

## Pollinator-friendly cut flower plants

Adding appropriate flowering plants to the farm or garden landscape promotes insect diversity and sustainability in the system. Pollinators are vital for some fruit and vegetable production. They increase fruit size, yield, and quality in many other fruits and vegetables that are self-pollinating. Pollinator-friendly plants are also attractive to other species of insects – many of them beneficial (e.g. hover flies, ladybird beetles and parasitic wasps). Flowers may produce pollen (a source of protein needed for insect egg production) and/or nectar (a source of carbohydrates needed for energy). Flower size and shape determine the insects that are attracted to the flower. In general, small, shallow flowers attract small bees, flies and wasps. Larger, deeper flowers tend to attract honeybees, bumblebees, and butterflies. White or light-colored flowers that release their fragrance at night attract night-flying moths.

### When you plant for pollinators – remember:

Avoid plants with double flowers, the nectar and pollen is usually not accessible (or not present at all).

Don't use plants bred to be “pollen-free” (e.g. some cultivars of sunflowers) – they won't be feeding the bees.

Plants that are nourished and watered will provide better food for pollinators (and usually better cut flowers as well).

Bees can't see the color red so they won't normally utilize red flowers (unless the red color has an ultraviolet light component in it). However, these flowers are often quite attractive to hummingbirds.

Plan for a full season of flowering – pollinators are present from early spring to late fall. Deadhead plants to encourage prolonged bloom. Weeds (i.e. dandelions and goldenrod) can provide excellent early spring and late fall pollen and nectar for pollinators.

Cultivars of good bee plants may or may not be good bee plants. When plant breeders tinker around with plant characteristics, they may inadvertently change the food value of the nectar and/or pollen that the plant produces. If I have knowledge that a specific cultivar is a good bee plant, the cultivar name will be indicated below the species name in the charts below.

**PERENNIALS** – All take full sun, are adapted to the mid-Atlantic region, and need well-drained soil (unless otherwise indicated).

"Native" is indicated for plants that are native anywhere in the continental United States.

| <b>COMMON NAME</b> | <b>LATIN NAME</b>  | <b>HT.</b> | <b>FLOWER COLOR</b> | <b>BLOOMS</b> | <b>NOTES &amp; SOURCE CODES</b>   |
|--------------------|--|------------|---------------------|---------------|---|
| Yarrow             | <i>Achillea millefolium</i><br>'Summer Pastels' (ok from seed), 'Cerise Queen', 'Colorado' | 1-3'       | many                | summer        | native, white is best for pollinators, can dry flowers, rapid spreader <b>Ch Co J</b><br><b>JC S SofC T</b> |

|                     |   |       |                                 |                        |  |
|---------------------|---|-------|---------------------------------|------------------------|--|
| Allium              | <i>Allium</i> spp.  | 1-4'  | white, pink, purple, & yellow   | late spring/summer     | bulbs, plant in fall, tolerates drought, deadhead <i>A. tuberosum</i> & <i>A. caeruleum</i> to avoid weed problems, can dry flowers <b>Ch Co JC</b>  |
| Golden marguerite   | <i>Anthemis tinctoria</i>   | 2-3'  | yellow                          | summer                 | tolerates poor, dry soil, doesn't like humidity or heat, cut back heavily after flowering <b>Ch</b>  |
| Swamp milkweed      | <i>Asclepias incarnata</i>  | 3'    | mauve, pink or white            | spring to early summer | native, adapts to drier conditions <b>Ch J JC SofC</b>   |
| New England aster   | <i>Aster novae-angliae</i>  | 4-6'  | many                            | late summer to fall    | native, support or pinch back, harvesting can cause rash <b>Ch J JC PD SSE</b>   |
| New York aster      | <i>Aster novi-belgii</i>  | 1-6'  | many                            | late summer to fall    | native, support or pinch back <b>Ch</b>  |
| Astrantia           | <i>Astrantia major</i>  | 2-3'  | cream/pink pink & red cultivars | late spring to summer  | part shade ok, likes organic matter and moisture, 10-14 d as cut flower <b>Ch JC</b>   |
| Bluebeard           | <i>Caryopteris x clandonensis</i>   | 3-4'  | blue                            | late summer to fall    | shrub, cut back hard in late winter <b>JC PD</b>   |
| Common bluebeard    | <i>Caryopteris incana</i>   | 3-5'  | violet-blue or white            | late summer            | shrub, cut back hard in late winter, may dieback in zone 6, drought tolerant <b>Ch</b>   |
| Leopard's bane      | <i>Doronicum orientale</i> var. <i>magnificum</i> [may be listed as <i>D. caucasicum</i> ] 'Finesse' (ok from seed) | 1-2'  | yellow                          | early to mid-spring    | part shade in hot locations, water during drought, zone 4-7 (not heat tolerant - may go summer dormant) <b>Ch</b>  |
| Coneflower          | <i>Echinacea purpurea</i> 'White Swan'  | 2-3'  | red/purple & white              | July to September      | native, part shade ok, drought tolerant, sow in fall (or cold stratify), the flowers of the straight species droop & look wilted, plants may be short-lived <b>Ch J PD PV SofC S SSE T</b> |
| Small globe thistle | <i>Echinops ritro</i>   | 3-4'  | dark blue                       | June to August         | spiny foliage, can dry flowers, ok on poor & dry soil <b>Ch</b>  |
| Bluetop sea holly   | <i>Eryngium alpinum</i> 'Blue Star', 'Superbum'   | 1-2'  | blue                            | midsummer              | spiny, 14 days as cut flower, ok on poor & dry soil, difficult to germinate <b>Ch JC</b>   |
| Sea holly           | <i>Eryngium amethystinum</i>  | 1½-2' | blue                            | midsummer              | spiny, ok on poor & dry soil, difficult to germinate, can dry flowers <b>Ch</b>  |
| Flat sea holly      | <i>Eryngium planum</i> 'Blaukappe'  | 2-3'  | blue                            | midsummer              | spiny, ok on poor & dry soil, difficult to germinate <b>Ch J JC</b>  |
| Eryngium            | <i>Eryngium x tripartitum</i>   | 3½-4' | blue                            | midsummer              | spiny, ok on poor & dry soil, difficult to germinate <b>Ch JC</b>  |

