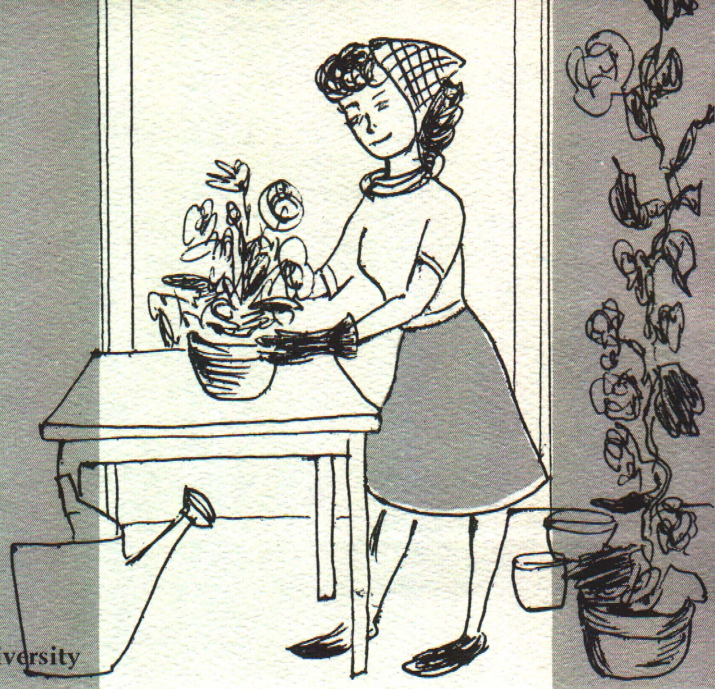


Care of House and Garden Plants

Hints on Growing Outdoor Azaleas

Cooperative Extension Service Michigan State University



by

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The azalea is mainly a deciduous plant often classified with rhododendron. It is a superb plant for landscaping and has a beautiful array of colors — white, yellow, orange, scarlet, purple, and intermediate hues.

Soil

Acid soil is best, pH range of 4.5 to 6.0°, loose and well aerated.

Add organic matter to the soil to help obtain these soil conditions. To a sandy soil add peat or well rotted leaves. For a heavy clay soil, use sand and peat. Place the organic matter to a depth of 6 inches several weeks before planting.

Make sure the soil is well drained so it will not become water-logged, and is not in an area subject to flooding.

Fertilizer

First application is made when initial soil preparation is done (adding organic matter).

Mix two cups ammonium sulfate, three cups superphosphate, and one cup potassium sulfate. Of this mixture, add two cups per 100 square feet. Specify these kinds of fertilizer when shopping at a garden center or farm supply store. After the plant is in the soil one month, fertilize again at the rate of $\frac{1}{4}$ cup per three foot plant.

Keep fertilizer away from the base of the stem as roots extend beyond the branches.

Planting

Plant in early spring.

Partial shade is needed; plant north side of house with a wind breaker, hedge or trees.

Buy plants with a ball of soil wrapped in burlap, or plants that are potted. Soak the ball of soil in water several hours prior to planting.

Plant at the same depth the plant was growing in the container or nursery. Dig a hole twice the size of the root ball. Make a 1:1 mixture of peat moss and the soil removed from the hole. Place the roots in position holding the plant with one hand and scoop the soil mix into the hole with the other hand. Tamp the soil firmly as the hole is filled to eliminate air pockets.

Once filled, mould the remaining soil around the edge of the hole to produce a saucer. Fill the saucer with water once a day the first 2 to 3 days and then once every week if rainfall is sparse.

A mulch may be placed in the saucer to prevent excessive evaporation and to keep the roots cool. Use any commercial mulch, dried grass clippings, rotted leaves, or peat moss.

Spacing

Wide spacing of the plants will insure full development. Plant about 2 to 3 ft. apart minimum. In multiple plantings, be sure that colors are compatible.

Transplanting

Transplant during the dormant state, late fall or early spring. Azaleas have a shallow root system, so be careful when digging them up not to damage the roots.

Follow planting directions.

Winter Hardy Varieties (Botanically azaleas are rhododendrons)

Rhododendron roseum (Roseshell), R. kaempheri (Kaempher), R. nudiflorum (Pinxterbloom), R. schlippenbacki (Royal), R. viscosum (Swamp), R. calendulaceum (Flame).

Pruning

Prune after the plant has flowered. Remove branch tips, to reduce size of plant, increase number of blooms, and control plant shape.

Pests

Lace Bugs — These gray-white insects, $\frac{3}{16}$ inch long, have lacy wings with brown and black markings. They fre-

quent the undersides of the leaves where they suck plant juices. This reduces plant vigor and causes the upper leaf surfaces to become stippled, blanched, or yellowed.

Control — Spray plants. Make sure to cover the lower leaf surfaces with either:

	100 Gal. of Water	1 Gal. of Water
57% Malathion emulsion, or	1½ pts.	1½ tsp.
20% Lindane emulsion	1½ pts.	1½ tsp.
50% Sevin wettable powder, or	2 lbs.	2 tbs.
50% DDT wettable powder	2 lbs.	2 tbs.

