Red pumpkin beetle on cucurbits

*Aulacophora foveicollis*, syn. *Raphidopalpa foveicollis*

### Prevention
- The red pumpkin beetle is a small insect which adults cause damage to leaves, flowers and fruits, while the larvae damage the roots.
- Use fast growing varieties if possible since they are more likely to outgrow the damage caused by the beetles.
- Avoid planting new crops next to those which are already infested with the beetle - the adults can easily fly between plants and fields.
- If possible, don’t plant in a previously infested field. Otherwise wait at least 1-2 months after harvesting and destroying previous crop remains (bury or burn) before planting the new crop.
- Cover seedlings with polythene bags to protect against beetle damage.
- Cover seedling bed with a mosquito net to act as a barrier between beetles and plants.
- Encourage healthy plant growth by applying manures and/or commercial fertilizers and providing adequate water. This is especially important for seedlings which are particularly vulnerable to beetle damage.
- Use furrow irrigation which moistens the roots of plants but not the soil immediately underneath. Beetle eggs will dry out and die in the top soil layer.

### Monitoring
- Relevant crops: gourd, melon, watermelon, cucumber, pumpkin, marrow, squash.
- Examine the leaves, flowers and fruits for feeding damage by adults. They feed between leaf veins, often cutting and removing circles of leaf, and fly between plants.
- Several beetles may cluster on a single leaf, leaving other leaves untouched.
  - Adults: Reddish-yellow, oval-shaped, 3.5-3.75 mm in width, 6-8 mm in length, antennae about half of body length.
  - Check roots and fruits for larvae feeding damage. Larvae tunnel into the roots causing them to become swollen, discoloured and distorted.
  - Larvae: pale yellow, 1.5-1.6 mm in width, 12-13 mm in length.
  - Seedlings may be completely destroyed by heavy attacks.
  - Observe crop particularly closely when temperature is 27-28°C - the optimal temperature for pupation of the beetle.
  - Be careful not to mistake the beetle for *Canadesia* (previously called *Monolepta*). It has a dark area on the triangular piece at the base of the wing cases. It also has a smooth thorax (the part behind the head) whereas *Aulacophora* has a groove in the thorax.
  - Consider taking action as soon as one adult is found on a plant.

### Direct Control
- For small infestations, collect beetles using hand nets in the early hours of the morning when beetles are sluggish. Kill them in kerosene oil.
- Spray wood ash onto crop. Add half a cup of wood ash and half a cup of lime to 4 L water. Test the strength on a few infested plants before spraying the whole crop.
- Spray crop with neem seed oil and detergent (see label for dosage) at a 7 days interval.

Note: Pesticides may be available to control this pest. Please check with the Ministry of Agriculture in your country to find out which pesticides are registered in your country and the local restrictions for their use.