Sesame Grower's Guide

Revised Edition
National Agricultural Research Organisation (NARO)

1996

Introduction

Sesame or simsim is grown in Northern and Eastern parts of Uganda which is warm and has little rainfall, as an export crop and for domestic consumption. The seed contains about 50% edible oil which is used for cooking and commercially as blend salad oil. It is also used in the pharmaceutical industry in the manufacture of margarine, soap and also as a fixative in the perfume industry.

Simsim seed has a protein content of 16- 32% and is also used as a confectionary in bakery The whole seed can be eaten after roasting.

Simsim can also be used as protein supplement in livestock and poultry feeds.

Simsim has potential yields of between 500- 800 kg/ha of improved varieties compared to 300-400 kg/ha of most local cultivars.

Varieties

The varieties available in the market include SERRA and S. The variety EM-14 is in the pipeline for release.

Land Preparation

Simsim requires a fine seedbed on well-drained soil.

Seed Rate

The seed rate when broadcast is 6-8 kg/ha or 4 kg/acre. Simsim is planted in rows and the spacing is 30 cm between rows and 10 cm between plants. Bury the seed about 3 cm deep.

Planting

Done during the onset of the first rains in March and April and onset of the second rains in July, August and September depending on rainfall reliability and pattem in the area. A void too much rain during drying.

Thinning

Thinning is done when the plants are about 10 cm high leaving one plant per hole at 10 cm distance between plants.

Weeding

Simsim is very sensitive to weed competition in early growing stages. First weeding is done two weeks after germination and second weeding is after thinning depending on the type of weeds in the area.

Fertilizer

On land where fertility is low, apply 125 kg/ha of SSP to the seedbed. 125 kg/ha of Sulphate of Ammonia or CAN or Urea is applied at planting or side dress after thinning with half of it.

Harvesting and Drying

Harvesting should be done before capsules start shattering once these varieties are of shattering type. Knives are used for harvesting. Tie a handful of stems into a bundle for drying. Arrange and tie these bundles with a rope on the drying rack. The bundles should be put on the rack with capsule tips upright or slanting to avoid loss of seeds during drying. Thresh the dried simsim on cemented, ground, sheet of cloth or ground smeared i with cow dung and dried well to avoid seed getting stuck on the smeared ground. Handle the bundle capsule tips facing the ground and beat it gently using a stick (club) until all the seeds are released. Winnow the seeds well and remove all trash.

Storage

Dry well at 9% moisture content and possibly use storage chemicals like Actellic on seeds stored for next season's planting.

Pest

i. ***Simsim webworm caterpillars***

They feed on top leaves and produce silken webs. The sesame webworm moth is the adult of the caterpillar.

Control: Use Dimethoate (Rogor 40) at 50 mls in 20 litres of water starting from 20 days after emergence of the plant and then repeat 4 times at 10 days interval.

ii. ***Gall-midge***

Controlled using Dimethoate (Rogor 40) at 50 mls in 20 litres starting from 38 days after emergence and then repeat 4 times at 10 days interval. Gall-midge larval population increases from onset of flowering (i.e. 8 weeks after the emergence) to a peak at 10 weeks after emergence and then decreases at 13 weeks.

Diseases

i. Angular leaf spot (Cylindrosporium sesami)
ii. Cercospora leaf spot (Cercospora sesami).
Control: Dithane M-45 and Benlate

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