Repeat spray in 2 weeks.

*If you do not know the "pH" of the soil you are using, call your County Extension Office for help in testing your soil.

Thrips — Alligator-shaped insects about 1/16 inch long, yellow to brownish-black in color infest the lower surface of the leaves. They rasp the leaf tissues liberating the plants juices which they suckup. Plants are weakened and the foliage becomes silvered or whitened.

Control — Spray plants every 10 days with either:

	100 Gal. of Water	1 Gal. of Water
57% Malathion emulsion, or	1½ pts.	1½ tsp.
20% Lindane emulsion	1½ pts.	1½ tsp.
50% DDT wettable powder	2 lbs.	2 tbs.

Or *dust* plants every 10 days with either: 1% Lindane dust, or 4% Malathion dust, or 5% DDT dust.

Whether using sprays or dusts, coverage of lower leaf surfaces is essential for effective control.

Aphids — Soft bodied, pale green to black, insects about 1/8 inch long, suck juices from new growth or bases of buds. Both the adults and immature nymphs are pear-shaped but only the adults possess wings. Their feeding reduces the vigor of the plants and causes leaves to curl and flowers to become distorted. Honeydew liberated by the aphids adheres to the foliage and serves as a medium for, and is turned black by, a sooty mold fungus. This adds further to the disfigurement of the plant.

Control — Spray plants with either:

	100 Gal. of Water	1 Gal. of Water
20% Lindane emulsion	1½ pts.	1½ tsp.
57% Malathion emulsion, or	1½ pts.	1½ tsp.
25% Dieldrin emulsion	3 qts.	2 tbs.

Or *dust* plants with 2% Lindane dust, 5% Malathion dust or 2% Diazinon dust.

Red Spider Mites — Not insects, but red or greenish red creatures about 1/50 inch long, that are closely allied to spiders. They feed by piercing tissues and sucking up the plant juices, thus reducing the vigor of the plant. Infested foliage becomes stippled, yellow, and then dies. Mites can be detected by forcibly jarring a portion of the foliage over a white piece of paper; mites will appear as tiny moving specks.

Control — Spray plants with either:

	100 Gal. of Water	1 Gal. of Water
18.5% Kelthane emulsion, or	1 pt.	1 tsp.
25% Aramite emulsion, or	1 pt.	1 tsp.
57% Malathion emulsion	1½ pts.	1½ tsp.

A second spray in 7 to 10 days may be necessary.

Leaf Roller — Yellow caterpillars about ½ inch long first mine between the upper and lower leaf surfaces, then roll and tie several leaves together. The adult, a moth with purple and yellow wings about ¾ inch across, lays eggs on the leaves. Best control is obtained by spraying when the larvae first begin to form mines.

Control — Spray when the leaf mining stage is first noticed with either:

	100 Gal. of Water	1 Gal. of Water
57% Malathion emulsion, or	1½ pts.	1½ tsp.
20% Lindane emulsion	1½ pts.	1½ tsp.

Black Vine Weevil — Black adult weevils about 2/5 inch long hide in soil during the day and feed on the leaves at night by chewing holes along the margin or devouring the whole leaf except for larger veins. They may also damage the main stem by chewing off the bark at the soil level. The white

legless grubs, have brown heads and are about ½ inch long. They feed on and destroy the small roots. Infested plants are stunted, wilt, and eventually die.

Control — Spray when adult weevils are first noticed (usually during late June) with either:

	100 Gal. of Water	1 Gal. of Water
45% Chlordane emulsion, or	2 qts.	4 tsp.
25% Dieldrin emulsion	3 qts.	2 tbs.

Apply sprays to the foliage and soil beneath the plants to kill adult weevils. Soil treatments for controlling grubs have not proven practical.

Azalea Whitefly — Adult whiteflies, winged, wedge-shaped insects 1/16 inch long, and wingless immature nymphs frequent the underside of new tender leaves. When disturbed, the adults fly in all directions. They suck large amounts of sap from the leaves causing them to become pale, stippled and then drop. Honeydew secreted by the whiteflies accumulates on the leaves and turns black with sooty mold adding to the disfigurement of the plant.

Control — Spray plants, making sure to obtain coverage of lower leaf surfaces, with either:

	100 Gal. of Water	1 Gal. of Water
57% Malathion emulsion, or	1½ pts.	1½ tsp.
25% DDT emulsion	3 pts.	1 tbs.

Or *dust* plants paying particular attention to covering lower leaf surfaces with either 5% DDT dust, 2% lindane dust or 5% Malathion dust.

Diseases

Petal Blight first appears on petals of opened flowers as translucent, whitish spots that feel slimy, in one or two days the petals collapse.

Control — Spray with Zineb 75% wettable powder, 1 to 1½ tablespoons per gal.

Leaf Gall deforms flowers and shoots.

Control — Spray with Zineb 75% wettable powder or Captan 50% wettable powder 1½ tablespoon/gal. Pick off galls and destroy.