## UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE ECOLOGICAL SCIENCES AND TECHNOLOGY DIVISION Washington, D.C.

and

## SOIL CONSERVATION SERVICE East Lansing, Michigan

## NOTICE OF RELEASE OF "IMPERIAL' CAROLINA POPLAR

The Ecological Sciences and Technology Division of the Soil Conservation Service and the Rose Lake Plant Materials Center, East Lansing, Michigan announce the release of 'Imperial' Carolina poplar, <u>Populus canadensis</u> <u>eugenei</u> (Simon-Louis) Schelle.

This plant selection was evaluated under the accession number, Mich-88. Upon release it was entered into the SCS plant materials data base and the National Plant Introduction System (SEA) after assignment of the number PI-432347.

'Imperial' was grown at the Rose Lake Plant Materials Center from cuttings taken from established plantings on the Elsberry Plant Materials Center, Elsberry, Missouri. The Elsberry plantings originated from rooted cuttings obtained from Andrews Nursery, Faribault, Minnesota in 1955.

'Imperial' is a very rapid-growing, male hybrid with upright growth form intermediate between Lombardy poplar and eastern cottonwood. It reaches a height of 15-25 m. (50-80 ft.). Branches are ascending but the crown outline is a narrow pyramidal shape. The yellowish-gray bark becomes ridged toward the base of the trunk. Buds are large and resinous. Twigs are somewhat angular, yellowish-green and glabrous. Leaves are rhombic-ovate, long acuminate at the apex, rounded at the base, 7-14 cm. (3-5 in.) long, 5-9 cm. (2-3 in.) wide, glabrous, thick and leathery in texture, dull green above, slightly paler and with prominent veins beneath. Leaf margins are crenate-serrate. Petioles are stout,

strongly flattened near the blade and 2.5 - 5 cm. (1-2 in.) long.

Because 'Imperial' is fast growing, somewhat pyramidal in shape, less susceptible to various diseases than other species or cultivars tested, and fairly free from insect damage, this tall tree can become a valuable conservation plant for use in 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 drainage in early spring. This plant may also have potential as a shade tree in recreational developments and on selected sites for pulp or timber production.

Growth and performance of 'Imperial' Carolina poplar has been outstanding in field plantings in the Great Lakes Region. On good sites as much as 1.2 meters (4 ft.) of growth per year can be expected. Observational records of plantings in Minnesota,

North Dakota and New Jersey indicate very good vigor and excellent growth. Some plantings in Michigan and Wisconsin are 20 years old.

The Rose Lake Plant Materials Center will maintain foundation stock of 'Imperial' Carolina poplar. Material for cutting blocks will be provided by Rose Lake PMC to nurserymen for commercial production. Cultivar increase will be accomplished by rooting hardwood cuttings from foundation stock or from cutting blocks established with rooted cuttings from foundation stock.

State Conservationist

Soil Conservation Service East Lansing, Michigan

Director Ecological Sciences and Technology

Division

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Date