



ATTRACTING BENEFICIAL INSECTS

Flowering plants play a vital role in the organic garden for the creatures that they attract. Many of these are insects that eat or parasitise a range of garden pests, playing an important role in natural pest control.

Predators and parasites

Insects such as **ladybirds**, **lacewings** and **hover-flies** are all natural predators of insect pests such as aphids, mites, mealy bugs and caterpillars. Their larvae are particularly voracious feeders. Adults seek out pest colonies, laying their eggs close by to enable the larvae to feed. One hover-fly larva can consume up to 50 aphids in a day and around 1000 in a lifetime. From one female emerging in spring, some 4000 hover-flies may be produced during a season.

Ladybird eating aphids



Parasitic insects, such as the tiny **tachnid flies** and some species of wasps, lay their eggs directly into the pest; the developing larvae feed within the pest, finally emerging, leaving the pest for dead.

Both predatory and parasitoid insects, particularly the adults, require high-energy food to help them seek out appropriate prey or hosts. Sugars and proteins are provided by nectar and pollen, gathered from flowers. Adult female hoverflies and lacewings particularly, need the protein found in pollen to ensure that their eggs develop successfully.

Choosing attractant plants

Whatever the size of your garden, room can be made for 'attractant' plants. Plant them in and around the vegetable patch as well as in the flower garden, to encourage beneficial insects where they are often needed most.

Simple, open flowers are best, or small flowers with the pollen and nectar within easy reach of the insects. Avoid hybrid cultivars or those with complex flower forms, such as double flowers. Hybrid forms are often sterile and do not produce pollen or nectar.

Seasonal plants

Ideally choose plants, and time sowings to ensure that you have something in flower throughout the year. Early spring flowers are particularly important to feed adults emerging from hibernation when pollen and nectar supplies are very scarce. Hazel and willow help provide a supply early in the season, as do spring bulbs. Calendula will provide pollen and nectar through until November. The poached egg plant, *Limnanthes douglasii*, is very easy to establish, self-seeding each year for a continuous supply of bright, open flowers.

Provide safe cover

Cultivated bare soil is not attractive to ground-dwelling predators, such as ground beetles, rove beetles and centipedes. They love the dark, moist conditions found under ground-cover plants or plant debris. Keep soil covered with mulches, ground cover plants or a green manure crop. Green manures will provide temporary cover for beneficial insects and help build soil fertility..



Don't be too tidy

Put off tidying up in your garden until spring. This will help to provide beneficial insects with safe hibernation sites. Both ladybirds and lacewings like to over-winter in hollow stems. Ladybirds also like to hibernate amongst tussocky grass or dead leaves. Therefore, it helps to leave old plant material undisturbed during winter. Leave a patch of grass to grow a bit longer, or let a corner of the garden run wild.

Spiders are also important predators of pest insects, although many species found in Great Britain live for just one year. Females lay several egg masses before dying, depositing them under plant debris or rocks to over-winter. Removing debris can also remove the egg sacs, significantly reducing spider populations in the following year.

Top 10 plants to attract beneficial insects

The alphabetical list below contains our 'Top 10' plants which are particularly attractive to beneficial insects. Seeds of most plants are available to order from The Organic Gardening Catalogue.

- **Californian poppy** (*Eschscholtzia californica*)
Fast-growing perennial. Direct sow in spring in a sunny position. Flowers June until Sept.
- **Candytuft** (*Iberis umbellata*)
hardy annual, Direct sow in spring in a sunny position, flowers May through until Sept.
- **Coriander** (*Coriandrum sativum*)
Tender annual herb, grown for the seeds rather than the leaves. Direct sow from spring to early summer into free-draining soil in a sunny position.
- **Dyers chamomile** (*Anthemis tinctoria*)
Evergreen perennial herb, which produces golden yellow flowers during July and August. Sow under glass during March and April, Plant out in early summer into well-drained soil in a sunny spot.
- **Fennel** (*Foeniculum vulgare*) and **bronze fennel** (*Foeniculum vulgare* 'Purpureum')
A tall, hardy perennial herb that produces flattened clusters of tiny bright yellow flowers from August until October. Sow directly in spring in a dry, sunny position..
- **Fern-leaf yarrow** (*Achillea filipendulina*)
Hardy, easy to grow herbaceous perennial. flower June until September. Direct sow in spring. Prefers full sun
- **Goldenrod** (*Solidago virgaurea*)
Herbaceous perennial, flowers July until September. Direct sow in spring into well drained soil in full sun or partial shade.
- **Phacelia** (*Phacelia tanacetifolia*)
Hardy annual, direct sown from March until September. Prefers well-drained soil and a sunny position. flowers June until September, very attractive to bees.
- **Poached-egg plant** (*Limnanthes douglasii*)
Low growing hardy annual, making good ground cover. Can be direct sown from March until May, producing scented flowers from May to August
- **Pot marigold** (*Calendula officinalis*)
Hardy annual, which will self-seed freely. Produces bright orange, daisy-like flowers from May to the first frosts of autumn. Direct sow in autumn, spring or early summer
- **Cornflower** (*Centaurea cyanus*) Hardy annual, which will self-seed freely.
- **Chives and Nasturtiums** are also great and can be eaten too.

Finally, remember that ladybirds need aphids! Always leave some aphids and other pests in the garden, otherwise beneficial insects will not be encouraged to stay in your garden and lay their eggs. The aim is to have tolerable levels of pests in your garden, not no pests at all.