Fertilizing Blueberries

Blueberries often need supplemental fertilizer for optimal growth and productivity. The main nutrient needed is nitrogen. Like other acid-loving plants such as azaleas and rhododendrons, blueberries use the ammonium form of nitrogen (NH_4) (as opposed to nitrate).

WSU recommends an annual application of ammonium sulfate (21-0-0) based on plant age. (See Table.) Commercially packaged evergreen or azalea fertilizer can be substituted for ammonium sulfate.

Suggested amount of ammonium sulfate per plant based on plant age

Age of plant	Late April	Late May	Late June
Newly transplanted	2 Tbsp. (1.0 oz.)	2 Tbsp. (1.0 oz.)	2 Tbsp. (1.0 oz.)
Year 2	2.5 Tbsp. (1.2 oz.)	2.5 Tbsp. (1.2 oz.)	2.5 Tbsp. (1.2 oz.)
Year 3	2.5 Tbsp. (1.2 oz.)	2.5 Tbsp. (1.2 oz.)	2.5 Tbsp. (1.2 oz.)
Year 4	6 Tbsp. (3.0 oz.)	6 Tbsp. (3.0 oz.)	6 Tbsp. (3.0 oz.)
Year 5 and older	8 Tbsp. (4.0 oz.)	8 Tbsp. (4.0 oz.)	8 Tbsp. (4.0 oz.)

From: WSU. Growing Small Fruits for the Home Garden (Home Garden Series) (EM103E) (2015).

Apply dry fertilizers evenly by hand within the dripline of the bush. Keep the granules away from the crown of the plant to prevent burning and scratch them lightly into the soil surface so as not to disturb the roots.

Master Gardener Program
Washington State University Extension

Fish emulsion is an acceptable organic regimen for blueberries but must be diluted to prevent salt injury and applied in smaller amounts more frequently because liquid fertilizers quickly move below the plant's root zone. Oregon State University recommends diluting 1 Tablespoon fish emulsion in 1 cup water and applying to each plant once in late April, twice in May, twice in June, and once in early July.

A visual assessment of plant growth can help determine fertilizer needs. If leaves are green, yield is good, and plants are growing well (10 to 12 inches of lateral growth each year and new vigorous shoots from the base of the plant), fertilizer beyond the amount recommended above is not needed.

High soil pH (above 5.5) and insufficient pruning also can result in poor growth and decreased productivity in blueberries. These problems will not be corrected with applications of fertilizer. If plant growth and productivity are not as expected, evaluate soil pH and pruning practices in addition to the plant's fertilizer needs.

References

WSU. Growing Small Fruits for the Home Garden (Home Garden Series) (EM103E) https://pubs.extension.wsu.edu/growing-small-fruits-for-the-home-garden-home-garden-series-replaces-eb1640

OSU. Growing Blueberries in Your Home Garden. (EC 1304) (2020) https://catalog.extension.oregonstate.edu/ec1304