



COOPERATIVE EXTENSION • YOLO COUNTY  
70 Cottonwood Street, Woodland, CA 95695 Tel. (530) 666-8143 Fax (530) 666-8736

## Attracting Beneficial Insects to your Garden

Beneficial insects are grouped into three categories: predators, parasites and pollinators. Predators hunt, attack and kill multiple individual prey. Parasites during their immature stage live and feed in or on a larger animal (host). Bees are the most common pollinators.

Beneficial insects will reduce pests and produce a garden humming with butterflies, bees and hummingbirds. Many types of pesticides applied to gardens kill all insects equally. Beneficial insects are often more susceptible to pesticides than the pests, which reproduce more prolifically in the absence of parasites and predators. Gardens free of broad-spectrum pesticides and planted with a variety of blossom- and nectar-producing plants attract and nourish beneficials that naturally reduce garden pests.

Beneficial insects include:

- Bees - pollinators
- Parasitic wasps and tachinid flies – feed during their immature stage on caterpillars (e.g., cutworms and codling moths), aphids, whiteflies, scales, etc.
- Assassin bugs – attack almost any insect
- Damsel bugs – attack many small insects
- Green lacewing larvae – feed on mites, eggs, and small insects esp. aphids
- Lady beetles and their larvae – feed on mostly aphids
- Pirate bugs – attack mites and any tiny insect, esp. thrips
- Predaceous ground beetle adults and larvae– stalk soil-dwelling insects
- Soldier beetle adults – eat mostly aphids
- Spiders – attack all kinds of insects
- Syrphid fly (Hover flies) – larvae eat mostly aphids

The young of parasites and many insect predators eat pests while adults feed on nectar and pollen and (in certain species) also pests. Provide food, habitat and shelter, including a variety of blooming material throughout the seasons to encourage beneficials to stay near your garden.

Consider plants with abundant small flowers. Plant perennials as well as annuals to create a garden with blooms for each season. Certain plants can be invasive. Choose plants that are appropriate for each area of your garden and the level of gardening that you want to do.

- Early season bloomers:
  - Alyssum, Penstemon, Cinquefoil, Thyme, Columbine, Carpet Bugleweed
- Mid Season bloomers:
  - Common Yarrow, Aster, Spike Speedwell, Poppy Mallow, Coriander, Lavender, Lobelia, Mint, Stonecrop

- Late Season bloomers:
  - Fern leaf Yarrow and other yarrows, Lavender Globe Lily, Dill, Chamomile, Fennel, Statice, Wild Bergamot
- A short list of some other plants to consider:
  - Annuals or perennials in the sunflower or aster family
  - Allow to flower: cabbage, broccoli, mustard, bok choy, radish
  - Herbs – borage, rosemary, basil
  - Carrot family
  - Sage (Salvia)
  - Buckwheats

REFERENCES:

[www.ipm.ucdavis.edu/PMG/menu.biocontrol.html](http://www.ipm.ucdavis.edu/PMG/menu.biocontrol.html)

Compiled by Laura Cameron, Yolo County Master Gardener  
Reviewed by Steve Dreistadt, IPM, UC Davis

*All contents copyright © 2011. The Regents of the University of California All rights reserved*

The University of California Division of Agriculture & Natural Resources (ANR) prohibits discrimination or harassment of any person in any of its programs or activities (Complete nondiscrimination policy statement can be found at <http://ucanr.org/sites/anrstaff/files/107734.doc>)

Inquiries regarding ANR's equal employment opportunity policies may be directed to Linda Marie Manton, Affirmative Action Contact, University of California, Davis, Agriculture and Natural Resources, One Shields Avenue, Davis, CA 95616, (530) 752-0495.