

Predatory Insect Guide for Insectary Gardens

| Beneficial | Species | Target Pests | Lures |
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| Assassin Bug | 150+ Garden species | Indiscriminate feeders | Goldenrod, sunflowers, wildflowers, Carrot family: Queen Anne's Lace, Bishop's Lace, dill, fennel, chervil. Overwinter in leaves, bark, debris. Family includes the Wheel Bug. |
| Big-eyed bugs | Geocoris | Aphids, bean beetles, cabbage loopers, cabbage worms, caterpillars, caterpillar eggs, cinch bugs, flea beetles, spider mites, thrips, whiteflies, many insect eggs | Low foliage, oregano, thyme, clover, daisy, chamomile, yarrow, sunflower, marigold, "weeds". Will eat nectar and sap when prey is scarce. |
| Damsel bugs | 400+ | Aphids, asparagus beetles, cabbage worms, thrips, tobacco budworms, small caterpillars, cutworms, cabbage loopers, Colorado potato beetle eggs & larvae, four-lined plant bugs, leaf hoppers, sawfly larvae, spider mites, whiteflies, many insect eggs | Low foliage, dianthus, thyme, clover, chervil, Queen Anne's lace, Bishop's lace, dill, fennel, chervil. Adults lay eggs on grasses and overwinter in grasses. |
| Dicyphus | Hesperus | Whiteflies, mites, aphids, thrips, moth eggs, potato psyllids | Foxglove, mullein. |
| Ground beetles | 2500+ | Asparagus beetles, caterpillars, Colorado potato beetles, corn ear worms, cutworms, slugs, snails, grubs, gypsy moth larvae, squash vine borers, tobacco bud worms | Tall, dense grasses; brush piles |
| Hover flies (Syrphid) | 1000+ | Aphids, cabbage worms, caterpillars, mealybugs | Alyssum, asters, coreopsis, cosmos, feverfew, mint, statice, sunflowers, wild mustard, zinnia, and many more. Adults feed on nectar & pollen. |
| Lacewings | Chrysopa | Aphids, asparagus beetle larvae, Colorado potato beetle larvae, caterpillar eggs, young caterpillars, corn earworms, lace bugs, mealy bugs, some scale insect, spider mites, whiteflies, and eggs of several pests | Coreopsis, cosmos, goldenrod, angelica, caraway, Queen Anne's lace, Bishop's lace, dill, fennel, cilantro, marguerite daisy, tansy, yarrow, helianthus, dandelions. Larval lacewings are predators, adult lacewings feed primarily on nectar and pollen. |
| Ladybugs (family includes Mealybug Destroyer) | 450+ | Aphids, asparagus beetle larvae, Colorado potato beetle larvae, lace bugs, mealybugs, bean beetle larvae, scale, spider mites, whiteflies, and eggs of several pests | Asclepias, bugle weed, cabbage family, chamomile, cilantro, dandelions, dill, fennel, hairy vetch, oregano, Queen Anne's Lace, tansy, sunflower, goldenrod, thyme, yarrow. Both adult and larval ladybugs eat pests, but adults also require nectar & pollen. |

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| Minute Pirate Bug | Orius | Aphids, small caterpillars, lace bugs, Mexican bean beetle larvae, scale, spider mites, thrips, whiteflies, various insect eggs | Adults and nymphs are predators. Adults will turn to nectar and pollen early in the season when prey is more scarce. Mustards, buckwheat, clover, cosmos, corn silks, basket of gold, Sunflower, wallflower, sage, alfalfa. |
| Parasitic wasps | Many | Aphids, cabbage worms, tobacco budworms, cutworms, Colorado potato beetles, four-lined plant bugs, sawfly larvae, whiteflies, beetle larvae, bagworms, cucumber beetles, gypsy moth caterpillars, Japanese beetles, leafminers, mealybugs, bean beetles, squash vine borers, tent caterpillars, tomato hornworms, tobacco hornworms, fly larvae. | Allium, alyssum, cilantro, coral vine, cosmos, dill, fennel, lemon balm, mustard, radish, thyme, statice, yarrow, zinnia (nectar & pollen for adult stage) |
| Predatory mites | Several | Spider mites, thrips, fungus gnats. | Must have prey species present. |
| Predatory wasps | Many | Caterpillars are fed to the young. Blue mud wasp favors Black widow spiders. | Adults feed on nectar and pollen. |
| Robber flies | 1000+ | Colorado potato beetle, four-lined plant bugs, Japanese beetles, Mexican bean beetles. Robber flies are opportunistic feeders and will also eat some beneficials such as butterflies, dragonflies, and damselflies. | Prefer a diverse landscape. Both adults and larvae are carnivorous predators. |
| Soldier beetles | | Adults - aphids. Larvae - grubs, caterpillars, grasshopper eggs. | Goldenrod, daisy family, cosmos, marigold, zinnia. |
| Spiders | Many | Wide variety of pests depending on species. | Travel and hide in mulch, leaves, pine straw. |
| Tachinid flies | 1300+ | Caterpillars, codling moth, Colorado potato beetles, corn earworms, cucumber beetles, cutworms, earwigs, four-line plant bugs, Japanese beetles, Mexican bean beetles, peach twig borers, leaf rollers, grasshoppers, sawfly larvae, squash bugs, tobacco budworms. | Cilantro, feverfew, chamomile, oxeye daisy, flowering buckwheat, sweet alyssum, Carrot family: Queen Anne's Lace, Bishop's Lace, dill, fennel, chervil, parsley, cilantro. |