|                            |  |        |                                   |                           |   |
|----------------------------|--|--------|-----------------------------------|---------------------------|---|
| Blanket flower             | <i>Gaillardia aristata</i>   | 3'     | yellow/red                        | summer                    | plants sprawl, good in hot & dry conditions, long-blooming, flowers close at night <b>Ch T</b>  |
| Blanket flower conditions, | <i>Gaillardia x grandiflora</i><br>'Golden Goblin' (blooms first year from seed, yellow)<br>[may be listed as <i>Gaillardia aristata</i> ] | 2-3'   | yellow/red                        | summer                    | plants sprawl, good in hot & dry long flowering season, plants are short-lived but self-seed<br><b>Ch JC SofC</b>                           |
| Baby's breath              | <i>Gypsophila paniculata</i>   | 2-3'   | white or pink                     | summer                    | likes alkaline soil, filler, taprooted<br><b>Ch J JC SofC</b>   |
| Sneezeweed                 | <i>Helenium perennis</i>   | 3-5'   | yellow, orange, red, mahogany     | midsummer to frost        | likes lean, moist soil, cut back hard by June, needs support, cut back by 1/3 after flowering <b>Ch JC</b>                                  |
| Jasione                    | <i>Jasione perennis</i><br>'Blue Light'  | 2'     | blue                              | June on                   | blooms 1 <sup>st</sup> year from seed, part shade ok<br><b>Ch</b>   |
| Lavender                   | <i>Lavandula angustifolia</i>  | 2-3'   | white, pink, lavender             | summer                    | can dry flowers, prune to 6-8" in spring, low germination rate, slow grower<br><b>CO J JC PV S SofC T</b>                                   |
| Lavender                   | <i>Lavandula x intermedia</i><br>'Dilly Dilly'   | 2-3'   | purple and white                  | summer                    | drought tolerant, can dry flowers, shrubby <b>JC S</b>  |
| Liatris                    | <i>Liatris</i> spp.  | 1-6'   | purple, mauve, rose-purple, white | mid to late summer        | native, prefers moist soils – especially <i>L. spicata</i> , can dry flowers <b>Ch JC PD</b>  |
| Sea lavender               | <i>Limonium gerberi</i><br>[may be listed as <i>L. latifolium</i> ]  | 3'     | lavender                          | summer                    | can dry flowers <b>Ch J</b>   |
| Bee balm                   | <i>Monarda didyma</i><br>'Panorama' series (ok from seed)  | 2-4'   | many                              | summer                    | native, needs moisture retentive soil, can be invasive, divide every 2-3 years, suitability as a cutflower varies by cultivar <b>Ch J S</b> |
| Catmint                    | <i>Nepeta catarica</i>   | 2-4'   | lavender                          | summer                    | part shade ok, drought tolerant, cut back hard after flowering for second bloom, filler <b>Ch J PV SofC SSE T</b>                           |
| Oregano                    | <i>Origanum laevigatum</i>   | 1½-2'  | pink/purple                       | late summer               | hardy only to zone 6/7, drought tolerant, may sprawl <b>Ch</b>  |
| Wild marjoram              | <i>Origanum vulgare</i>  | 1-3'   | pink/purple                       | mid to late summer        | likes alkaline soil, for culinary oregano use vegetatively propagated plants <b>J PV</b>  |
| Penstemon                  | <i>Penstemon barbatus</i>  | 1½ -3' | many                              | late spring to mid-summer | native <b>Ch J JC</b>   |
| Russian sage               | <i>Perovskia atriplicifolia</i>  | 3-5'   | blue/purple                       | summer                    | tolerates drought, aromatic foliage, can be dried, long-blooming <b>Ch JC PD T</b>  |

