

Salix babylonica: Weeping Willow¹

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Introduction

Often when one envisions a quiet body of water, the graceful, elegant form of a weeping willow is seen at the water's edge, the long, green, pendulous branches reflected in the water, gently swaying with each little breeze. Though it does well in very moist soils, weeping willow may also be successfully used as a fast-growing specimen or screen in drier, more open areas where it should receive regular watering to prevent leaf drop in a drought. It will survive drought but loses some leaves without irrigation. Ultimately reaching a height of 30 to 50 feet with an equal or greater spread, weeping willow should be given plenty of room to develop its broad, rounded crown.

General Information

Scientific name: *Salix babylonica*

Pronunciation: SAY-licks bab-ih-LON-ih-kah

Common name(s): Weeping willow, Babylon weeping willow

Family: *Salicaceae*

USDA hardiness zones: 2 through 9A

Origin: native to northern China

UF/IFAS Invasive Assessment Status: not assessed/incomplete assessment

Uses: screen; specimen; no proven urban tolerance



Figure 1. Full Form—*Salix babylonica*: weeping willow

Description

Height: 30 to 50 feet

Spread: 30 to 50 feet

Crown uniformity: symmetrical canopy with aregular (or smooth) outline, and individuals have more or less identical crown forms

Crown shape: round; weeping

Crown density: dense

Growth rate: fast

Texture: fine

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Foliage

Leaf arrangement: alternate

Leaf type: simple

Leaf margin: serrate; serrulate

Leaf shape: lanceolate; linear

Leaf venation: pinnate

Leaf type and persistence: deciduous

Leaf blade length: 3 to 6 inches

Leaf color: green on top, gray green underneath

Fall color: yellow

Fall characteristic: showy



Figure 2. Leaf—*Salix babylonica*.: weeping willow

Flower

Flower color: greenish yellow

Flower characteristics: inconspicuous and not showy; spring flowering; emerges in clusters on 1" long catkins

Flowering: spring



Figure 3. Flower—*Salix babylonica*.: weeping willow

Fruit

Fruit length: 1 inch

Fruit covering: dry or hard; capsule

Fruit color: green, turns brown when ripe

Fruit characteristics: does not attract wildlife; inconspicuous and not showy; fruit, twigs, or foliage cause significant litter

Fruiting: late spring and early summer



Figure 4. Fruit, Young—*Salix babylonica*.: weeping willow



Figure 5. Fruit, Mature—*Salix babylonica*.: weeping willow

Trunk and Branches

Trunk/branches: droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; not particularly showy; should be grown with a single leader; no thorns

Bark: gray brown and irregularly furrowed

Pruning requirement: requires pruning to develop strong structure

Breakage: susceptible to breakage either at the crotch due to poor collar formation, or the wood itself is weak and tends to break

Current year twig color: brown

Current year twig thickness: thin



Figure 6. Bark—*Salix babylonica*.: weeping willow
Credits: Gitta Hasing

Culture

Light requirement: full sun to partial shade

Soil tolerances: clay; loam; sand; acidic; alkaline; moist but well-drained

Drought tolerance: high

Aerosol salt tolerance: high

Soil salt tolerance: good

Other

Roots: surface roots can lift sidewalks or interfere with mowing

Winter interest: no special winter interest

Outstanding tree: not particularly outstanding

Ozone sensitivity: sensitive or moderately tolerant

Verticillium wilt susceptibility: not known to be susceptible

Pest resistance: long-term health usually not affected by pests

Use and Management

Care should be taken not to locate weeping willows near underground water or sewer lines or close to septic tank drain fields where the roots could cause significant damage. Roots are aggressive and will spread about three times the distance from the trunk to the edge of the canopy and often grow on the soil surface. Weeping willows are deciduous, the thin, three to six-inch-long leaves turning yellow before falling.

Locate weeping willow only where there is adequate space for its large, imposing form. Not for residential lots, it is best located near water where soil will be undisturbed. It is often planted near retention ponds and lakes for a dramatic softening effect.

Willows were used by Indians as medicine, the young twigs and bark chewed to relieve headaches. It was later found the active ingredient was salicylic acid, the basis of today's aspirin.

Weeping willows should be grown in full sun or very light shade and will tolerate a wide range of soil conditions, including alkaline pH. All willows will need initial pruning and training when young to develop a strong, central trunk with branch crotches as wide as possible. This will increase the longevity of the tree and help overcome the problem with brittle wood but the trees are usually still short-lived to 30 years, or so.

Cultivars include: 'Aurea', with golden-yellow branches; 'Crispa', corkscrew willow, has interesting leaves curled into a ring; 'Golden Curls', moderately weeping, has golden bark with twisting branches and leaves; 'Babylon', excellent, broadly weeping habit; 'Tristis', a popular weeping willow.

Pests

Some of its pests are scales, caterpillars, borers, and aphids. The willow is a favored host for the gypsy moth.

Disease

Root rot can occasionally infect root systems and cause decline.

Crown gall causes galls to form near the soil line or farther up the plant. Take out infected plants and do not replant in the same area for at least two years.

Willow scab attacks and kills young leaves within a very short time. The fungus enters twigs, kills back the young shoots and causes cankers. Olive green spore masses can be seen along the veins on the undersides of leaves. Another fungus, *Physalospora miyabeana*, attacks willow and the two fungi in combination cause willow blight. Prune out infected branches and use resistant species.

Black canker causes dark brown spots on the leaves. Whitish gray lesions with black borders appear on the twigs and stems. Prune out infected branches and use resistant species. Weeping willow appears to be resistant.

Many fungi cause cankers on willow and infected branches are pruned out. If the trunk is infected and girdled, the tree will die. Keep trees healthy by regular fertilization.

Many fungi cause leaf spots but are not serious enough to warrant preventive sprays. Rake up the fallen diseased leaves in the fall.

Powdery mildew causes a white coating on the leaves. The disease is usually not serious.

Rust causes yellow spots on the lower surfaces of leaves and, if severe, defoliation. Rake up and destroy leaves from diseased trees.

Tar spot causes black, raised spots on leaves. The spots are harmless. Rake up and dispose of fallen leaves from diseased trees at the end of the growing season.

Reference

Koeser, A. K., Hasing, G., Friedman, M. H., and Irving, R. B. 2015. *Trees: North & Central Florida*. Gainesville: University of Florida Institute of Food and Agricultural Sciences.