



Praying mantids approach pests very slowly and then grab them with lightning speed.



Many kinds of spiders, like these jumping spiders, search for and kill pests. Other spiders lie in wait and catch pests when the pest passes by or is caught in the spider's web.

How to Conserve Natural Enemies

You can help natural enemies survive and multiply in two important ways:

- 1) **Do not use broad-spectrum pesticides.** *These pesticides kill natural enemies. Instead, use selective conventional pesticides and bio-pesticides. Learn how to use pesticides properly.*
- 2) **Plant and conserve flowering plants near your crops.** *Nectar and pollen from the flowers help natural enemies survive and reproduce.*



Flowering plants help natural enemies like this fly (a bee mimic) reproduce.

By: Gregory C. Luther and R. Srinivasan
Photos: James Mangan, R. Srinivasan, Peter A.C. Ooi,
G.C. Luther, Suzanne Neave

AVRDC – The World Vegetable Center
P.O. Box 42
Shanhua, Tainan 74199
Taiwan

NATURAL ENEMIES HELP FARMERS CONTROL PESTS



**All spiders are friends of the farmer
because they kill and eat pests**

Natural Enemies in Farmers' Fields

Many insects and spiders help farmers control pests on their crops by hunting down the pests and killing them. These friends of the farmer are called "natural enemies." They are enemies of pests and they control pests in a natural way.

These pictures will help you recognize some common natural enemies in your fields. Protect them and they will help you protect your crops.



Robber flies hunt many kinds of insects.



Lacewings and their larvae feed on aphids, leafhoppers, other soft-bodied insects, small caterpillars, and mites.



Ladybird beetles and their larvae feed on vegetable pests such as aphids, whiteflies, mealybugs, scale insects, and spider mites.



Earwigs prey on pests and decompose organic matter in the soil.



Hoverflies (Syrphid Flies) usually hover around flowers. The adults mainly feed on pollen and nectar. The larvae feed on sucking insects such as aphids.



All kinds of dragonflies feed on pests.



Many kinds of large wasps attack pests, while many small wasps kill pests by laying eggs in the pest's body; after the eggs hatch, the wasp larvae kill the pest.