

Fertilizing annual flowers and ornamental vegetables

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Properly maintained annual flowers will reward gardeners with abundant color and season-long enjoyment. People often find by the end of a hot summer, tired-looking annuals need to be ripped out. Yet, in many public gardens, annuals shine their bright colors right up until frost. The first step in growing healthy, annual flowers and ornamental vegetables is understanding their growth requirements.

Many annuals are native to tropical or semi-tropical climates where they receive ample rainfall and nutrients are readily available. Compared to lawns or perennial flowers, annuals are relatively “hungry” for plant nutrients. Annuals that are properly maintained in the early season may use up the soil nutrients by mid-summer and just run out of gas.

Proper bed preparation is the first step for growing healthy annuals. Michigan soils benefit from the addition of organic matter such as compost or leaf mold. By adding 1 inch of compost to a garden bed and spading it through to about 4 inches deep, your plants will enjoy small amounts of nutrients throughout the season, keeping them looking good in between fertilizer applications. Check soil drainage before planting to avoid waterlogged conditions.

Applying fertilizer

Although you can use a wide variety of balanced fertilizers, “slow release” or “control release” products



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A second application in mid-July of slow or controlled release fertilizer near the roots of annuals will supplement nutrient needs for the second half of summer.



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Annuals, tropicals and ornamental vegetables provide color all season long when fertilized properly.

are available that can be applied just once in the spring to a garden bed. These environmentally friendly products release nutrients when soil temperatures and moisture are just right. Products vary in length of availability to the plant from three to six months. If you use the three-to-four month product, you may need to re-apply it in late July to extend your season of performance. The more you irrigate, the quicker the product will be used up by the plant.

Many annual flower fertilizer products have high levels of phosphorous, especially products that are sold to “boost blooms.” Research has shown that annuals do not need as much phosphorous as once thought. Over-application causes plants to become leggy and they may respond by becoming leggy if too much is applied. Remember, when growing annuals in a garden soil and not a container, most of the phosphorous you need for the whole season is already contained in that soil.

Most annuals benefit by using a combination of slow release products with liquid feed. Plants like petunia need a constant source of nitrogen to generate new growth and continue blooming throughout the summer. Learning to “read” your plants by watching for light green or yellow foliage or a lack in performance will alert you to nutrient deficiencies.

Troubleshooting

Annuals can have a variety of reasons for lack-luster performance that are not related to nutrient requirements. The following is a list of potential issues that may help you trouble shoot when something is not going right:

Right plant, right place. Many annuals will not perform to expectations if they are planted in less than optimum light conditions. Sun-loving petunias will become leggy and bloom weakly in shade, while shade-loving impatiens may wilt daily and show burned leaf margins in full sun.

Overuse of preemergent weed killers. The popularization of preemergent weed control products that combine fertilizer with weed control has been the cause for many losses in annual beds. When the product is not applied according to label recommendations or if too much rainfall or irrigation is applied, moving the product down several inches in the soil to the annual roots, the result is stunted plants that remain so for the duration of the season.

Waterlogged soil. Annuals love a well-drained soil. If a garden bed has a slope, dip or is at the edge of a walk where water pools or an irrigation head is located, plants

will slow down and even stop growing. Remember that plant roots need oxygen in the same amount they need water, so when they don't have one or the other problems occur. If a rot sets in, the best solution is to take the plants out and allow the area to dry up. Re-plant with another variety that enjoys more moisture.



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These beautiful impatiens and tropical plants were sited properly in part shade.

Summer weather. Summer weather affects growth and bloom performance. Annuals tend to dislike wild fluctuations in soil moisture and spells of very cool weather during the summer. While cool summers will greatly benefit the pansy, a plant-like ornamental pepper will not grow nor set fruit. Plants like New Guinea Impatiens or begonias thrive in warm summers. Tropical plants such as Caladium or Calla Lily may become stunted and show little growth when it is cool, but flourish when the summer is hot and humid.

Annuals that perform well during hot summers:

- Vinca
- Begonia
- New Guinea Impatiens
- Petunia
- Sweet Potato Vine
- Various tropical
- Calibrachoa

Annuals that perform best under cool conditions:

- Pansy
- Osteospermum Daisy
- Gerbera Daisy
- Trailing Snapdragon
- Viola

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