

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: 25.01.2018 - 31.01.2018

| 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 | Nursery/ Harvesting | Idukki, Kozhikode, Wayanad (Kerala), Kodagu (Karnataka) ,Tamil Nadu | Scale insects (<i>Protopulvinaria</i> <i>longivalvata</i> , <i>Lepidosaphes</i> <i>piperis</i>) (Field) | Low | Stunt disease (<i>Cucumber</i> <i>mosaic virus</i> , <i>Piper yellow</i> <i>mottle virus</i>) | Low | Nematodes (<i>Radopholus</i> <i>similis</i> , <i>Meloidogyne</i> <i>incognita</i>) (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 neem oil (0.5%). 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. Scale insects Spray neem oil (0.5%), once infestation is noticed. Root mealybug Drench neem oil (0.5%), once |
| | | | Root mealybug (<i>Planococcus</i> sp.) (Field) | Medium | Slow decline (<i>Meloidogyne</i> <i>incognita</i> , <i>Radopholus</i> <i>similis</i>) | Medium | | |
| | | | Pollu beetle (<i>Lanka</i> <i>ramkrishnai</i>) (Field) | Medium | Anthracnose (<i>Colletotrichum</i> spp.) (Nursery) | Low | | |
| | | | Mealybug (<i>Planococcus</i> sp., <i>Ferrisia</i> <i>virgata</i>) (Nursery) | Low | Basal wilt (<i>Sclerotium</i> <i>rolfsii</i>) (Nursery) | Low | | |
| | | | Scale insect | Low | Viral infection (Nursery) | Low | | |

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| | | | (<i>Protopulvinaria longivalvata</i>) (Nursery) | | | | infestation is noticed. Pollu beetle Spray neem oil (0.5%), once infestation is noticed. Nursery: Anthracnose Spray Bordeaux mixture (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 neem oil (0.5%) whenever infestation is noticed. Mealy bug and scale insects Spray neem oil (0.5%), once infestation is noticed. Nematodes Apply <i>Pochonia chlamydosporia</i> @ 1g/bag. |
| Cardamom | Harvesting | Idukki, Wayanad (Kerala), Kodagu (Karnataka) | Thrips (<i>Sciothrips cardamomi</i>) Shoot borer (<i>Conogethes punctiferalis</i>) | Medium Low | Leaf blight (<i>Colletotrichum</i> spp.) Katte/Mosaic (<i>Cardamom mosaic virus</i>) | Medium Low | Leaf blight Maintain optimum shade level by providing 40-60% filtered light. Katte/ Mosaic Prompt inspection of plantation, detection and rouging of virus |

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| | | | | | <p>Chlorotic streak (<i>Banana bract mosaic virus</i>)</p> | Low | <p>sources (infected plants/volunteers) to reduce re-infection. 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.</p> <p>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.</p> <p>Shoot borer Spray quinalphos (0.075%).</p> <p>Thrips Spray quinalphos 25%EC (0.075%) after undertaking thrashing.</p> |
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| Vanilla | Bean maturing/ Harvesting | Karnataka | | | <p>Premature yellowing and bean shedding (<i>Colletotrichum vanillae</i>)</p> <p>Root and stem rot (<i>Fusarium oxysporum</i> f.sp. <i>vanillae</i>)</p> <p>Viral diseases (<i>Bean common mosaic virus</i>, <i>Bean yellow mosaic virus</i>, <i>Cucumber mosaic virus</i>, <i>Cymbidium mosaic virus</i>)</p> | <p>Medium</p> <p>Low</p> <p>Low</p> | <p>Premature yellowing and bean shedding Provide 50% shade in the plantation.</p> <p>Root and stem rot Soil drenching with copper oxychloride 0.25% at monthly interval.</p> <p>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%).</p> |
| Ginger and Turmeric | Collect the seed rhizomes for the ensuing season from disease-free fields. Harvest the produce at right time and discard diseased/severely infested rhizomes. Before storage, follow appropriate seed treatment and store the seed rhizomes in sawdust + dried <i>Strychnos nuxvomica</i> leaves after rhizome treatment. | | | | | | |

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