‘Clemson Greenspire’ Arizona Cypress

R.E. Schoenike
Department of Forestry, College of Forest and Recreation Resources
Clemson University, Clemson, SC 29631

Additional index words. Cupressus arizonica var. glabra, Christmas tree, ornamental

‘Clemson Greenspire’ is a fast-growing cultivar of smooth Arizona cypress (Cupressus arizonica Greene var. glabra [Sudw.] Little) released by the Department of Forestry and the South Carolina State Commission of Forestry.

Origin

‘Clemson Greenspire’ is a selection of smooth Arizona cypress made at the Erland Nelson Christmas Tree Farm, Wind- sor, South Carolina, in January, 1968. The farm was planted with seedlings derived from commercial seed of this species. The selection was propagated and established at 3 sites in South Carolina. ‘Clemson Greenspire’ has been under observation for 12 years. The original ortet was cut for a Christmas tree, but cuttings taken from ramets derived from it have consistently produced good trees.

Description

In comparison with the usual columnar form of the species, ‘Clemson Greenspire’ has a broad pyramidal crown. The foliage is bright yellow-green in summer (Munsell 10GY 4/6) dulling slightly (Munsell 5 GY 5/6) and carrying bronze-tipped leaves in winter. The branchlets alternate at right angles to each other (Fig. 1); producing, by this arrangement, a dense habit. The scale-like leaves average 2.0 mm in length and 0.8 mm in width, are shield-shaped with narrow pointed tips that overlap each other. They are closely appressed to the branchlet and angled on the foliage a sparkling sheen in the sun. Silvery resin-blisters on the leaves give the foliage a sparkling sheen in the sun. The foliage, which is slightly sticky to the touch, has a mild camphor-like odor that is sometimes pungent on new growth in the spring. Young branches are reddish-brown in color, turning gray in the third year. They are covered by prickly awl-shaped scales with narrow pointed tips that overlap each other. They are closely appressed to the branchlet and angled on the foliage a sparkling sheen in the sun. Silvery resin-blisters on the leaves give the foliage a sparkling sheen in the sun. The foliage, which is slightly sticky to the touch, has a mild camphor-like odor that is sometimes pungent on new growth in the spring. Young branches are reddish-brown in color, turning gray in the third year. They are covered by prickly awl-shaped scales with narrow pointed tips that overlap each other.

The inner bark is sometimes pungent on new growth in the spring. Young branches are reddish-brown in color, turning gray in the third year. They are covered by prickly awl-shaped scales with narrow pointed tips that overlap each other.

The inner bark is sometimes pungent on new growth in the spring. Young branches are reddish-brown in color, turning gray in the third year. They are covered by prickly awl-shaped scales with narrow pointed tips that overlap each other.

Utility

‘Clemson Greenspire’ is recommended both as an ornamental and as a Christmas tree. As an ornamental, it does best when planted in an open, sunny location. Rooted cuttings reach Christmas tree size in five years. In an experimental Christmas tree plantation in Saluda County, South Carolina, this cultivar has been very well received by consumers. As Christmas trees, cypresses have a tendency to dry rapidly, often shedding their leaves in two weeks; hence, trees should be cut fresh and their bases placed in water or wet sand throughout their period of use.

Propagation

‘Clemson Greenspire’ can be rooted from cuttings; 70% success has been obtained when cuttings 10 to 15 cm in length were taken from trees up to 5 years in age in late February or March and inserted vertically into 1 spaghnum peatmoss: 1 (w/v) under intermittent mist utilizing a sole- noid with stainless steel screen that is activated by evaporation of water from the screen. Bottom heat of 25°C will facilitate speed of rooting but has not increased total rooting. The cut ends should be dipped in a rooting powder (commercial preparations are satisfactory) containing about 0.8 to 1% indolebutyric acid. Wounding has not increased rooting success in trials made thus far.

Registration

The cultivar, ‘Clemson Greenspire,’ has been officially registered under the International Authority for the Registration of Conifer Names, The Royal Horticulture Society, Surrey, England.

Availability

A limited number of unrooted cuttings will be made available for experimenters, members of the nursery trade, and Christmas tree growers. Information on the availability of cuttings can be obtained from the author.

Fig. 1. ‘Clemson Greenspire’ Arizona Cypress. 5 years old, height = 3.2 m; spread at widest point = 1.8 m.

Under optimum conditions, cuttings will root in 13-16 weeks. Cuttings taken in March can be potted in early July; however, in cooler climatic zones such as piedmont South Carolina, they should not be set out in a permanent location until the following spring. Potted cuttings can be overwintered satisfactorily in a cold frame or in a plastic-covered lath house. If open storage must be used, the pots should be plunged in sawdust, woodchips, bark, or similar material until spring.

We have had no experience with container production, per se, because mass production with this cultivar has not been attempted. However, I do not see any reason why it should not be possible, given its good rooting ability in open mist beds. Nurserymen may wish to try out different techniques to fit their individual situations. We have had no trouble with field survival in Christmas tree plantings, following the rooting-potting schedule outlined above, and we believe it to be fully satisfactory where it can be applied.

1Received for publication February 5, 1981.

The cost of publishing this paper was defrayed in part by the payment of page charges. Under postal regulations, this paper therefore must be hereby marked advertisement solely to indicate this fact.

The release has been approved by Clemson University’s Crop Variety Recommendations Release Committee and by the South Carolina Agricultural Experiment Station.