



अखिल भारतीय समन्वित गन्ना अनुसंधान परियोजना
All India Coordinated Research Project on Sugarcane
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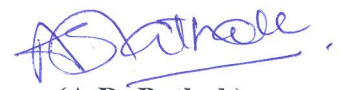
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Advisory on management of locust swarm in sugarcane

As you are aware that swarms of desert locust (*Schistocerca gregaria*) is creating havoc in Rajasthan, parts of Gujarat, Punjab, Haryana, Madhya Pradesh, Uttar Pradesh etc. These swarms are invading in to Indian Territory through land boundaries of Pakistan. It may directly be hitting Indian boundaries from Ethiopia, Somalia, Yemen, Oman as well. As per FAO prediction, several swarms may hit Indian Territory in coming June-July also. Desert locust normally breeds in desert area having sufficient moisture. But, in search of food, swarms of immature adults may move to Indo-Gangetic plains and other parts of the country. Gregarious immature adults are bright pink coloured which may later turn to brownish colour. The sexually matured adults are bright yellow coloured. A female of gregarious phase lay 80-150 eggs, while solitary phase may lay 200-300 eggs in soil in especially designed egg pods depending on suitability of climate. The young nymphs (hoppers) moult five times to fledge in to immature adults and then to sexually matured adults. In optimum temperature and habitat conditions, multiplication rates can be as high as 16-20. A small swarm of 1 km² can have population up to 150 million locusts and may travel up to 150 kms in one day along the wind. The life span may vary from 2 to 6 months. Normally, locusts can complete five generations in a year. Since, locusts are polyphagous and swarms are moving in search of green food, sugarcane crop may be severely affected from their ravages. Therefore, following recommendations may be followed to manage the looming threat of locusts in sugarcane.

1. Regular monitoring of the sugarcane crop and other fields in the area. Keep updated on locust swarm movement through radio, TV, new paper and nearest state agriculture office.
2. As prophylactic measure, spraying of Azadirachtin (1500 ppm) @ 5 ml/ lit water or NSKE (5%) solution on sugarcane may be followed.
3. Once swarm is noticed near the fields, loud noises by beating the drums, tin boxes, running tractor engine without silencers and other such means help in pushing the locust swarm out of the fields.
4. For chemical control of the locusts, apply Lambda cyhalothrin 5% EC @ 400 ml/ ha or Lambda cyhalothrin 10% WP @ 200 ml/ ha or Deltamethrin 2.8% EC @ 500 ml/ha or Fipronil 5% SC @ 125 ml/ ha or Fipronil 2.92% EC @ 220 ml/ha or Chlorpyrifos 20% EC @ 1200 ml/ha or Chlorpyrifos 50% EC @ 500 ml/ ha or Malathion 50% EC @ 1850 ml/ ha or Malathion 25% WP @ 3700 ml/ha in 500 litre water or Deltamethrin 1.25% ULV @ 1000 ml/ha (directly).

Famers should be advised to use protective gears while spraying of synthetic insecticides. Insecticide sprays should be rotated with other recommended chemicals in the subsequent sprays to avoid development of resistance in locusts against insecticides. It is also advised to follow CIB&RC (Govt. of India) recommendations on uses of insecticides. Once locust swarm is noticed in your area, inform nearest state agriculture department office or KVK for further necessary action.


(A.D. Pathak)