

and the plant quality ratings for *Weigela* and *Spiraea*. Percent root coverage was greatest for *Weigela* at the lowest rate of EH application. The high rate of EH was generally detrimental to plant growth. These results indicate that treatment of container-grown woody ornamentals with EH is both species and rate dependant. Further work is needed before recommendations can be made for the use of EH on woody nursery crops to alleviate problems associated with high summer temperatures.

Evaluation of Ornamental Grasses in South Georgia[®]

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INTRODUCTION

Ornamental grasses continue to increase in popularity in the southeastern United States. Grasses offer variation in plant texture, form, color, and seasonal interest for homeowners and landscapers.

NESPAL is an acronym for the National Environmentally Sound Production Agriculture Laboratory located at the Coastal Plain Station in Tifton, Georgia (USDA Zone 8A). Unique aspects of the NESPAL complex are the native plant community based design and the use of environmentally sound landscaping practices. The grounds are also being used as a test site for landscape plant establishment and adaptability evaluations. Tifton averages about 100 days per year at or above 32°C (90°F).

MATERIALS AND METHODS

An experimental planting was established at the NESPAL site which is approximately 9 m × 16 m (30 ft × 60 ft) and between an asphalt parking lot and a west-facing wall. The original soil was a Tifton loamy sand, however, most of the topsoil was removed during construction leaving the "B" horizon for landscaping purposes. During fall of 1998, approximately 8 cm (3 inches) of a mixture of composted dairy waste and peanut shell bedding was applied. In February 1999 another 10 cm (4 inch) of cotton gin compost was spread over the area and incorporated to a depth of 15 cm (6 inches).

Well-rooted container-grown liners of 23 different taxa of commercially available ornamental grasses were planted on 30 April 1999. Selections used were *Andropogon gerardii*, *A. glomeratus*, *A. ternarius*, *A. virginicus*, *Calamagrostis × acutiflora* 'Karl Foerster', *Chasmanthium latifolium*, *Eragrostis curvula*, *E. spectabilis*, *Festuca glauca* 'Elijah Blue', *Miscanthus sinensis* 'Adagio', *M. sinensis* 'Morning Light', *Muhlenbergia capillaris*, *Panicum virgatum* 'Cloud Nine', *P. virgatum* 'Haense Herms', *P. virgatum* 'Heavy Metal', *P. virgatum* 'Prairie Sky', *P. virgatum* 'Rotstrahlbusch', *Pennisetum alopecuroides* 'Hameln', *P. alopecuroides* 'Moudry', *Saccharum ravennae*, *Schizachyrium scoparium*, *S. scoparium* 'The Blues', and *Sorghastrum avenaceum* 'Sioux Blue' (*S. nutans* 'Sioux Blue'). The area was mulched with a 8-cm (3-inch) layer of mixed wood chips and was watered as needed for the first month, periodically thereafter.

RESULTS AND DISCUSSION

Ravenna grass (*S. ravennae*) was the tallest grass in the study and should be suited for commercial or large-scale landscapes. The best low-growing grasses in the study were *P. alopecuroides* 'Hameln' and 'Moudry'. Lodging was a severe problem for both selections of *S. scoparium*. Plants exhibiting poor growth were *C. xacutiflora* 'Karl Foerster', *C. latifolium*, *F. glauca* 'Elijah Blue'. *Chasmanthium* have performed well in the Coastal Plain Research Arboretum in Tifton where they receive filtered sunlight and adequate soil moisture.

All the *Andropogon* spp. grew well but were not seen as candidates for traditional home landscapes. *Eragrostis curvula* grew well and has been used successfully for bank stabilization at the NESPAL complex. Purple love grass (*E. spectabilis*) has a fine, wispy texture but has not flowered in our trials. *Muhlenbergia capillaris* has flowered heavily and drew rave reviews. *Miscanthus sinensis* 'Adagio' was the favorite grass in the trial. The cultivar 'Morning Light' did not grow well or flower as heavily as did 'Adagio'. Of the five *P. virgatum* selections 'Prairie Sky' had the most outstanding blue foliage of any plant in the trial. All five switch grasses have pleasing foliage in the winter but no hints of the red winter foliage. Indian grass (*S. avenaceum* 'Sioux Blue') has an erect form but did not show the powder-blue foliage that it was selected for. No significant insect or disease problems were noted. Evaluations are continuing in 2000.