



United States Department of Agriculture  
Natural Resources Conservation Service  
Plant Materials Program

# 'Imperial' Carolina Poplar

*Populus x Canadensis* Moench

A Conservation Plant Release by USDA NRCS Rose Lake Plant Materials Center, East Lansing, MI



'Imperial' Carolina Poplar

'Imperial' Carolina Poplar, *Populus x Canadensis* is a widely popular conservation plant released by the Rose Lake Plant Materials Center in 1979.

## Description

'Imperial' is a hybrid that reaches a height of 50-80 feet. Its yellow gray bark becomes ridged toward the base of the tree. The twigs are somewhat angular and smooth and the buds are large and resinous. The tree's side smooth leaves are rounded at the base. Its branches curve upward and mature 'Imperial' poplars are narrow. Because 'Imperial' is a male sterile hybrid, it does not produce the irritating cottony substance common to many poplar trees.

## Source

The Rose Lake Plant Materials Center developed 'Imperial' from cuttings taken from established plantings at the Elsberry Plant Materials Center in Missouri. The Natural Resources Conservation Service obtained the original rooted cuttings in 1955 from the Andrews Nursery in Faribault, MN.

## Conservation Uses

'Imperial' Carolina Poplar can become a valuable conservation plant for field and farmstead windbreaks. Of special interest is its use around orchards to protect fruit from wind damage. Being a deciduous tree it does not interfere with air circulation in early spring. It also has the potential as a shade tree in recreation developments and on selected sites for pulp and timber production.

## Area of Adaptation and Use

'Imperial' grows very well in somewhat sandy soils with adequate moisture throughout the Great Lakes region. It does well wherever other poplar trees are common.

## Establishment and Management for Conservation Plantings

In the temperate zone, 'Imperial' should generally be planted in the spring as soon as frost is out of the ground. Planting should be completed by May 15 or June 1, depending on the location.

The maximum spacing between plantings should be 10-23 feet. One year old rooted stock is suitable for mechanical planting. Dormant (non-rooted) cuttings, 18-24" may also be used to establish a planting.



A row of 'Imperial' Carolina Poplar

## Ecological Considerations

To ensure establishment, control weeds during establishment years. Care must be taken to prevent damage by rodents and other animals. Deer may be particularly troublesome because they use 'Imperial' for browse.

### **Production**

'Imperial' must be propagated vegetatively. Cuttings may be harvested from established trees anytime during dormancy. Stems with ½-¾" diameter can be cut into lengths of 18-24". Several buds must be present on the stem section. Cuttings can be planted with 2/3 of the cutting in the soil and 1/3 above ground. Leaf and root formation will start within a few weeks of planting as weather conditions permit.



*Row of 'Imperial' Carolina Poplar being used as a windbreak*

### **Availability**

'Imperial' Carolina Poplar is a clone-propagated cultivar. NRCS maintains foundation stock at the Rose Lake Plant Materials Center in East Lansing, MI. It is now available from most commercial nurseries in the Midwest.



*Leaf of the 'Imperial' Carolina Poplar*

*For more information, contact:*  
Rose Lake Plant Materials Center  
7472 Stoll Rd., East Lansing, MI 48823  
Phone: 517-641-6300  
Fax: 517-641-4421

### **Citation**

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For additional information about this and other plants, please contact your local USDA Service Center, NRCS field office, or Conservation District <<http://www.nrcs.usda.gov/>>, and visit the PLANTS Web site <<http://plants.usda.gov/>> or the Plant Materials Program Web site <<http://www.plant-materials.nrcs.usda.gov/>>

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