

Salix purpurea 'Fish Creek'

The State University of New York College of Environmental Science and Forestry (SUNY-ESF) presents 'Fish Creek', a fast-growing shrub willow from their willow breeding program. 'Fish Creek' is a high-yielding variety that is disease resistant, produces multiple small stems, and is well suited for biomass plantings, snowfences, streambank restoration, and riparian buffers.



Photo by Laura Wayne



Photo by Kimberly Cameron



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Salix purpurea 'Fish Creek'



Botanical Name: *Salix purpurea* 'Fish Creek' U.S. Plant Patent 17,710
(Family: Salicaceae) issued May 8, 2007

Hardiness: U.S.D.A. Zones 4 - 6

Development: 'Fish Creek' was produced through controlled willow breeding in 1998 as part of a research project to produce new willow cultivars that generate high biomass yields on a variety of sites, display resistance to diseases and pests, and possess agronomic traits suitable for mechanical planting, harvesting, and post-harvest processing. 'Fish Creek' was produced by crossing *Salix purpurea* '94006' with *S. purpurea* '94001'.

Significance: 'Fish Creek' is a shrub willow cultivar displaying exceptionally rapid growth, producing greater than 30% more woody biomass than its parents in yield trials, with low incidence of rust disease or damage by beetle or sawfly. Woody stems can be harvested every three to four years, and new shoots will re-sprout the following season. Repeated harvesting of shrub willow plantations can be sustained for at least 15 years.

Description:

Height and Width: 15-20 feet tall, 3-5 foot crown spread at 3 years when grown at 2 x 3 foot spacing.

Habit: Fast-growing, deciduous shrub with multiple small-diameter, vertical stems.

Foliage: Dark green oblong leaves, typically 2-3 inches long, 0.5-1 inches wide, with foliage April through October in Zone 5.

Bark: Brown when young, turning green and smooth with age; yellow-orange buds in winter.

Flowers: Male, early spring.

Seeds: No seeds produced.

Culture: Adaptable to a wide range of soil and moisture conditions. Prefers maximum sunlight.

Propagation: Roots easily from dormant stem cuttings.

Uses: Excellent for bioenergy plantations, streambank restoration, living snowfences, and riparian buffers. Dried stems can be used in basketry.

Availability: Available from Double A Willow (www.doubleawillow.com) beginning Spring 2007.

For information on the SUNY-ESF Willow Biomass Program go to www.esf.edu/willow.

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