



Cooperative Extension Service  
Institute of Food and Agricultural Sciences

## *Hydrangea macrophylla*<sup>1</sup>

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### Introduction

Almost everyone is familiar with the enormous, round flower heads of *Hydrangea*, in various shades of white, pink, red, and, on acid soils, blue (Fig. 1). They are borne in late spring on top of the rounded canopy of rich foliage. The coarse green foliage works well as a foundation plant or accent in a flower garden, or does well in containers for use on shaded patios and decks. Massed together on three to five-foot centers, their foliage makes a strong statement in a shrub border or in other areas of the landscape. They make a nice accent plant when placed among other shrubs due to the coarse foliage.

### General Information

**Scientific name:** *Hydrangea macrophylla*

**Pronunciation:** hye-DRAN-jee-uh mack-roe-FIL-luh

**Common name(s):** Bigleaf Hydrangea

**Family:** *Saxifragaceae*

**Plant type:** shrub

**USDA hardiness zones:** 5B through 9A (Fig. 2)

**Planting month for zone 7:** year round

**Planting month for zone 8:** year round

**Planting month for zone 9:** year round

**Origin:** not native to North America

**Uses:** mass planting; container or above-ground planter; foundation; specimen; accent; cut flowers

**Availability:** generally available in many areas within its hardiness range

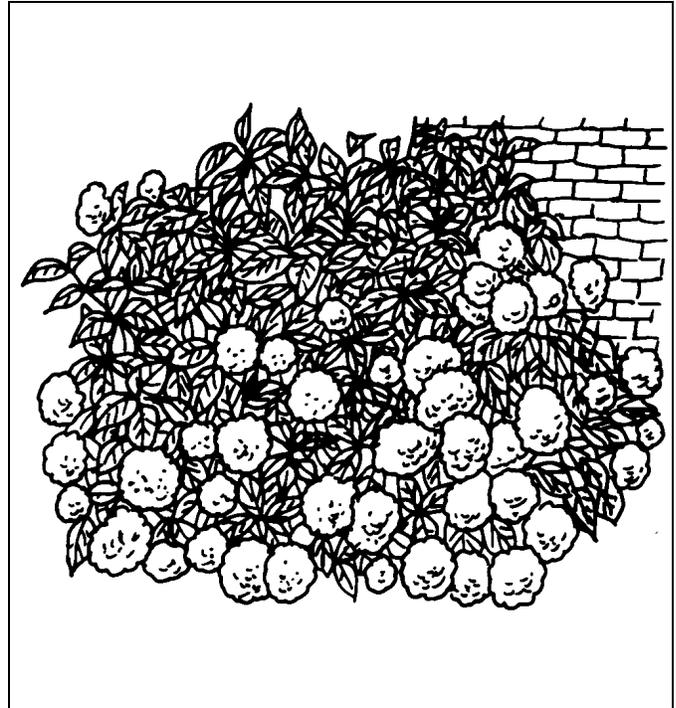


Figure 1. Bigleaf Hydrangea.

### Description

**Height:** 6 to 10 feet

**Spread:** 6 to 10 feet

**Plant habit:** round

**Plant density:** moderate

**Growth rate:** moderate

**Texture:** coarse

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Figure 2. Shaded area represents potential planting range.

**Foliage**

- Leaf arrangement:** opposite/subopposite
- Leaf type:** simple
- Leaf margin:** serrate
- Leaf shape:** obovate
- Leaf venation:** pinnate
- Leaf type and persistence:** deciduous
- Leaf blade length:** 4 to 8 inches
- Leaf color:** variegated
- Fall color:** no fall color change
- Fall characteristic:** not showy

**Flower**

- Flower color:** pink; white; red; blue
- Flower characteristic:** summer flowering; spring flowering

**Fruit**

- Fruit shape:** oval
- Fruit length:** less than .5 inch
- Fruit cover:** dry or hard
- Fruit color:** brown
- Fruit characteristic:** persists on the plant

