

GINGER PRODUCTION GUIDE

INTRODUCTION:

Ginger (*Zingiber officinale*) is one of the important spices grown in Nigeria. It was traditionally grown in the ginger savanna region of Kaduna, particularly in Southern Kaduna (Areas like Kachia, Kubacha, Kafamchan, Kwoi and Zankwa), research has shown that it can equally do well in the rainforest region. Ginger is an erect perennial herb with a knobby rootstock that is thick, fibrous and whitish off-colored in appearance. The plant reaches a height of 3 to 4 feet, the leaves growing 6 to 12 inches long. It is extensively cultivated in the tropics.

SOURCES OF PLANTING MATERIAL:

Seed rhizomes should be carefully preserved free from pests and diseases which are collected from originally cultivated forms should be used for planting. The seed rhizomes can be treated with fungicide before sowing. The seed rate varies from 1500-2500kg/ha.

LAND PREPARATION AND PLANTING

Proper ploughing and harrowing is important in the cultivation of ginger as it encourages the proliferation of ginger roots for maximum exploitation of soil nutrients and moisture.

CULTURAL PRACTICE

Mulching the ginger beds with green leaves enhances the germination of seed rhizomes and the addition of organic matter to the soil and also conserves moisture during the later part of the cropping seasons. The first mulching is to be done with green leaves at 10-12t/ha at the time of planting. It is to be repeated at 5t/ha at 3 months after planting. This helps to moderate the soil temperature which needs to be maintained at 28-32°C during the first three months after planting for good rhizome growth. Mulching should be done up to a thickness of 5cm with long-lasting mulch material.

SOIL FERTILITY MANAGEMENT

Organic manure such as green manure, compost wood ash or farmyard manure should be applied to return the nutrients removed from the soil by the crops as well as improve the water and nutrient holding capacity of the soil by the crops as well as improve the water and nutrient holding capacity of the soil. The amount of fertilizer required for a particular crop should depend on the initial fertility status of the soil. Fertilizer is best applied by broad casting in two applications. 300kg of NPK 15:15:15 is recommended per hectare of ginger, applied in split applications, half at planting and half at 4-6 weeks after planting.

Farmyard manure or compost at 5-6 t/ha may also be applied as a basal dose at planting.

WEED CONTROL

Uncontrolled weed growth in ginger plots may reduce rhizome yield by up to 76% compared to weeded plots. The critical period for weed removal in ginger is 8 – 16 weeks after planting. This means the crop should be free from serious weed competition during the period. Manual weeding is done 4-6 weeks after planting and subsequent roughing. Weed growth after 20 weeks of planting does not affect rhizome yield much.

PEST AND DISEASES

Diseases and pests of ginger are rare when ginger is grown in fertile soils. However, high relative humidity and low soil fertility predispose it to the attack of leaf spot disease which, at the advanced stage, may tear the leaves into shreds and finally lead to premature death of the plant. To prevent the disease, select fertile soil and apply balanced fertilizer, plant early and mulch adequately to prevent soil splash on the leaves. Other diseases like Fusarium, yellow and soft rot are rare. There is hardly any known pest of economic importance of ginger. Although, root knot nematode (*Meloidogyne incognita*) is said to be a common pest of ginger, its occurrence in Nigeria has not been established.

HARVESTING AND YIELD

The crop is ready for harvest in about eight to ten months depending on the maturity of the variety. When fully matured, leaves turn yellow and starts drying up gradually, clumps are lifted carefully with a spade or digging fork and rhizomes are separated from dried leaves, roots and adhering soil. The average yield of fresh ginger per hectare varies with varieties from 15 to 25tonnes.

STORAGE OF GINGER

After setting aside planting material for the next session, ginger rhizomes are split and dried soon after harvest. Small quantities of ginger can be stored in covered pits, or in baskets covered with saw dust. Large quantities can be best stored in heaps under the shade of the tree and covered with dry grass, or in well-ventilated huts. The rhizomes should be sorted periodically to remove rotten ones. Seed rhizomes can also be stored in pits dug in the ground under the shade of tree provided there is no chance for water to enter the pits.

NOTE: Feasibility report on Ginger production is available on request.

For further information, contact

Office of the Executive Director
National Horticultural Research Institute
PMB 5432, Jericho GRA
Idi-Ishin, Dugbe, Ibadan
info@nihort.gov.ng, nihortinfo@yahoo.com
www.nihort.gov.ng