

THE  
UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

AND

OREGON STATE UNIVERSITY AGRICULTURAL EXPERIMENT STATION

AND

WASHINGTON STATE UNIVERSITY AGRICULTURAL EXPERIMENT STATION

NOTICE OF THE RELEASE OF 'PLUMAS'  
SITKA WILLOW (Salix sitchensis, Sanson ex Bong.)

Notification of the naming and release of 'Plumas' sitka willow.

'Plumas' sitka willow, Salix sitchensis, is a vegetatively propagated cultivar recommended for use in streambank stabilization and the restoration of riparian areas. It also has potential for use as native hedges or screens, wildlife habitat, windbreaks, and natural area landscaping. Growth is upright and rapid at an early age. 'Plumas' competes satisfactorily with other vegetation under low maintenance conditions.

'Plumas' sitka willow is a medium to large shrub, 2-7 meters (m) [16-23 feet] tall with an open, erect form. Leaves are dull green above and covered with dense, silvery hairs beneath. 'Plumas' is male and therefore produces **only** staminate flowers in late March or April. The name refers to the region of California that includes the Plumas National Forest where the material was originally collected.

**Origin:** 'Plumas' is a selection from a native collection made in Lassen County, California near Susanville in February, 1978 by local Soil Conservation Service employees. Five uniform male plants were chosen by the SCS Corvallis Plant Materials Center to provide the source material for the foundation cutting block established in 1983.

**Description:** 'Plumas' sitka willow is a multistemmed or arborescent shrub, 2-7 m in height with an open, upright habit, and smooth, gray bark. Young twigs are dark red, brown or green with slight to moderate pubescence. Leaves are alternate and oblanceolate, obovate to elliptic in shape. They are dull green above with prominent veins and dense, silvery, appressed pubescence beneath, 4-7 centimeters (cm) long, 1-3 cm wide, and 2 to 4 times longer than wide; margins entire to crenulate. Petioles are short, 4-12 millimeters (mm) long; stipules small and nonpersistent or well developed and leafy on vigorous foliage; male catkins 2-5 cm long and born on a short, leafy peduncle or sessile; stamens 1 per flower with violet anthers; scales long-hairy and dark brown. Catkins emerge in late March or April at the same time as the leaves. Leaves are deciduous, falling by late November.

Positive identification of 'Plumas' sitka willow as Salix sitchensis Sanson ex Bong. was obtained from Dr. La Rea Johnston, Assistant Curator, Oregon State University Herbarium, Corvallis, Oregon.

'Plumas' was first assigned the SCS accession number 9004795. In January, 1987 it was officially designated PI-508555 under the name S. sitchensis.

**Adaptation:** 'Plumas' sitka willow is known to be adapted to stream borders, meadows, forest clearings, inland beaches, and other moist sites in valleys west of the Cascade Range in Oregon and Washington as well as northern California where precipitation exceeds 510 mm (20 inches) per year. Potential area of adaptation includes the east slope of Cascades, Sierra Nevada foothills and valleys, California Coast Range, and adjacent regions with adequate moisture. S. sitchensis is indigenous to water-courses and moist, open woods at elevations up to 2000 m (6500 feet) from San Luis Obispo County, California to the Alaska panhandle; also, mountainous areas of eastern Oregon, Washington and northern Idaho. Idaho. Often found on rich, mucky soils, it tolerates well to poorly drained soils of most texture classes.

**Performance:** 'Plumas' sitka willow or 9004795 was evaluated in an observational row nursery against 105 accessions or individual clones comprising at least 8 native species. Accession 9004795 was 1 of 22 ecotypes of S. sitchensis tested. It was chosen for its higher basal stem density, rapid initial growth rate, and apparent freedom from serious disease pests. 'Plumas' attained a height of 3.1 m (10 feet) in 4 years and 4.3 m (14 feet) after 9 years on a nonirrigated upland soil at the Corvallis Plant Materials Center (40 inch ppt.). Initial growth rates up to 193 cm (6.3 feet) per year were the highest of 7 select willows. Data from 42 field plantings along streambanks, watercourses, and on other moist, low maintenance sites in Oregon and Washington indicates an overall survival rate of 51 percent after 1 to 5 years. However, where proper site selection and planting methods are used, survival exceeds 85 percent. Rapid initial growth rate and upright habit may help it compete with weedy grasses and forbs.

**Propagation:** 'Plumas' sitka willow is a vegetatively propagated cultivar. Fifteen to 20 cm (6-8 inch) cuttings, 6-13 mm (1/4 to 1/2 inch) in diameter, will root readily in moist potting medium under greenhouse conditions. Thirty to 50 cm (12-20 inch) cuttings planted directly into the field will grow if adequate moisture exists and proper site preparation and planting techniques are employed. Where water tables are low or receding, 90-150 cm (3-5 foot) unrooted whips, 13 mm (1/2 inch) or more in diameter, can be used to improve survival.

**Material Distribution:** Foundation stock will be available January, 1989 in limited quantities to commercial nurseries, agricultural experiment stations, researchers, and arboreta through the Oregon State University Seed and Plant Certification Program, Corvallis, Oregon 97331. The USDA, Soil Conservation Service, Plant Materials Center, 3420 NE Granger, Corvallis, Oregon 97330 will maintain original mother plants for supplying certified stock. Material should be available commercially by January, 1991.

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