

					(Nursery & Field) <i>Phytophthora capsici</i>			<p>infestation is noticed.</p> <p>Pollu beetle Spray neem oil (0.5%), once infestation is noticed.</p> <p>Nursery: Anthracnose Spray Bordeaux mixture (1%).</p> <p>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%).</p> <p>Viral infections Regular inspection and removal of infected plants. Regular monitoring for insects and spray with neem oil (0.5%) whenever infestation is noticed.</p> <p>Mealy bug and scale insects Spray neem oil (0.5%), once infestation is noticed.</p> <p>Foot rot Removal and destruction of dead vines along with root system from the garden is essential as this reduces the buildup of inoculums</p> <p>Drench the vines at a radius of 45-50 cm with copper</p>
--	--	--	--	--	--	--	--	--


							<p>oxychloride (0.2%) @ 5-10 litres/vine after the receipt of monsoon showers (May-June). A foliar spray with Bordeaux mixture (1%) is also to be given. Drenching and spraying need to be repeated during August-September. A third round of drenching may be given during October if the monsoon is prolonged.</p> <p>Apply <i>Trichoderma harzianum</i> around the base of the vine @ 50 g/vine (10^{10} cfu/g) at the onset of monsoon (May-June).</p> <p>Nematodes Apply <i>Pochonia chlamydosporia</i> @ 1g/bag.</p>
--	--	--	--	--	--	--	--

Cardamom	Flowering	Idukki, Wayanad (Kerala), Kodagu (Karnataka)	Thrips (<i>Sciothrips cardamomi</i>) Shoot borer (<i>Conogethes punctiferalis</i>)	Low Low	Leaf blight (<i>Colletotrichum spp.</i>) Katte/Mosaic (<i>Cardamom mosaic virus</i>) Chlorotic streak (<i>Banana bract mosaic virus</i>)	Medium 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 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. 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. Shoot borer Spray quinalphos (0.075%). Thrips Spray quinalphos 25%EC (0.075%) after undertaking thrashing.
-----------------	------------------	--	---	----------------	--	---------------------------------	--

Vanilla	Vegetative	Karnataka			Root and stem rot <i>(Fusarium oxysporum f.sp. vanillae)</i> Viral diseases <i>(Bean common mosaic virus, Bean yellow mosaic virus, Cucumber mosaic virus, Cymbidium mosaic virus)</i>	<p>Low</p> <p>Low</p>		Root and stem rot Soil drenching with copper oxychloride @ 0.25% followed by spray with carbendazim (0.25%) at monthly 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 neem oil (0.5%).
Ginger	Planting	Karnataka, Kerala	Rhizome scale <i>(Aspidiella hartii)</i>	Low	Soft rot <i>(Pythium aphanidermatum, P. myriotylum)</i>	Low	Nematodes Root Knot (<i>Meloidogyne</i> spp.), Burrowing nematode (<i>Radopholus similis</i>) and Lesion nematode (<i>Pratylenchus</i> sp.)	Rhizome scale Treat the seed rhizomes with quinalphos (0.075%) for 20-30 minutes before planting. Soft rot Use disease free seed rhizomes for planting. Select well drained soil for planting and provide adequate drainage to prevent water stagnation. Treat seed rhizomes with mancozeb (0.3%) or meatalaxyl-mancozeb (0.125%) for 30 minutes before planting Nematodes In root knot nematode endemic regions, IISR Mahima may be cultivated. Apply <i>Pochonia</i>

								<i>chlamydosporia</i> @ 20 g/bed (10 ⁶ cfu/g) at the time of planting.
Turmeric	Planting	Andhra Pradesh, Telangana, Tamil Nadu, Odisha	Rhizome scale (<i>Aspidiella hartii</i>)	Low	Rhizome rot (<i>Pythium aphanidermatum</i>)	Low	Nematodes Root Knot (<i>Meloidogyne</i> spp.), Burrowing nematode (<i>Radopholus similis</i>) and Lesion nematode (<i>Pratylenchus</i> sp.)	Rhizome scale Treat the seed rhizomes with quinalphos (0.075%) for 20-30 minutes before planting. Rhizome rot Use disease free seed rhizomes for planting. Select well drained soil for planting and provide adequate drainage to prevent water stagnation. Treat seed rhizomes with mancozeb (0.3%) for 30 minutes before planting Nematodes In root knot nematode endemic regions, IISR Pragati may be cultivated. Apply <i>Pochonia chlamydosporia</i> @ 20 g/bed (10 ⁶ cfu/g) at the time of planting.

(Nodal Officer) C.M. Senthil Kumar
 Name: C.M. Senthil Kumar
 Designation: Senior Scientist (Agri. Ento.)


 Director/Head of Institution

निदेशक Director
 भारतीय मसाला फसल अनुसंधान संस्थान
 Indian Institute of Spices Research
 कालिकट Calicut-673 012
 केरल Kerala, भारत India