Spraying Dithane M-45 of 0.2% concentration at 20 and 40 days after sowing (DAS) is effective not only in controlling the blight but also in reducing the intensity of white rust.

Burning the debris of the crop is a simple but important practice for reducing the incidence of Alternaria blight.

Mildew is another disease that causes considerable damage to crop. To control the disease, spraying of Zinels (0.2%) is recommended.

Harvesting time:

When the parts turn yellowish brown, harvest the crop since it is liable to shattering.

Yield :

Toria - 8 – 10 qtl/ha.

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PACKAGE OF PRACTICES OF TORIA



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Krishi Vigyan Kendra Yisemyong, Mokokchung Nagaland Toria (Brassica rapa cv. Toria) is a major oilseed crop of rabi season commonly known as sarson or lahi. It is known for many of its uses and in various purposes for human consumption. Rabi season could be best utilized by growing various rabi crops to achieve double cropping and greatly contribute farmers income

Climate:

The crop requires a fair supply of soil moisture during the growth period and dry period at the time of maturity. Cool temperature, clear dry weather, plentiful of bright sunshine associated with adequate soil moisture increase the oil yield.

Soil

Toria can grow on a wide range of soil condition varying from sandy loam to clay loam soil but is most suitable in light loam soil. Crop can not tolerate water logging and do not grow on heavy soil. Plant can tolerate moderate salinity but a soil having a neutral p^H 6-6.5 is ideal for proper growth and development of the crop.

Field preparation :

The land should be well-prepared by one ploughing followed by 2-3 harrowing. Each ploughing should be followed by planting to make the soil well pulverized and levelled.

Spacing

Toria 30 cm r to r, 5 – 10cm p to p

Thining is done 3 weeks after sowing in order to maintain the 5-10 cm plant to plant distance.

Seed rate : 5 – 6 kg/ha

Time of sowing :

The best time for planting Toria varies from early September to mid – Oct. Toria sown in early October suffer less from aphids while November sown crops suffer the most from aphids and saw flies.

Seed treatment :

Thiram, captan @ 30 gm/kg of seed to protect from seed borne diseases.

Inter cropping

Toria	+ Wheat
Toria	+ Gram
Toria	+ Barley
Toria	+ Potato
Toria	+ Sugarcane

fertilizers :

Ν	-	40 kg/ha
Р	-	40 kg/ha
К	-	10 kg/ha

Irrigation :

Irrigation has been observed as one of the three important factors for raising the production of Toria, the other two being the fertilizer application and plant protection. Two irrigations are required, one at flowering and the other at pod-filling stage as these are the critical stages of crop production.

Plant protection:

The most serious pest of Toria is aphid. The other pests are sawfly and cutworms.

The peak period of aphid activity stretched of beginning from January to mid-February. Therefore,, early sowing of toria and cultivation of short duration varieties should minimize the aphid incidence.

Chemical control of aphid:

Depending upon the intensity of infestation, 2-3 spraying of methyl demeton (0.02%) Demethoate (0.03%) or phosphomethon (0.03%) is recommended.

The economic threshold levels (ETLs) for spraying against aphid indicated that spraying of pesticides should be initiated when the aphid number is 9 - 18/plant and when 30% of the plants are infested. Spraying should be repeated when such a level of infestation is noticed again. As far as possible, chemicals should be sprayed in the afternoon to avoid mortality of pollinators.

Disease :

Alternaria blight is becoming a serious menace affecting Toria production. It has been found to reduce the yield tothe extent of 33 – 48%.

Control: