

Successful Cultivation of Sesame Crop in North India

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Sesame is one of the oldest oil seed crop which grown widely in tropical and subtropical area for its edible oil, proteins, vitamins, and amino acids. The seeds have high oil content around 55% and its oil is used in cooking, preparation of salads and in production of margarine, soaps, pharmaceuticals, paints and lubricants. The residue left after the extraction of oil is used as cattle feed. Sesame production is constrained by various biotic and abiotic stresses, which leads to less productivity in terms of seed yield and oil quality. In this article, valuable tips are shared with respectable farmers to increase productivity of sesame crop.

Punjab Til No. 2: This variety has dense, long, non-hairy pods and those are arranged opposite to each other. Its seeds are white, bold, have 49% oil, less crude fibre, soft and better in palatability. It is tolerant to phyllody and cercospora leaf blights with an average yield 2.80 q/ac.

RT 346: The pods are long, non-hairy, arranged alternately. The seeds are white, bold, contain 49% oil. It is moderately resistant to capsule borer with average yields 2.60 q/ac.

Agronomic practices

It requires a well-prepared seedbed with adequate moisture content for good germination and the crop should be sown in the first fortnight of July. The early sown (June) suffers from higher phyllody disease incidence. One-kilogram seed per acre with 30 × 15 cm spacing (4 to 5 cm deep) required for sowing with a pora or tube attached to the desi plough. Apply only 21 kg N (45 kg urea) per acre at the time of sowing. The crop should be harvested immediately when plants turn pale and capsules have just opened to avoid seed shattering. After harvesting, tie the plants into small bundles and stack in upward direction.

Plant-protection measure

Leaf webber and capsule borer: The young larvae roll together a few top leaves with help of silken threads and continue to feed in the webbed mass. The size of this rolled mass increases gradually as the caterpillar grows older. The full-grown larva is greenish in colour with black head. In the early stage of infestation, the plant dies without producing any branch or shoot. The maximum infestation occurs in September–October and infested shoots stop growing. At flowering, larvae feed inside the flowers and on



capsule formation, larvae bore into capsule and feed on developing seeds. To avoid losses from this pest the crop should be sown in the first fortnight of July.

Leaf Webber's incidence

Jassid: Both nymphs and adults suck the sap from leaves and also act as vector for transmission of mycoplasma like organism (MLO), which induces the malformation and inflorescence. Leaves become red or brown and curled up. Avoid early (June) sowing of crop.

Diseases



Phyllody: It is viral disease, caused by a MLO and transmitted by jassids. All floral parts are transformed into green leafy structures followed by abundant vein clearing in different flower parts. In severe infection, short twisted leaves closely arranged on a stem with short internodes replace the entire

inflorescence, abundant abnormal branches bend down. Finally, plants look like witches broom. Therefore, rogue-out the virus-infested plants regularly and need to control the jassid for further spread of disease.

Blight: It occurs at all stages of crop plant. At flowering stage, it appears as dark brown, angular lesions with grey centre on leaves. The diseased plants give blighted appearance followed by defoliation and can be easily pulled out. For preventive measure avoid excessive use of nitrogenous fertilizers and field should keep free from weeds and debris.

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