MANAGEMENT
1. Keep the orchards clean and follow recommended agro-techniques.
2. Mechanically remove the grubs from the infected trunk holes by using iron wire / hook.
3. Prune and destroy affected branches and paste the cut ends with 5% copper oxychloride (50 g / liter of water).
4. Clean the holes and insert cotton wick soaked in a solution of 0.5% dichlorvos 76 EC (5 ml / liter) and close the holes with mud plaster.
5. Two sprays on the trunk portion with 0.04% chlorpyrphos 20 EC (2 ml / liter of water) at fortnightly intervals with the onset of monsoon.

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The mango trunk borer (Batocera rufomaculata, Cerambycidae: Coleoptera) is increasingly becoming a menace in mango orchards across the country. The insect pest is widely distributed in the mango growing belts including Uttar Pradesh. The infestation is in the range of one to eight per cent depending upon maintenance of the orchards. Affected trees gradually lose their vigour, manifest drying of branches and in severe cases death ensues.

**SYMPTOMS**

The adult beetle is 4-6 cm long, lays eggs on the bark of main trunk, usually on older mango trees between May to December peaking in June-July. The young ones of the beetles (i.e., grubs) start feeding below the bark, making tunnels, subsequently boring into the main stem. The frass coming out of the entry point indicates the presence of trunk borer in the tree. The damage results in yellowing of leaves followed by drying of terminal shoots and branches eventually leading to the death of the whole tree, if not timely managed.

**LIFE CYCLE**

*Life cycle of the pest is annual with one generation per year.*

- **Adults** are stout, dark brown beetles 50-55 mm (male) and 55-60 mm (female) long with yellowish-green pubescence (fine hairs). The adult beetle emerges with the onset of monsoon and start mating. The female beetle emerges with the onset of monsoon and starts laying eggs after 1-2 days of mating and continues up to 20-25 days.

- **Eggs** are shiny white in colour, oval shaped, 5-7 mm long. On an average, it lays one egg per day. Eggs hatch in about 7-13 days. Full grown grubs are 85-95 mm long, yellowish-ivory in colour with well defined segmentation. Pupae are 50-55 mm long and yellowish-brown.

- **Pupa** (7-13 days)

- **Grub** (20-25 days)

- **LIFE CYCLE** (170-190 days)

- **Eggs** (7-13 days)

- **Pupa** (20-25 days)

- **Grub** (20-25 days)

- **Adult**