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हर कदम, हर ढगर किसानों का हमसफर भारतीय कृषि अनुसंधान परिषद

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# Calender of Operations



ICAR-Indian Institute of Spices Research Kozhikode - 673012, Kerala, India

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Calendar of Operations – Ginger
<ul> <li>Dig the rhizomes marked for seed purpose as well as dry ginger using spade.</li> <li>Stop irrigation before one month of harvest.</li> <li>Clean the rhizomes properly using water. Remove adhering leaves and roots.</li> </ul>
• For organic production, dip the rhizomes in solution of Bordeaux mixture (1%) or solution of <i>Trichoderma harzianum</i> for 20 minutes and drain the water.
• Rhizomes for seed purpose can be treated with mancozeb (0.3%) and quinalphos (0.075%) for 30 minutes and should be dried in shade.
• Treated rhizomes are placed in storage pits with dried sand or sawdust. Spread sand or sawdust of 2 cm thickness above 1 ft stored rhizomes and cover with wooden sheet.
<ul> <li>Stored rhizomes must be examined and rotten ones should be removed at frequent intervals.</li> </ul>
• Stored rhizomes must be examined at frequent intervals and the pest and disease infested ones should be removed.

March	<ul> <li>Seedlings of ginger may be raised using protray technology.</li> <li>The land preparation for next cultivation should be done during March. Clean the previous crop residues and burn, plough thoroughly and pulverize.</li> <li>Stored rhizomes must be examined at frequent intervals and the pest and disease infested ones must be removed.</li> </ul>	ł		<ul> <li>Seed rhizomes must be soaked in 0.1 % quinalphos / 0.3 % mancozeb for half an hour before planting. In organic production, rhizomes are soaked in GRB 35 or <i>Trichoderma</i>.</li> <li>Provide spacing of 25 x 30 cm to 25 x 25 cm and a depth of 5 cm with the viable bud upwards (recommended).</li> <li>Mulch the beds with 6 splits of dried account language/bade (2nd main) are graph.</li> </ul>
April	• Apply lime @ 1-2 tonnes/ha, if soil pH is <6. Beds can be prepared for planting rhizomes after the receipt of summer			coconut leaves/ beds (3x 1 m size) or green leaves and other organic materials @ 15 t/ha after planting rhizomes.
	showers.		May	• Weeds should be removed before
	• Beds of 1m width, 25cm height and of convenient length may be prepared.			<ul><li>fertilizer application.</li><li>Apply 80 kg of urea and 40 kg of muriate</li></ul>
	• In the case of irrigated crop, ridges must be formed 40 cm apart and plant to plant distance should be kept 20-25 cm.			of potash per hectare at 45 days of planting. Apply ash @ 1t/ha and compost @ 2 t/ha after 45 days of planting in
	• Drainage channels must be provided between beds.			<ul><li>organic ginger production.</li><li>Weeding, fertilizer application Mulching</li></ul>
	• Apply 30 t FYM/compost and 310 kg of			followed by earthing up should be done.
	superphosphate per hectare as basal dose and incorporate well into soil.		June-July	• Weeds should be removed and earthing
	• In organic production, 280 kg rock phosphate should be used instead of superphosphate.			<ul><li>up should be done.</li><li>Prevent water stagnation in the field.</li></ul>
	<ul> <li>Ideal time for ginger planting is during first fortnight of April with the receipt of summer showers.</li> </ul>	$\langle$		<ul> <li>Apply 80 kg of urea and 40 kg of muriate of potash per hectare as second doze (90 DAP).</li> </ul>
	• The healthy rhizomes for planting are cut into pieces of 20-25 g with at least 1 bud and can be used for planting in the beds.			<ul> <li>Apply vermicompost @ 2 t/ha and sulphate of potash @ 100 kg/ha at 90 days of planting in organic ginger production.</li> </ul>

	<ul> <li>Provide green leaves in the basins (7.5 tonnes/ha) as mulching material and no mulching is needed if dried coconut leaves are used as mulch.</li> </ul>
	• For the management of shoot borer, pruning of infested shoots and spray with 0.05 % dimethoate is recommended.
	<ul> <li>Spray 0.6% neemgold instead of dimethoate in organic production.</li> </ul>
	<ul> <li>Foliar spray of ginger micronutrient mixture @ 5 gm per litre of water can be done one week after fertilizer application</li> </ul>
	<ul> <li>Remove plants infested with rhizome rot or bacterial wilt,</li> </ul>
	• Once the rhizome rot disease is noticed in the field, remove affected clumps and drench the affected and surrounding beds with mancozeb (0.3%) or 0.125% metalaxyl - mancozeb to check spread of the disease.
	• To avoid spread of this disease to other beds, drenching must be done in all the beds.
August-	• Weeds must be removed from beds.
September	• Second foliar spray of ginger micronutrient mixture @ 5 gm per 11 litre of water can be done one week after second dose of fertilizer application.
	• Avoid water stagnation in the field.
	• Mark healthy and pest free beds for seed

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	<ul> <li>Apply 1 kg of neem cake mixed with <i>Trichoderma</i> in beds of organic ginger.</li> <li>Drenching may be given in beds with Copper oxycloride 0.2% or metalaxyl mancozeb after uprooting (0.125%) rhizome rot affected plants.</li> </ul>
October- November	<ul> <li>Mark healthy beds for collecting ginger seed rhizomes.</li> </ul>
December	<ul> <li>Ginger can be harvested when leaves start drying.</li> <li>Stop irrigation one month prior to harvest.</li> <li>Dig up rhizomes using a spade, remove adhering soil, roots and leaves. Wash well with clean water.</li> <li>Dry ginger can be prepared by sun drying. Peel it carefully to remove the outer skin without damaging the underlying root. Try to make the pieces of same size and thickness to ensure uniform drying.</li> <li>Grade and pack in polythene lined bags.</li> <li>Care must be taken to avoid moisture absorption from atmosphere while storage of dry ginger and heap bags in wooden floor and 50-60 cm away from side walls.</li> </ul>