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
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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	**(a) Bearing stage** **(b) Nursery**	Idukki, Kozhikode, Wayanad (Kerala), Kodagu (Karnataka), Tamil Nadu	**Leaf gall thrips** (*Liothrips karnyi*) **Top shot borer** (*Cydia hemidoxa*) **Pollu beetle** (*Lanka ramakrishnai*) **Mealybug** (*Planococcus* sp., *Ferrisia virgata*) (Nursery)	Medium Medium Medium Low	**Stunt disease** (*Cucumber mosaic virus, Piper yellow mottle virus*) **Foliar infection (**due to *Phytophthora capsici***)** **Anthracnose (***Colletotrichum gloeosporioides***)** **Foliar infection due to *Phytophthora capsici*** (Nursery)	Low Medium Medium 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 with chlorpyrifos (0.075%). **Foliar infection due to *Phytophthora capsici*** Second application of foliar spray with Bordeaux mixture (1%) and drenching the vines at a radius of 45-50 cm with copper oxychloride (0.2%) @ 5-10 litres/vine. Alternatively, drenching and spraying with potassium phosphonate (0.3%) @ 5-10 litres/ vine (drench) or potassium

					Anthracnose (*Colletotrichum gloeosporioides***)** (Nursery) **Basal wilt** (*Sclerotium rolfsii*) (Nursery) **Viral infection** (Nursery)	Low Low Low to Medium		phosphonate (0.3%) @ 5-10 litres/ vine (drench) also may be given. **Anthracnose** Spray Bordeaux mixture (1%) or carbendazim - mancozeb (0.1%). **Leaf gall thrips** Spray dimethoate (0.05%) during emergence of new flushes on young vines. **Top shot borer** Spray quinalphos (0.05%) on tender terminal shoots; repeat spraying at monthly intervals to protect emerging new shoots. **Pollu beetle** Spray quinalphos (0.05%). **Nursery:** **Foliar infection due to *Phytophthora capsici*** 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. **Anthracnose** Spray Bordeaux mixture (1%) alternating with carbendazim (0.1%). **Basal wilt** Remove 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 ml/bag.
Cardamom	**Capsule formation and maturation**	Idukki, Wayanad (Kerala), Kodagu (Karnataka)	**Shoot borer** (*Conogethes punctiferalis*) **Thrips** (*Sciothrips cardamomi*)	Medium Low	**Leaf blight** (*Colletotrichum gloeosporioides*) **Katte/Mosaic** (*Cardamom mosaic virus*) **Chlorotic streak** (*Banana bract mosaic virus*) **Azhukal/Capsule rot** (*Phytophthora nicotianae* var. *nicotianae* and *P. meadii*)	Low to Medium Low Low Medium		**Shoot borer** Spray quinalphos (0.075%). **Thrips** Under Karnataka conditions, spray Fipronil (0.005%) or Spinosad (0.0135%). **Leaf blight** Maintain optimum shade level by providing 40-60% filtered light. Spray Bordeaux mixture (1%) @ 0.5-1 litre/plant or carbendazim - mancozeb (0.1%) or carbendazim (0.2%). **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 *Colocasia* and *Caladium* 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. Prevent water logging by providing adequate drainage. Destroy disease affected portions and plant debris. Spray Bordeaux mixture (1%). Alternatively, fosetyl-aluminium (0.2%) or potassium phosphonate (0.3%) can be used. Drench plant basin with copper oxychloride (0.2%).

Vanilla	**Bean development**	Karnataka			**Premature yellowing and bean shedding** (*Colletotrichum vanillae*) **Bean rot** (*Phytophthora meadii*, *Sclerotium* sp.) **Viral diseases** (*Bean common mosaic virus*, *Bean yellow mosaic virus*, *Cucumber mosaic virus*, *Cymbidium mosaic virus*)	Medium Medium Medium		**Premature yellowing and bean shedding** Provide 50% shade in the plantation. Spray carbendazim – mancozeb (0.25%) at 15 – 20 days interval. **Bean rot** Regulate shade. Remove and destroy infected plant parts and mulch. Spray Bordeaux mixture (1%) and drench soil with copper oxychloride (0.25%) 2 – 3 times, In case of Scelrotium rot, spray carbendazim – mancozeb (0.25%) twice at 15 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 dimethoate (0.05%).
Ginger	**Rhizome development and bulking**	Kerala, Karnataka, Tamil Nadu	**Leaf roller** (*Udaspes folus*) **Shoot borer** (*Conogethes punctiferalis*)	Low High	**Soft rot** (*P. aphanidermatum* and *P. myriotylum*) **Leaf spot** (*Phyllosticta zingiberi*) **Bacterial wilt** (*Ralstonia solanacearum*	Medium to Severe Low to Medium Medium to Severe		**Soft rot** Once the disease is noticed, remove affected clumps and drench affected and surrounding beds with mancozeb (0.3%) or metalaxyl - mancozeb (0.125%) or copper oxychloride (0.2%). **Leaf spot** Spray Bordeaux mixture (1%) or mancozeb (0.2%) or carbendazim (0.2%) when the initial symptoms

					Biovar-3)			appear. Care should be taken that the spray solution should reach lower surface of the leaves also. **Bacterial wilt** Affected clumps may be removed carefully without spilling the soil once the disease appears in field. Dispose the removed plants far from the cultivated area or destroy by burning. The affected area and surrounding areas should be drenched with copper oxychloride (0.2%). **Leaf roller** Spraying malathion (0.1%) at 21 days intervals. **Shoot borer** Prune and destroy freshly infested pseudostems and spray malathion (0.1%).
Turmeric	**Rhizome development and bulking**	Kerala, Tamil Nadu, Andhra Pradesh, Telangana	**Leaf roller** (*Udaspes folus*) **Shoot borer** (*Conogethes punctiferalis*)	Low Medium	**Rhizome rot** (*Pythium aphanidermatum*) **Leaf spot** (*Colletotrichum capsici*)	Low Low to Medium		**Rhizome rot** Once the disease is observed, remove affected clumps and drench affected and surrounding beds with metalaxyl - mancozeb (0.125%) or copper oxychloride (0.2%). **Leaf spot** Spray carbendazim or mancozeb (0.2%) or copper oxychloride (0.2%). **Leaf roller** Spraying malathion (0.1%) at 21 days intervals. **Shoot borer**

								Spray malathion (0.1%) or lamda-cyhalothrin (0.0125%).