‘Imperial’ Carolina Poplar

*Populus x canadensis* Moench (pro sp.) [*deltoides × nigra*]

‘Imperial’ Carolina Poplar is a widely popular conservation plant released as a cultivar by the USDA-NRCS Rose Lake Plant Materials Center (PMC) in 1979.

**Description**

‘Imperial’ is a hybrid that reaches a height of 50 to 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 wide, 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 USDA-NRCS 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**

Michigan NRCS technical specialists have determined that ‘Imperial’ is useful or potentially useful with these Conservation Practice Standards:

- Alley Cropping (311)
- Early Successional Habitat
- Development/Management (647)
- Forage and Biomass Planting (512)
- Hedgerow Planting (422)
- Streambank and Shoreline Protection (580)
- Tree/Shrub Establishment (612)
- Upland Wildlife Habitat Management (645)
- Windbreak/Shelterbelt Establishment (380)
- Windbreak/Shelterbelt Renovation (650)

**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 to 23 feet. One-year-old rooted stock is suitable for mechanical planting. Dormant (non-rooted) cuttings, 18- to 24- inches long, may also be used to establish a planting.
Ecological Considerations
To ensure establishment, control weeds during early 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. Half- to ¾-inch diameter stems can be cut into lengths of 18 to 24 inches. Several buds must be present on the stem section. Cuttings can be planted with ⅔ of the cutting in the soil and ⅓ above ground. Leaf and root formation will start within a few weeks of planting as weather permits.

Availability
‘Imperial’ Carolina poplar, as well as other Rose Lake PMC releases, is available from commercial suppliers. Rose Lake PMC does not sell releases to the general public, although small quantities of nursery stock are available to commercial seed or nursery growers for increase purposes.

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Citation

For more information, contact:
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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>