|                      |  |              |                            |                             |   |
|----------------------|--|--------------|----------------------------|-----------------------------|---|
| Balloon flower       | <i>Platycodon grandiflorus</i><br>'Florist Blue'                                   | 2½' -<br>3½' | blue                       | mid to late<br>summer       | part shade ok, doesn't like wet soil, slow to emerge in spring, sear stems to prolong vase life, needs support, taprooted <b>Ch JC SofC</b> |
| Spiked speedwell     | <i>Pseudolysimachion spicatum</i><br>[probably listed as <i>Veronica spicata</i> ] | 1-3'         | white, pink, red<br>& blue | late spring to<br>midsummer | deadhead for repeat bloom, flowers for 4-7 weeks <b>Ch J JC PV</b>  |
| Pincushion flower    | <i>Scabiosa caucasica</i><br>House hybrids   | 1½' -2'      | blue to purple             | summer                      | likes neutral pH, mulch in summer, slow-grower <b>Ch JC</b>   |
| Cream scabious       | <i>Scabiosa ochroleuca</i>   | 2-3'         | yellow                     | summer                      | short-lived but self-seeds <b>Ch</b>  |
| Devil's bit scabious | <i>Scabiosa succisa</i><br>[may be listed as <i>S. pratensis</i> ]                 | 1-2½'        | dark blue/purple           | summer<br>to fall           | small flowers <b>Ch</b>   |
| Goldenrod            | <i>Solidago canadensis</i><br>'Golden Baby' (ok from seed) (2')                    | 2-6'         | yellow                     | midsummer<br>to fall        | native, part shade ok, don't fertilize, divide every 2-3 years <b>Ch JC PD</b>  |
| Tansy                | <i>Tanacetum vulgare</i>   | 2-4'         | yellow                     | mid to late<br>summer       | spreads aggressively by rhizomes, site carefully, part shade ok, can use leaves in potpourri <b>Ch</b>                                      |
| Tall verbena         | <i>Verbena bonariensis</i>   | 3-4'         | rose-violet                | summer to<br>fall           | hardy to zone 6 but reseeds readily <b>Ch Co J PD S</b>   |
| New York ironweed    | <i>Vernonia noveboracensis</i>   | 3-7'         | violet-purple              | late summer<br>to fall      | native, cut back hard 1 month after emergence to increase flowers, likes moist soil <b>Ch</b>   |

**ANNUALS** – All take full sun and well-drained soil unless otherwise indicated. "Native" is indicated for plants that are native anywhere in the continental United States.

| <b>COMMON NAME</b> | <b>LATIN NAME</b>                           | <b>HT.</b> | <b>FLOWER COLOR</b>                          | <b>BLOOMS</b> | <b>NOTES &amp; SOURCE CODES</b>  |
|--------------------|---|------------|--|---------------|--|
| Corn cockle        | <i>Agrostemma githago</i><br>'Milas' series | 2-3'       | pink, white,<br>red-purple                   | May – July    | poisonous seed can contaminate grain crops, drought tolerant <b>Ch Co PV SofC</b>                    |
| Safflower          | <i>Carthamus tinctorius</i>                 | 1-6'       | orange or yellow<br>(sometimes red or white) | mid-summer    | deep taproot, strong, upright grower, drought tolerant, can dry flowers, spiny leaves <b>Ch SofC</b> |
| Cosmos             | <i>Cosmos bipinnatus</i>                    | 5-6'       | white, pink, purple                          | summer        | short vase life<br><b>Ch Co J PV S SofC SSE T</b>  |
| Cosmos             | <i>Cosmos sulphureus</i>                    | 1½-3'      | yellow & orange                              | summer        | drought tolerant<br><b>Ch J PV S SofC SSE T</b>  |