**Trunk and Branches**

- Trunk/bark/branches:** not particularly showy; typically multi-trunked or clumping stems
- Current year stem/twig color:** brown
- Current year stem/twig thickness:** thick

**Culture**

- Light requirement:** plant grows in the shade
- Soil tolerances:** occasionally wet; slightly alkaline; clay; sand; acidic; loam;
- Drought tolerance:** moderate
- Soil salt tolerances:** poor
- Plant spacing:** 36 to 60 inches

## Other

**Roots:** usually not a problem

**Winter interest:** plant has winter interest due to unusual form, nice persistent fruits, showy winter trunk, or winter flowers

**Outstanding plant:** not particularly outstanding

**Invasive potential:** not known to be invasive

**Pest resistance:** no serious pests are normally seen on the plant

## Use and Management

Since the deciduous Bigleaf Hydrangea blooms on large buds formed on previous season's growth, any pruning should be done immediately after flowering. Long popular as a florist's plant, Bigleaf Hydrangea performs well in moist, rich garden soil in partial sun to fairly deep shade, where it can grow four to six feet tall. Be sure that tree roots are not competing with the roots, since this will slow growth dramatically. Usually Hydrangea is free of insect or disease problems.

Some available cultivars include: 'Nikko', deep blue flowers, very hardy; 'All Summer Beauty', three to four feet high, cool blue flowers; 'Variegata' has green and white variegated foliage, blue, star-shaped, fertile flower clusters surrounded by a ring of white, sterile flowers; and 'Alpengluhen', large red flower heads.

Propagation is from cuttings.

Hydrangea is usually pest-free.

Aphids distort the new growth and coat the leaves with sticky honeydew. The insects can be dislodged with a high pressure water spray from the garden hose.

Four-lined plant bug causes round, brown, sunken spots on the leaves. The injury is often thought to be a disease.

A leaf tier webs the leaves over the tip of the branches. These insects may be picked off by hand.

Rose chafers are light tan with red, spindly legs, though they can be darker. They can occur in large numbers where soils are sandy. Chemicals are ineffective because more rose chafers quickly move into a treated area to replace those killed by pesticides.

Oystershell scale infests the upper stems of Hydrangea and often goes unnoticed. Sprays of dormant oil should help control overwintering stages and are less harmful to predators that help control scale.

Mites cause yellowish foliage.

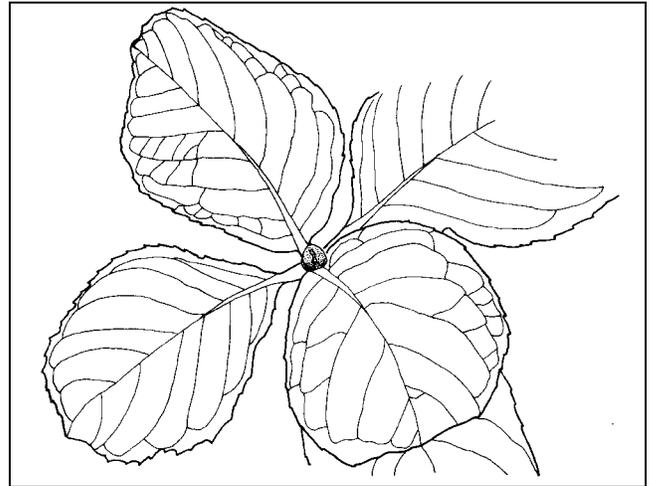


Figure 3. Foliage of Bigleaf Hydrangea

## Pests and Diseases

Bacterial wilt may blight the flower clusters and leaves. The disease is worse after heavy rains and hot weather. If severe, wilting and root rot occur, followed by plant death.

Bud or flower blight infects dense flower clusters in wet weather or after frost.

Several genera of fungi cause leaf spots on Hydrangea.

Powdery mildews in different genera cover the undersides of leaves with light gray mold. The leaves turn brown in spots and the upper leaf surfaces stay green or turn purplish brown. Young stems and flower stalks are infected and killed.

Rust causes rusty brown pustules on the leaves. The pustules are most noticeable on the undersides of leaves. Infected leaves dry up and become brittle.