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: 10.11.2016 – 16.11.2016

	Crop Stage	Location (with GPS)	Major Insect Pests		Major Plant Diseases		Other Pests	
Сгор			Name (Scientific Name)	Status (Low, Medium & Severe)	Name (Scientific Name)	Status (Low, Medium & Severe)	(Nematodes, Rat, etc.) (Scientific Name)	Pest Advisories
Black pepper	(a) Bearing stage(b) Nursery	Idukki, Kozhikode, Wayanad (Kerala), Kodagu (Karnataka), Tamil Nadu	Leaf gall thrips (Liothrips karnyi) Pollu beetle (Lanka ramakrishnai) Mealybug (Planococcus sp., Ferrisia virgata) (Nursery)	Low Low	Stunt disease (Cucumber mosaic virus, Piper yellow mottle virus) Slow decline (Meloidogyne incognita., Radopholus similis) Anthracnose (Colletotrichum gloeosporioides) Anthracnose (Colletotrichum gloeosporioides) (Nursery) Basal wilt (Sclerotium rolfsii) (Nursery) Viral infection (Nursery)	Low Medium Low Low Low to Medium	Nematodes (Radopholus similis, Meloidogyne incognita) (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 chlorpyrifos (0.075%). Slow decline Remove and destroy severely affected vines. Drench the vines with carbosulfan (0.1%). Along with nematicide application, the basins may be drenched with either copper oxychloride (0.2%) or potassium phosphonate (0.3%) or metalaxyl- mancozeb (0.125%). Alternatively, biocontrol agents like <i>Pochonia</i> <i>chlamydosporia</i> or <i>Trichoderma</i> <i>harzianum</i> @ 50 g/vine may also be applied. Ensure sufficient soil moisture at the time of nematicide application. Anthracnose Spray Bordeaux mixture (1%) or carbendazim - mancozeb (0.1%).

							Leaf gall thripsSpray dimethoate (0.05%) during emergence of new flushes on young vines.Pollu beetleSpray quinalphos (0.05%).Nursery: AnthracnoseSpray Bordeaux mixture (1%) alternating with carbendazim (0.1%).Basal wiltRemove and destroy affected cuttings along with defoliated leaves.After periodic sanitation, the cuttings should be drenched with carbendazim (0.2%) or Bordeaux mixture (1%).Viral infections Regular inspection and removal of infected plants. Regular monitoring for insects and spray with dimethoate (0.05%) whenever infestation is noticed.Mealy bug Spray dimethoate (0.05%), once infestation is noticed.Nematodes Apply carbosulfan (0.1%) @ 50
Cardamom	Capsule	Idukki,	Shoot borer	Medium	Leaf blight	Medium	ml/bag. Shoot borer
	maturation	Wayanad	(Conogethes		(Colletotrichum		Spray quinalphos (0.075%).
	and	(Kerala),	punctiferalis)		gloeosporioides)		Thrips
	harvesting	Kodagu	Thrips	Low	Katte/Mosaic	Low	Under Karnataka conditions, spray
		(Karnataka)	(Sciothrips		(Cardamom		Fipronil (0.005%) or Spinosad
			cardamomi)		mosaic virus)	T	(0.0135%).
					Chlorotic streak	Low	Leaf blight

			(Banana bract mosaic virus)		Maintain optimum shade level by providing 40-60% filtered light. Spray Bordeaux mixture (1%) @ 0.5-1 litre/plant or carbendazim - mancozeb
Vanilla	Bean maturing	Karnataka	Prematureyellowingandbean shedding(Colletotrichumvanillae)Viral diseasesViral diseases(Bean commonmosaicvirus,Beanyellowmosaicvirus,Cucumber mosaicvirus,virus, Cymbidiummosaic virus)	Medium	Premature yellowing and bean sheddingProvide 50% shade in the plantation. Spray carbendazim – mancozeb (0.25%) at 15 – 20 days interval.Viral diseasesRegular inspection and removal of

Ginger	Rhizome	Kerala,	Shoot borer	High	Leaf spot	Medium	Leaf spot
	development	Karnataka,	(Conogethes		(Phyllosticta		Spray Bordeaux mixture (1%) or
	and bulking	Tamil Nadu	punctiferalis)		zingiberi)		mancozeb (0.2%) or carbendazim
							(0.2%) when the initial symptoms
							appear. Care should be taken that the
							spray solution should reach lower
							surface of the leaves also.
							Shoot borer
							Prune and destroy freshly infested
							pseudostems and spray malathion
							(0.1%).
Turmeric	Rhizome	Kerala,	Shoot borer	High	Leaf spot	Medium	Leaf spot
	development	Tamil Nadu,	(Conogethes		(Colletotrichum		Spray carbendazim or mancozeb
	and bulking	Andhra	punctiferalis)		capsici)		(0.2%) or copper oxychloride $(0.2%)$.
		Pradesh,					Shoot borer
		Telangana					Spray malathion (0.1%) or lamda-
							cyhalothrin (0.0125%).