Admired for their colorful spring blossoms, rhododendrons and azaleas are some of the most popular plants to use in the home landscape. Many people share the misconception that rhododendrons and azaleas are difficult to grow. However, if you choose the right site and the right plants, provide a well-drained soil, and properly plant and maintain them, your rhododendrons and azaleas will thrive.

Assessing your Site

As you begin to choose a planting site, pay attention to three important factors: exposure, soil drainage, and soil pH.

**Exposure:** Think about sunlight and wind. In the wild, most rhododendrons and azaleas grow in partially shaded forest understories sheltered from the wind. Winter winds can damage the plants, especially evergreen species, so consider year-round weather conditions. The most ideal sunlight situation for rhododendrons is morning sun with dappled afternoon shade. Should your proposed planting site be too exposed for your liking, remember some types can handle more sunlight than others. Grouping plants together helps to break the wind.

**Soil Drainage:** All rhododendrons and azaleas require well-drained soils. Soggy soils create a reduced-oxygen environment for the plant’s roots which could lead to fungal infection. To test the drainage of your soil, dig a small hole and fill it with water. If there is still water remaining in the hole after an hour, your soil has poor drainage. If you cannot find another site with better drainage, see the Preparing your Soil section to learn how to improve your soil.

**Soil pH:** Soil pH is the measure of soil acidity or alkalinity. It is measured on a scale of 0-14 with 7 being neutral. Any number less than 7 is acidic and any number greater than 7 is alkaline. The pH of your soil affects which nutrients your plants are able to take up. Rhododendrons and azaleas prefer soils that are acidic, in the range of 4.5 to 6.0. If you are thinking about planting near a sidewalk or a building, be aware that cement and concrete can leach lime into your soil. Lime is alkaline and raises soil pH. Test your current soil pH to determine whether you need to adjust the pH. The most accurate soil tests are done at soil testing labs and include additional information on the nutrient quality of your soil. Contact your local extension service to find out which soil testing lab to use. You can also test your soil pH with simple testing kits that are sold at most garden centers.

Selecting your Plants

Consider your planting site when selecting rhododendrons. Large-leaved rhododendrons prefer shadier sites, whereas small-leaved rhododendrons can handle more sunlight. Azaleas also prefer more sun exposure.

When selecting a plant, it is best to think about what it will look like at maturity. Consider how large the plant will become, especially when planting in a location with restrictions, such as underneath a window. Last but not least, consider the hardiness rating of the plant. Freezing temperatures can kill flower buds on cultivars that have not been bred to withstand low temperatures. Know the hardiness zone of your region. Plant hardiness zones are determined by the average minimum temperature of a given area. Find out your hardness zone at http://planthardiness.ars.usda.gov/

Preparing your Soil

You can improve your soil drainage with soil amendments. Soil amendments are any materials that are added to soil to improve its physical or chemical properties, such as drainage or acidity. Poor drainage in soils is often due to the small size of the particles that compose it. Add coarse sand to your soil as the large sand particles allow for better drainage and aeration. Avoid fine-grained builders sand and play sand. Organic matter such as aged tree bark, fine wood chips, and compost also improves the structure of your soil, while also adding nutrients to it and helping it to retain moisture. Aged shredded pine bark is a great soil amendment for rhododendrons and...
azaleas because it is naturally acidic and it decomposes slowly. The Holden Arboretum recommends a soil mix of five parts coarse sand and one part pine bark to four parts of the existing soil.

You may also need to adjust the pH of your soil. You can lower the pH by adding elemental sulfur or iron sulfate to the soil as directed in your soil test results.

Whether your soil is naturally well-drained or you had to amend your soil, it is always a good idea to create a raised bed for your rhododendrons or azaleas. Raising the soil level just six inches above grade can greatly improve drainage. Rhododendrons and azaleas have shallow spreading roots, so focus going wide rather than deep when preparing the planting bed.

**Planting**

Set the plant so that the root flare – the area of the plant’s trunk where the roots begin to flare out -- is just above the soil. Sometimes the root flare is buried inside the pot, so make sure you locate and uncover it before planting. Oftentimes, potted plants become root-bound, meaning that the roots have formed a dense mesh along the inner surface of the pot. If this is the case, make shallow vertical cuts with a utility knife every 4-6 inches around the entire root mass. Once the plant is set, fill the hole with amended soil, but don’t cover the root flare! Gently firm the soil around the plant and water thoroughly to settle it.

Lay a 2-3 inch layer of mulch around the plant to help the soil retain moisture and to insulate the roots. Aged woodchips, pine bark and pine needles all serve as good mulches. Keep the mulch one inch from the trunk of the plant, as mulch piled around the trunk invites disease and decay.

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**After-care**

Until the first winter, water every four days that your new plants go without receiving an inch of rain. Since municipal water is treated with lime, it can raise the pH of your soil over time. A good alternative is to use water from a rain barrel. Regularly check the moisture content of the soil with your fingers. The soil should feel cool but not soggy. Do not fertilize during the first year.

In subsequent years, water the plants if they haven’t received an inch of rain in a week. As mulch decays over time, pay attention to the mulch depth every year and add more as needed to maintain a depth of 2-3 inches.

Rhododendrons and azaleas are adapted to low soil fertility. Use fertilizers only when the plants need it because excess fertilizer will “burn” the roots. Indications that your plant may need fertilizer include poor growth and leaves paler in color than usual. There are a number of fertilizers on the market specialized for acid-loving plants. Follow the fertilizer’s application instructions. Fertilize in early spring before the flowers bloom so that nitrogen is available for good spring growth.