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: 01.11.2018 - 07.11.2018

			Major Insect Pests		Major Plant 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/spike setting	Idukki, Kozhikode, Wayanad (Kerala), Kodagu (Karnataka), Tamil Nadu	Mealybug (Planococcus sp., Ferrisia virgata) (Nursery) Scale insect (Protopulvinari a longivalvata) (Nursery)	Low to Medium Low	Slow decline (Meloidogyne incognita., Radopholus similis) Anthracnose (Colletotrichum spp.) Stunt disease (Cucumber mosaic virus, Piper yellow mottle virus) Mealybug (Planococcus sp., Ferrisia virgata) Anthracnose (Colletotrichum spp.) (Nursery) Basal wilt (Sclerotium	Low Low Medium Low Low	Nematodes (Radopholus similis, Meloidogyne incognita) (Nursery)	Field: Slow decline 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. Anthracnose Spray leaves of the affected vines with carbendazim - mancozeb (0.1%). Stunt disease 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%). Mealybug Drench neem oil (0.5%). or chlorpyriphos (0.075%).

					<i>rolfsii</i>) (Nursery) Viral infection (Nursery)	Low	Nursery:AnthracnoseSpray Bordeaux mixture (1%).Basal wiltRemove and destroy affectedcuttings along with defoliated leaves.After periodic sanitation, the cuttingsshould be drenched withcarbendazim (0.2%) or Bordeauxmixture (1%).Viral infectionsRegular inspection and removal ofinfected plants. Regular monitoringfor insects and spray with neem oil(0.5%) whenever infestation isnoticed.Mealy bug and scale insectsSpray neem oil (0.5%), onceinfestation is noticed.NematodesApply Pochonia chlamydosporia @1g/bag.
Cardamom	Capsule maturation and harvesting	Idukki, Wayanad (Kerala), Kodagu (Karnataka)	Thrips (Sciothrips cardamomi) Shoot borer (Conogethes punctiferalis)	Medium to Severe Medium	Leaf blight (Colletotrichum spp.) Katte/Mosaic (Cardamom mosaic virus) Chlorotic streak (Banana bract mosaic virus)	Low to Medium Low to medium Low	Leaf blightMaintain optimum shade level by providing 40-60% filtered light.Spray carbendazim - mancozeb (0.1%) or carbendazim (0.2%) which may be repeated at 30 days interval depending on disease severity.Katte/Mosaic and Chlorotic streak Prompt inspection of plantation, detection and rouging of virus sources (infected plants/ volunteers). 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. Shoot borer Spray quinalphos (0.075%). Thrips Spray quinalphos 25% EC (0.075%) after undertaking thrashing.
Ginger	Vegetative	Karnataka, Kerala	Leaf roller (Udaspes folus) Shoot borer (Conogethes punctiferalis)	Low Medium	Leaf spot (Phyllosticta zingiberi)	Medium	Leaf spot Spray Bordeaux mixture (1%) or mancozeb (0.2%) or carbendazim (0.2%). Leaf roller Spray malathion (0.1%) at 21 days interval. Shoot borer Prune and destroy freshly infested pseudostems and spray malathion (0.1%).
Turmeric	Vegetative	Andhra Pradesh, Telangana, Tamil Nadu, Odisha	Leaf roller (Udaspes folus)	Low	Leaf spot (Colletotrichum capsici)	Medium	Leaf spot Spray carbendazim or mancozeb (0.2%). Leaf roller Spray malathion (0.1%) at 21 days interval.
Vanilla	Vegetative/Bea n maturing	Karnataka			Leafspot(Colletotrichumvanillae)Stem rot(Fusariumoxysporum f. sp.vanillae)Viral diseases(Bean common	Low Medium Low	Leaf spotSpray Bordeaux mixture (1%) at 15- 20 days interval.Stem rotRemove and destroy infected plantparts. Apply Trichoderma harzianumand Pseudomonas fluorescens (cfu10 ⁸) 50 g per vine.Viral diseases

					mosaic virus, Bean yellow mosaic virus, Cucumber mosaic virus, Cymbidium mosaic virus)		Regular inspection and removal of infected plants. The removed plants may be burnt or buried deep in soil. Control of vector (aphids) by spraying neem oil (0.5%).
Nutmeg	Bearing	Kerala	Borer (Xylosandrus spp.)	Low	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. Borer Adopt strict phytosanitation and crop hygiene measures. Prune and destroy severely affected plant parts.