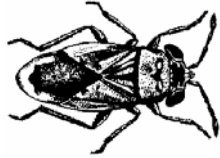


BENEFICIAL INSECTS IN YOUR GARDEN

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Big-eyed Bug

ACTUAL SIZE: 3/16"

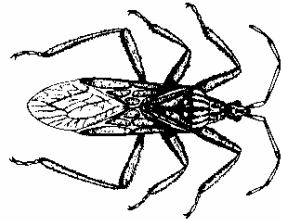
Feeds on many small insects, insect eggs, mites, flea beetles, and aphids.



Minute Pirate Bug

ACTUAL SIZE: 1/16 to 1/8"

Feeds on aphids, mites, thrips, psyllids, and insect eggs.



Damsel Bug

ACTUAL SIZE: 3/8 to 1/2"

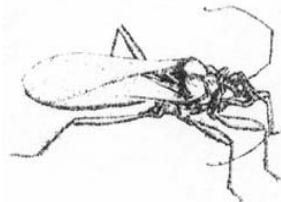
Feeds on aphids, mites, leafhoppers, small bugs, and caterpillars.



Tachinid Fly

ACTUAL SIZE: 3/8 to 1/2"

Feeds on caterpillars, Japanese beetle and other insect larvae.



Assassin Bug

ACTUAL SIZE: 3/4 to 1"

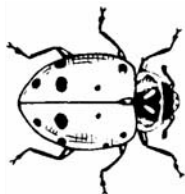
Feeds on most insect species.



Syrphid Fly

ACTUAL SIZE: 1/8 to 1"

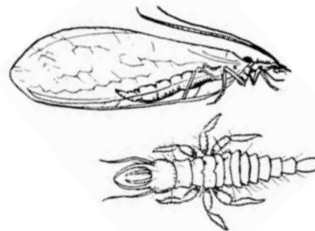
Feeds on aphids.



Lady Beetle

ACTUAL SIZE: 1/4 to 3/8"

Feeds on aphids, mites, thrips, and mealy bugs.



Green Lacewing

ACTUAL SIZE: 1/2 to 3/4"

Feeds on insect eggs, mites, thrips, aphids, mealybugs, whiteflies, leafhoppers, and small caterpillars.



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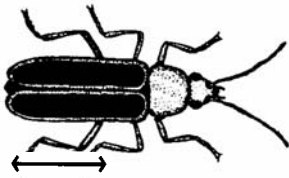
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Soldier Beetle

ACTUAL SIZE: 1/2 to 3/4"

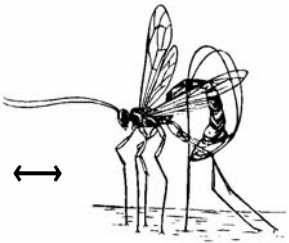
Feeds on aphids and the eggs and larvae of beetles, moths, and butterflies.



Mealy Bug Destroyer

ACTUAL SIZE: 1/16"

Feeds on aphids and mealy-bugs.



Ichneumonid Wasps

ACTUAL SIZE: 1/4 to 1/2"

Feeds on beetles, leafhoppers, aphids, caterpillars, true bugs and whiteflies.



Braconid Wasps

ACTUAL SIZE: 1/16 to 1/8"

Inserts egg in aphid body. Wasp larva kills aphid. Also attacks whiteflies, beetle larvae, and caterpillars.



PLANTS THAT ATTRACT BENEFICIAL INSECTS

Beneficial insects that prey on insect pests are called natural enemies. Many of them need nectar and pollen as adults in order to reproduce. They may also feed on nectar and pollen if pests are scarce. Below is a list of plants which are attractive to many natural enemies.

- Baby-Blue-Eyes (*Nemophila menziesii*)
- Bishop's Weed (*Aegopodium podagraria*)
- Blazing Star (*Mentzelia spp.*)
- Candytuft (*Iberis umbellata*)
- Caraway (*Carum carvi*)
- Clovers (*Trifolium spp.*)
- Coreopsis (*Coreopsis spp.*)
- Coriander (*Coriandrum sativum*)
- Cosmos (*Cosmos spp.*)
- Dill (*Anethum graveolens*)

- Golden Marguerite (*Anthemis tinctoria*)
- Goldenrod (*Solidago altissima*)
- Hyssop (*Hyssopus officinalis*)
- Scabiosa (*Scabiosa atropurpurea*)
- Sunflowers (*Helianthus spp.*)
- Sweet Alyssum (*Lobularia maritima*)
- Tansy (*Tanacetum vulgare*)
- Yarrow (*Achillea millefolium*)

WAYS TO INCORPORATE THESE INSECTARY PLANTS IN YOUR GARDEN

- Plant in rows or islands in your vegetable garden
- Plant an herb garden
- Include perennials that are rich in nectar and pollen in your permanent borders
- Plant hedgerows, e.g. plant a row of sunflowers along a fence or around your compost area

- Grow cover crops, particularly clovers, alternately with your vegetable crops
- Allow some of your herbs, salad or cole crops to bloom to attract beneficials

ADAPTED FROM:

- Beneficial Insects in Your Garden*, Alameda County Master Gardeners.
- Pests of the Garden and Small Farm*. 1998. M. L. Flint. UC ANR Publication 3332.
- Natural Enemies Handbook*. 1998. M. L. Flint and S. Dreistadt. UC ANR Publication 3386.

LINE DRAWINGS FROM:

- Handbook of the Insect World*. 1956. Hercules Powder Company. Wilmington, DE.
- Insects and Diseases of Vegetables in the Home Garden*. 1971. USDA Information Bulletin #380.
- Natural Enemies Handbook*.

WARNING ON THE USE OF CHEMICALS Pesticides are poisonous. Always read and carefully follow all precautions and safety recommendations given on the container label. Store all chemicals in the original labeled containers in a locked cabinet or shed, away from food or feeds, and out of the reach of children, unauthorized persons, pets, and livestock. Confine chemicals to the property being treated. Avoid drift onto neighboring properties, especially gardens containing fruits and/or vegetables ready to be picked. Dispose of empty containers carefully. Follow label instructions for disposal. Never reuse containers. Make sure empty containers are not accessible to children or animals. Never dispose of containers where they may contaminate water supplies or natural waterways. Do not pour down sink or toilet. Consult your county agricultural commissioner for correct ways of disposing of excess pesticides. Never burn pesticide containers.