|                   |   |         |                           |                      |   |
|-------------------|---|---------|---------------------------|----------------------|---|
| Sunflower         | <i>Helianthus annuus</i><br>'Holiday', 'Sonja', 'Autumn Beauty'                 | 2-10'   | many                      | summer               | native, drought tolerant <b>Ch Co J PV S SofC SSE T</b>                                       |
| Love-in-a-mist    | <i>Nigella damascena</i>  | 1½ -2'  | white, pink, blue, purple | summer               | can dry flowers and seedpods <b>Ch Co J PV S SofC SSE T</b>                                   |
| Mexican marigold  | <i>Tagetes minuta</i>   | 7-10'   | yellow                    | late summer/<br>fall | small flowers, use as filler, on noxious weed list in California <b>Ch SofC</b>               |
| Mexican sunflower | <i>Tithonia rotundifolia</i><br>'Torch' (4-6')                                  | 2 ½ -6' | red/orange                | summer               | drought tolerant, sear stems to prolong vase life <b>Ch Co J PV S SSE T</b>                   |
| Trachelium        | <i>Trachelium caeruleum</i>   | 2 ½-3'  | white or violet           | summer               | it's a tender perennial, can use as annual <b>Ch</b>  |
| Zinnia            | <i>Zinnia</i> species & hybrids<br>'Pastel Dreams', 'Blue Point', 'County Fair' | 1-4'    | many                      | summer               | use single flowered types, susceptible to leaf scorch & mildew <b>CH Co J S PV SofC SSE T</b> |

### For additional cultural information see:

Armitage, A.M. Herbaceous Perennial Plants: A Treatise on their Identification, Culture, and Garden Attributes. 2<sup>nd</sup> edition. 1989. Stipes Publishing L.L.C., Champaign, IL.

Enterprise Guide for Southern Maryland: Producing Cut Flowers – Liatris. Fact Sheet 467. Cooperative Extension Service. U. of MD.

Producing Annual Sunflowers as Cut Flowers. Fact Sheet 686. Cooperative Extension Service. U. of MD.

Production of Alliums as Cut Flowers. Fact Sheet 767. Cooperative Extension Service. U. of MD.

Production of Purple Coneflower as a Cut Flower. Fact Sheet 731. Cooperative Extension Service. U. of MD.

Production of Yarrows as Cut Flowers. Fact Sheet 685. Cooperative Extension Service. U. of MD.

Sustainable Cut Flower Production. 2000. 21 p. (this publication can be obtained free from ATTRA, download from [www.attra.org/attra-pub/farmscape.html](http://www.attra.org/attra-pub/farmscape.html) or call 1-800-346-9140.)

Copies of Maryland Cooperative Extension publications can be obtained online from: [www.agnr.umd.edu/MCE/Publications/Category.cfm?ID=5](http://www.agnr.umd.edu/MCE/Publications/Category.cfm?ID=5)

**Note: Please disregard information about using pesticides in the above Cooperative Extension publications. Beneficial insect habitat should be pesticide-free.**

## For additional information on native pollinators see:

Alternative Pollinators: Native Bees. 1999. 20 p. (this publication can be obtained free from ATTRA, download from [www.attra.org/attra-pub/farmscape.html](http://www.attra.org/attra-pub/farmscape.html) or call 1-800-346-9140.)

Batra, S.W.T. 1984. Solitary Bees. Scientific American 250(2):120-127.

Bee Biology and Systematics Laboratory, Agricultural Research Service, USDA website: [www.loganbeelab.usu.edu/](http://www.loganbeelab.usu.edu/)

Bosch, J. & W. Kemp. 2000. How to Manage the Blue Orchard Bee. Sustainable Agriculture Publications, Burlington, VT. \$9.95 + 3.95 S&H

Griffin, B.L. 1997. Humblebee Bumblebee. Knox Cellars Publishing, Bellingham, WA \$12.

## Seed and plant sources:

**Ch** – Chiltern Seeds [www.chilternseeds.co.uk](http://www.chilternseeds.co.uk). 44-1229-581137 (United Kingdom) This catalog identifies bee plants with a bee icon.

The website has a search function that will pull up a list of bee plants from the catalog.

**Co** – Cook's Garden [www.cooksgarden.com](http://www.cooksgarden.com) 1-800-457-9703

**J** – Johnny's Select Seeds [www.johnnyseeds.com](http://www.johnnyseeds.com) 1-207-437-4301

**JC** – Joy Creek Nursery [www.joycreek.com](http://www.joycreek.com) 1-503-543-7474 (plants)

**PD** – Plant Delights Nursery [www.plantdelights.com](http://www.plantdelights.com) 1-919-772-4794 (plants)

**PV** – Peaceful Valley Farm Supply [www.groworganic.com](http://www.groworganic.com) 1-888-784-1722

**S** – Shepherd's Garden Seeds [www.shepherdseeds.com](http://www.shepherdseeds.com) 1-860-482-3638

**SofC** - Seeds of Change [www.seedsofchange.com](http://www.seedsofchange.com) 1-888-762-7333

**SSE** – Seed Savers Exchange [www.seedsavers.org](http://www.seedsavers.org) 1-563-382-5990

**T** – Territorial Seed Company [www.territorialseed.com](http://www.territorialseed.com) 1-541-942-9547

(Note – source shown may sell a cultivar with unknown pollinator qualities)

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