Evaluation of Wood Waste as a Component of Potting Mix

Dr. Wayne J. McLaurin and Dr. James T. Midcap

Wood waste may hold the potential to become part of a nursery potting mix. Wood waste is highly variable and our source from Washington, GA is available in great quantities. This wood waste sample is a conglomerate of wood chips, bark and soil particles. To determine how this sample would function in a mix, tests were run on its pore space and water capacity. The results are as follows:

Physical Properties - Pore Space & Water Holding Capacity

Sample	% Porosity	% Air Space	% Water Holding
1	44.8%	21.5%	23.2%
2	43.2%	24.4%	18.8%
3	44.5%	24.2%	20.3%

The second part of the study involves the growth rates of an ornamental known to tolerate variable soil conditions -- *Ilex crenata* 'Compacta'. Four replications of eight plants per treatment were planted in mixes according to the following five treatments. The nursery potting mix is composed of 90% ground pine bark and 10% sand.

Wood Waste Evaluation Treatments

Treatment	Wood Waste	McCorkle's Potting Mix
I	0%	100%
II	10%	90%
III	30%	70%
IV	60%	40%
V	100%	0%

Each plant will be assessed and given a visual quality rating at the end of the growing season. Growth rate will be determined by weighing the top dry weight. Roots will be examined to determine the development of the root system. This project will be concluded in 1998 and results reported next year.