

Fertilizer Basics: Azaleas and Rhododendrons

When nurseries grow azaleas and rhododendrons in containers, they often do it in a soilless medium that contains no nutrients of its own. The nursery people have to add all the fertilizer the plants need to grow, and they tend to do it generously so that the plants are quick to reach salable size.

When you plant an azalea or rhododendron, it quickly exhausts whatever nutrients remain in its root zone and has to reach out into surrounding soil to get the nutrients it needs. You can help (and encourage root spread into native soil) by fertilizing.

Plants need three major nutrients—nitrogen (N), phosphorus (P), and potassium (K)—and several minor nutrients. The proportions of the major nutrients are listed in order (N-P-K) on the label under “Guaranteed analysis.” For example, a 10-8-6 fertilizer contains 10 percent nitrogen, 8 percent phosphorus, and 6 percent potassium. Because it contains all three major nutrients, it’s called a complete fertilizer.

At nurseries and garden centers, you’ll find the general-purpose fertilizers you’d expect, plus ones labeled specifically for azaleas and rhododendrons. The specialty fertilizers are formulated to acidify the soil, and usually derive their nitrogen from ammonium sulfate. That’s useful if your soil is not naturally acidic, but if your soil is already in the right range for azaleas and rhododendrons, there’s little advantage to an acid fertilizer. In such cases, general-purpose fertilizers work as well and usually cost less.

Commercial fertilizers come in either granular or liquid form. Granular fertilizers are usually cheaper, and are made to be scattered over the root zone two or three times each year. To encourage roots to grow out into native garden soil, sprinkle the fertilizer in a wide, doughnut-shaped band straddles the edge of the drip line (the drip line is outside edge of the plant). Scatter it over the mulch and water it in.

Liquid fertilizer usually comes as soluble granules that you dissolve in water for application. It can be used two ways: sprayed onto the plants’ leaves (that’s called foliar feeding), or as a drench poured over the roots. Because liquid fertilizer is much less concentrated than granular, and because it flushes through the soil faster, you have to apply it more frequently—as often as once every week or two during the growing season. The nitrogen in liquid fertilizers is usually derived from urea, which can be absorbed through plant leaves. Do foliar feeding in the cool of the morning when the sun is not directly shining on the foliage, when leaves are better able to take it in.

In principle, it’s best not to feed plants with high nitrogen after mid-summer, since fertilizer encourages plants to put on new growth that may not harden off in time to withstand fall frosts.

Much depends on the plant’s age. Young plants need extra fertilizer to get established quickly, while mature plants don’t usually need much at all. Here’s a schedule that will give you healthy plants that bloom well and hold up to the vicissitudes of climate.

At planting time - Before planting, some azalea and rhododendron specialists dig fertilizer into the soil. One good formula fortifies the planting soil with greensand for potassium, composted manure for nitrogen, and rock phosphate for phosphorus. The rock phosphate is important, since phosphorus is difficult to get into the root zone after planting (it doesn’t move through the soil easily). Apply all ingredients according to label directions.

When a newly planted azalea or rhododendron drops its lower leaves, it’s usually because the plant had to use up the nutrient reserves it stored there. That’s a good sign that it needs feeding. Do that by sprinkling a complete fertilizer like a 10-10-6 plus trace elements on top of the soil before you water the plant in. Apply 1 tablespoon per foot of growth; in other words, give a 2-foot plant 2 tablespoons of complete fertilizer.

In early spring - As buds swell (but well before bloom) apply 10-8-6 granular rhododendron fertilizer or complete slow-release fertilizer. Some slow release fertilizers release in response to warmer temperatures and may not be effective in our cooler weather. Read the label. It takes about a handful per mature plant to do the job, but “don’t put it on any heavier than you’d put salt on your corn or sugar on your grapefruit”. If you’re after more precision, a good rule of thumb is to apply one level tablespoon of fertilizer per foot of plant growth.

At leaf emergence - New leaves start growing just as blooms fade. After they unfold completely, apply another light dose of 10-8-6 or foliar fertilizer, especially if new leaves look pale.

In fall - Most plants don’t usually need fall feeding, but they may benefit from top dressing with rotted manure in October. If you have plants that didn’t put on much growth and look like they need a boost, you can give them a dose of 5-10-10 granular fertilizer.

- For greening of pale leaves: Use a foliar feed like Miracle grow
- For chlorotic younger leaves: usually an iron deficiency. Use chelated iron foliar feed or blood meal.
- For chlorotic other foliage: usually a magnesium or manganese deficiency. For magnesium deficiencies you can directly apply Epsom salts (Magnesium sulfate) to the soil lightly around the drip line or dissolve 1-2TBS. Epsom salts to a gallon of warm water and drench the soil. For manganese use barnyard manure.