosticta zingiberi)	Medium Medium High	Soft rotOnce disease is observed in field, remove affected clumps and drench affected and surrounding beds with mancozeb (0.3%) or metalaxyl mancozeb (0.125%) or copper oxychloride (0.2%).Bacterial wilt Confirm identity of the disease by "ooze test". After confirming as bacterial wilt, affected clumps shall be removed carefully without spilling the soil in the field and drench surrounding beds of infested areas with copper oxychloride (0.2%). Care should be taken to dispose the removed plants far from the cultivated area or destroyed by burning.Leaf spot Spray Bordeaux mixture (1%) or mancozeb (0.2%) when the initial symptoms appear. Care should be taken that the spray solution should reach lower surface of the leaves also.Leaf roller and shoot borer

							Prune and destroy freshly infested pseudostems and spray neem oil (0.5%) at 21 days interval
Turmeric	Vegetative	Andhra Pradesh, Telangana, Tamil Nadu, Odisha	Leaf roller (Udaspes folus) Shoot borer (Conogethes punctiferalis)	Low High	Rhizome rot (Pythium aphanidermatum) Leaf spot (Colletotrichum capsici)	Low	Rhizome rotOnce noticed in the field, the beds should be drenched with copper oxychloride (0.2%) or metalaxyl - mancozeb (0.125%).Leaf spotSpray carbendazim or mancozeb (0.2%) or copper oxychloride (0.2%).Leaf roller and shoot borer Spray neem oil (0.5%) at 21 days interval
Nutmeg	Bearing	Kerala			Leaf fall and fruit rot (Diplodia natalensis and Phytophthora sp.)	Low	Leaf fall and fruit rot In endemic regions, spray Bordeaux mixture (1%) covering both foliage and fruits as a prophylactic measure.