ICAR-National Research Centre for Integrated Pest Management, Pusa, New Delhi

Weekly Status Report on Insects Pests & Diseases of Crops

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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)	Low Low Medium Low	**Stunt disease** (*Cucumber mosaic virus*, *Piper yellow mottle virus*) **Foot rot (*Phytophthora capsici*)** **Anthracnose (*Colletotrichum gloeosporioides*)** **Foliar infection due to *Phytophthora capsici*** (Nursery)	Low Low Medium Low	**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%). **Foot rot** Drench the vines at a radius of 45-50 cm with copper oxychloride (0.2%) @ 5-10 litres/vine. Alternatively, potassium phosphonate (0.3%) @ 5-10 litres/ vine or potassium phosphonate @ 5-10 litres/ vine may be used. **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

					Anthracnose (*Colletotrichum gloeosporioides***)** (Nursery) **Basal wilt** (*Sclerotium rolfsii*) (Nursery) **Viral infection** (Nursery)	Low Low Low to Medium		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 maturation and harvesting**	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*)	Medium Low Low		**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.
Vanilla	**Bean development**	Karnataka			**Premature yellowing and bean shedding** (*Colletotrichum vanillae*) **Bean rot**	Medium Medium		**Premature yellowing and bean shedding** Provide 50% shade in the plantation. Spray carbendazim – mancozeb (0.25%) at 15 – 20 days interval.

					(*Phytophthora meadii*, *Sclerotium* sp.) **Viral diseases** (*Bean common mosaic virus*, *Bean yellow mosaic virus*, *Cucumber mosaic virus*, *Cymbidium mosaic virus*)	Medium		**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	**Shoot borer** (*Conogethes punctiferalis*)	High	**Leaf spot** (*Phyllosticta zingiberi*) **Bacterial wilt** (*Ralstonia solanacearum* Biovar-3)	Medium Low		**Leaf spot** Spray Bordeaux mixture (1%) or 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. **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%). **Shoot borer** Prune and destroy freshly infested

								pseudostems and spray malathion (0.1%).
Turmeric	**Rhizome development and bulking**	Kerala, Tamil Nadu, Andhra Pradesh, Telangana	**Shoot borer** (*Conogethes punctiferalis*)	High	**Rhizome rot** (*Pythium aphanidermatum*) **Leaf spot** (*Colletotrichum capsici*)	Low to Medium 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%). **Shoot borer** Spray malathion (0.1%) or lamda-cyhalothrin (0.0125%).