

certain seedlings having 1.5 to 7 times more explants forming shoots compared to other plants. Leaf explants from donor plants with the highest regenerative capacity had a higher percentage of regeneration on DKW than MS medium. Explants from productive donor plants should be placed on DKW medium supplemented with TDZ to improve shoot regeneration efficiency from American elm leaves.

## **Evaluating Pulp and Paper Sludge as a Substitute for Peat Moss in Container Media**

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Pulp and paper sludge is a byproduct of paper production, yet this fibrous material may be suitable as an alternative amendment for peat moss in container media. Newsprint mill sludge was composted 6 weeks and cured before use. One-year-old seedlings of lilac (*Syringa vulgaris* L.) and amur maple (*Acer tataricum* ssp. *ginnala* syn. *A. ginnala*) as well as rooted cuttings of cistena plum (*Prunus x cistena* Hansen) were planted in 3-liter pots containing a bark : sand (2 : 1, v/v) mix, 25% or 50% peat-amended media, or 25% or 50% sludge-amended media. After 14 weeks outdoors, shoot dry weight and changes in plant height were measured. All species planted in sludge-amended media grew as well as those potted in peat-amended or the bark : sand media. In fact, some species grew best in sludge-amended media. Lilac seedlings planted in 25% sludge produced almost double the amount of shoot dry weight and were 80% taller than plants in the bark and sand mix or 25% peat. Maple plants grown in 50% sludge produced over 100% or 35% more shoot dry weight than those grown in 25% or 50% peat-amended media, respectively. Plum cuttings potted in 25% sludge grew at least 53% taller than plants grown in either peat-amended medium. These results indicate that composted newsprint sludge can be used as a peat moss substitute in a container medium for the landscape plants tested.

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## **Alaskan Natives: More Potential for Ornamental Nursery Crops**

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The purpose of this project was to:

- Collect native Alaskan species.
- Develop the propagation techniques for these selected species as potential new introductions in the Idaho nursery industry.
- Include some species in the small fruit breeding and demonstration trials at the University of Idaho-Sandpoint Research and Extension Center in Sandpoint, Idaho.