



## Department of Horticulture

Purdue University Cooperative Extension Service • West Lafayette, IN

# Landscape Plants for Acid Soils

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This publication lists and briefly describes landscape plants that are suitable for the specific site conditions of acid soil. These lists can serve as a guide, but are not intended to be exhaustive. Many other plants may grow well in acid soil conditions besides the ones on the list.

Winter survival is fundamental to success of perennial landscape plants. Indiana is divided into hardiness zones by the United States Department of Agriculture. Southern Indiana, from the Ohio River to approximately Bedford or Seymour, is in zone 6. The rest of the state is in zone 5. Select only plants from this list with a hardiness zone number equal to or lower than the zone for the location they will be planted. For example, in Muncie (zone 5), select plants listed for zone 5, 4, 3, or lower.

Most soils in Indiana are derived from limestone, thus creating the alkaline condition of our soils. In limited areas, however, acid soils may be found. These could be

characterized by light-colored, sandy soils, or the dark, organic soils found in low areas. To find out if your soil is acid or alkaline, a soil test is needed.

Soils with a pH below 7.0 are acidic. A few plants require an acid soil (pH 4.5 - 6.5) for growth. Some of these have very attractive flowers. You may want to develop a garden area which will support some of these plants. Usually a raised bed is desirable. To create acidic conditions, mix Canadian peat, soil, and sand together thoroughly, and place in the bed. If the pH needs to be lowered further, incorporate powdered sulfur (.8 to 2.4 pounds/100 square feet to lower the pH by one unit) into the bed. Be sure to check every three years because alkaline water supplies will cause the soil to become less acidic.

### Groundcovers for Acid Soils

Common Name Scientific Name	Height	Zone	Comments
Heather <i>Calluna vulgaris</i>	3'	5	Evergreen foliage. Flowers may be white, pink, or red. Slightly moist soil required for good growth.
Pachistima, Canby <i>Paxistimi canbyi</i>	16"	4	Bronze autumn color. Requires some shade.
Wintergreen <i>Gaultheria procumbens</i>	creeping	4	Moist soil and partial shade required for growth. Leaves are evergreen. Bright red berries appear in fall.

### Shrubs for Acid Soils

Azalea, Torch <i>Rhododendron kaempferi</i>	8'	6	Moist soil and partial shade required for growth. Semi-evergreen. Many types of Azaleas available.
Bayberry <i>Myrica pensylvanica</i>	9'	5	Semi-evergreen. Gray berries are fragrant when crushed. Full sun.

Common Name Scientific Name	Height	Zone	Comments
Blueberry, Highbush <i>Vaccinium corymbosum</i>	6'-12'	4	Edible, blue fruit attracts birds. Red fall color. Full sun or partial shade.
Daphne, Rose <i>Daphne cneorum</i>	1'	5	Fragrant, pink spring flowers. Mulch roots and keep moist at all times. Full sun.
Enkianthus, Redvein <i>Enkianthus campanulatus</i>	30'	5	Broadleaf evergreen with white, drooping spring flowers. Scarlet fall color. Partial shade and moist soil required for growth. Protect from winter sun and wind.
Fothergilla, Large <i>Fothergilla major</i>	10'	5	Brilliant yellow to scarlet fall color. Full sun or partial shade.
Heath, Spring <i>Erica carnea</i>	1'	6	Evergreen with small, red or white flowers in early spring. Partial shade. Protect from winter sun and wind.
Juniper, Ground 'Depressa' <i>Juniperus communis</i>	3'	3	Needled evergreen with many cultivars available in varying forms. Grows in dry soils and full sun.
Leucothoe, Drooping <i>Leucothoe fontanesiana</i>	6'	5	Broadleaved semi-evergreen with white flowers in early spring. Bronze fall color. Partial shade. Protect from winter sun and wind.
Mountain Laurel <i>Kalmia latifolia</i>	10'	5	Broadleaved evergreen. Pink, white, or red spring blooms. Grows in partial shade. Protect from winter sun and wind.
Pieris, Japanese <i>Pieris japonica</i>	10'	6	Broadleaved evergreen. Spring flowers are white. Grows in partial shade. Protect from winter sun and wind.
Rhododendron, Catawba <i>Rhododendron catawbiense</i>	10'	5	Broadleaved evergreen. Protect from winter sun and wind. Variety of showy flower colors.
Silver-bell <i>Halesia carolina</i>	40'	5	White, bell-shaped flowers borne in clusters in spring.
Summer-sweet <i>Clethra alnifolia</i>	10'	5	Fragrant mid-summer flowers. Attractive fall foliage. Partial shade or full sun. Tolerates a wide variety of soils.

#### Trees for Acid Soils

Holly, American <i>Ilex opaca</i>	50'	6	Broadleaved evergreen with red fruit on female plants. Protect from winter sun and wind. Requires well-drained soil.
Oak, Pin <i>Quercus palustris</i>	80'	5	Broadly pyramidal form. Brilliant red fall color.
Sweet Bay <i>Magnolia virginiana</i>	60'	5	Large, fragrant, white flowers in late June or July. Evergreen in South.

\* Janie Nordstrom Griffiths assisted in the revision of this publication.

For more information on the subject discussed in this publication, consult your local office of the Purdue University Cooperative Extension Service.