



## Native Plants Support Fruits and Vegetables in Your Garden:

Build a Year-Round Ecosystem to Improve Your Harvest

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**Establishing and maintaining patches or strips of native grasses and wildflowers near your garden will attract, support, and sustain a beneficial ecosystem.** This ecosystem will improve plant health. Many species of bees needed for vegetable and fruit pollination nest and/or overwinter in the ground or in the stems of native plants. Plantings that provide bees with floral resources and year-round cover will result in healthier, on-site populations of bees available for pollination. Native plants also provide resources to beneficial insects, including predatory wasps, parasitoid wasps, ground beetles, lady beetles, soldier beetles, lacewings, etc. all of which help naturally control pest insects that are detrimental to your vegetable and fruit plants.



Two examples of perennial, native plants increase food yield on a produce farm in Jasper County, Indiana. Photos By Robert Suseland.

Native pollinator gardens will not only increase your vegetables and fruits (follow our work in <u>Bee Friendly Farming</u> to see how farmers are incorporating habitat to make a difference), but they can also be integrated in your Bee Friendly Garden to increase your fruit and vegetable yield. While the above photos are examples of on-farm habitat, you can replicate these practices and reap the same benefits in your home garden by putting in a patch or strip of flowering plants.

Select plants native to your state or province. Consult Pollinator Partnership's Ecoregional Planting Guides to learn more about plants native to your area. Select plants that are appropriate for your site conditions. The more species of native wildflowers, grasses, sedges, and rushes, the better. Be sure to include enough wildflower species to have blooms from April – October. When developing seed mixes or plug planting plans for small plantings, I recommend selecting plants that are not going to aggressively spread through seeds or rhizomes. I also recommend plants that do not grow taller than 4 feet. Shorter plants are less likely to fall over into production beds or walkways and plantings that are 4 feet or shorter also look tidier. If you live in the United States, visit <u>SoilWeb Apps</u> for useful, web-based tools for learning more about the soils on your property. The SoilWeb app for mobile devices allows you to investigate the soils at your location. To learn more about soils in Canada, check out <u>Soil Survey Reports Canada</u>.







**Plant seeds and plugs into firm, bare soil.** Inadequate site preparation is the primary reason for a failed planting. Converting lawns, pastures, hayfields, and other areas established to non-native grasses require the most site preparation effort. Herbicide and solarization are the most effective site preparation methods. Site preparation methods such as occultation (covering with black plastic), repeated tillage, smother cropping, or a combination of these methods can result in a properly prepared seedbed but can take several years to be effective.

**Seeds** can be mixed with inert filler such as cracked corn or non-clumping, unscented cat litter and spread by hand or broadcast by a small hand seeder. The seeds of many native wildflowers in areas with cold winters must go through a cold-wet stratification to germinate. Meaning until the seed gets wet and freezes, the seed cannot germinate. In these areas I recommend spreading the seed in the winter on a little snowfall. Seeds can be spread in the spring. If seeding in the spring, I recommend using a lawn roller on the area prior to planting to firm-up the seed bed and then roll the site again after seeding to increase seed to soil contact. Don't expect your seeding to look great the first couple of growing seasons. In fact, it is probably going to look terrible. During the first growing season, native wildflowers and grasses spend most of their energy developing a root system. Some seeds will sit in the ground for a year or more before breaking dormancy and germinating. Annual weeds, like common ragweed, foxtail, and marestail, often dominate plantings during the first year and are never a persistent problem. Many annual weeds are great sources of food and cover for wildlife.

**Plugs** are most feasible in areas ¼ acre or smaller. Plugs should be planted on a 1 square foot spacing. Laying down a string or rope marked every foot, or a measuring tape can help keep the 1-foot x 1-foot spacing on track. Using a small auger on a drill driver to dig the holes for the plugs can speed-up the planting process and can make it a lot more enjoyable. Plugs need watered throughout the rest of the summer until the plants enter dormancy. Hand weed any unwanted plants as they emerge. The area can be mulched with natural materials if the mulch does not touch the stem of the plant which can cause the stem to rot.

Native, perennial pollinator habitat of any shape and size planted in or near your garden will improve pollination and decrease populations of garden pests. Don't hesitate to start with a small area and add more areas as you see what works and what doesn't. If you need help planning pollinator habitat, consult with a wildlife biologist or other qualified person. Federal, state, provincial, and county agencies offer free technical assistance with establishing pollinator habitat. Anyone needing assistance in Indiana can reach me by email at robert@pollinator.org. Happy gardening!



