



Good Bugs? Yes, it is a bug-eat-bug world! Many “good bugs” can help manage pests that munch your prized plants. These *beneficial insects* are predators or parasites of other insects. If the beneficials stay around your garden, they can be powerful allies, helping to keep in check the three percent of insects that are pests. What does this mean for you? Fewer pests, less pesticides or none, and the foundation for an interdependent—and very interesting—garden ecology. If, on the other hand, you spray pesticides that kill many kinds of insects, the good bugs are killed, too. With their natural enemies gone, pest populations bounce back with a vengeance.

One way to encourage visiting beneficials to be permanent pest patrollers is to grow flowers that are good producers of nectar and pollen; with your help they’ll have food when pest populations decline. Even if your garden is as small as a few pots on a patio, a container of these *insectary plants* can help keep the good bugs around. In a larger garden, insectary plants can be planted among other plants.

Making a Good Bug Tub

What kind of pot should I use? Ideally, you will want to have enough different plants for blooms throughout the year, but that could mean a big tub. Container size can also depend on weight limits on a balcony garden, the number and mature size of the plants you choose, and how often you want to water it. Perennials and shrubby plants need extra space. For shade-loving plants, a porous pot avoids moldy soil. Don’t forget drainage holes. To keep the pot out of water, set it on pebbles or other supports.

What kind of soil is best? A light, fast-draining soil is best for pots. Supplement commercial potting soil with compost and a bit of slow-release fertilizer (organic or pelleted). Fertilizer enhances plant strength and size, but too much fertilizer—especially for native plants—will favor leaves at the expense of flowers.

What’s special about container care? Group plants with like needs. Water pots more often and set them in slightly shadier spots than similar in-ground plantings. Mulch on top (leaves or compost) can keep pots from drying out too fast and provide shelter for insects. For early bloom, plant the pot with wildflower seeds in fall.

What beneficial insects can I attract? Ladybugs, properly “ladybird beetles,” are the best-known beneficials, but most people don’t recognize their alligator-shaped larvae—even better predators than the adults—or their orange eggs on the bottom of leaves. Likewise, lacewing and hover fly larvae are the predaceous stage. And there are many more beneficials, including parasitic wasps—happily, much too small to sting—and soldier bugs, armored like six-legged tanks. Guides such as “Mac’s Field Guide: Good [and Bad] Garden Bugs of California” (a laminated sheet) and Starcher’s charming *Good Bugs for Your Garden* can introduce these tiny neighbors.

A Good Bug Tub Recipe

Joan Marlowe of the California Native Plant Society, Santa Clara Valley Chapter, designed the Good Bug Tub pictured using California native plants. Natives need little water and little or no fertilizer. She used a 20" plastic pot mounted on rollers and plans to add **Sulphur buckwheat** (*Eriogonum umbellatum* var. *polyanthum*) when available.

- Blue bedder penstemon (*Penstemon heterophyllus* var. *purdyii*); perennial, blooms June–July
- Dwarf blue lupine (*Lupinus nanus*); annual, March–May; can add seeds in fall
- Seaside daisy (*Erigeron glaucus*); perennial; March/April–August
- Coyote mint (*Monardella villosa*); perennial, May–September
- California poppy (*Escholzia californica*); perennial, March–October; long tap root requires tall pot
- Common yarrow (*Achillea millefolium*); perennial, April–July
- Tidy Tips (*Layia platyglossa*); annual, March–September; add seeds in fall

More Good Insectary Plants for Containers

Plan for diversity. One of every five flowering plant species is attractive to beneficials. Look for flat or shallow-throated flowers sized to the tiny mouthparts of beneficials and rich with nectar and pollen. Carrot relatives (many herbs) are top nectar producers; note *they must flower to be insect food*. Sunflower relatives (think daisy form) bloom longer. They have small true flowers at the center surrounded by petal landing pads. For early bloom, many species can be seeded in fall.

INSECTARY PLANT EXAMPLES. Key: annual/biennial/perennial A/B/P; Sun/partial shade/shade ☼/☺/●; more water ♠

Aster	☼♠P	Some native. Choose short species for pots. Bloom summer–fall.
Baby blue eyes (<i>Nemophila menziesii</i>)	☼☺♠A	Native. Trailing. Blooms Feb.–April.
Buckwheat (<i>Eriogonum</i>)	☼P	Native. Resist drought. Gravelly soil, <i>require</i> excellent drainage. Sulphur & red buckweats easier. Some bloom to Dec.
Chrysanthemums, marguerites, feverfew, daisies	Vary	Golden marguerite attracts all five major groups of beneficials.
<i>Coreopsis</i>	☼♠	Some native. Deadhead for long season.
<i>Cosmos</i>	☼A	Select dwarf strains for pots. Bloom summer–fall.
Fleabane (<i>Erigeron</i>)	☼♠P	Native. Blooms April–June/July.
Goldenrod	☼☺P	Some native. Look for smaller ones.
Herbs/vegetables: cilantro/coriander, parsley, caraway, thyme, borage, carrots, small mustards, chamomile, basil, tansy, rosemary, dill (tall), others	Vary	Cilantro and African blue basil highly recommended. Prostrate rosemary trails over edge of pots. Let some herbs flower and some carrots and parsley winter over.
Mints: spearmint, peppermint, catnip (Dropmore), lemon balm, Korean mint, others	♠P	Some native. Lemon balm blooms July–Oct. Good shelter.
Monkey flower (<i>Mimulus</i>)	P	Native. Scarlet monkey flower smaller than sticky monkey
Queen Anne's lace (<i>Daucus carota</i>)	Vary	flower but needs more shade and water. Scarlet: Bl. June–July.
<i>Rudbeckia</i> (coneflower, black-eyed susan)	☼B	Tall. Blooms May–Sept./Oct.
Sunflower (<i>Helianthus</i>), Mexican sunflower (<i>Tithonia</i>)	☼♠B/P	Some native; vary in height.
Sweet alyssum (<i>Lobularia maritima</i>)	☼A	Pick dwarfs for pots. Avoid those with pollen drop bred out.
<i>Verbena</i>	☼A	Highly recommended. Blooms all seasons.
Yarrow (<i>Achillea</i>)	☼P	Some native. Give lots of sun and heat, no water on foliage.
	☼P	Highly recommended. Some native. Insects like white. May–Jul.

More Resources

Bauer, N. *The Habitat Garden Book: Wildlife Landscaping for the San Francisco Bay Region*, 2001.

Flora for Fauna: Habitat Plants for Birds, Butterflies, and Beneficial Insects. Booklet from Wayward Gardens (\$5), (707) 829-2885.

“Gardening for Wildlife with Native Plants,” *Bay Nature* Supplement, Jan.–Mar. 2003; and

www.baynature.com/2003janmarch/2003janmarch_toc.html (extensive links)

www.ipm.ucdavis.edu. (University of California Integrated Pest Management site: pest identification, IPM approach)

<http://pages.prodigy.com/gardenshop/green11.htm> (tested insectary plants and beneficials they attract)

<http://www.stanford.edu/~rawlings/blazcon.htm> (a local California Native Plant Society chapter site; see “Gardening with Native Plants”)

<http://www.laspilitas.com/> (database of California native plants with photos, range, cultural information; more)



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