

BANDOLEERED CONTAINERS FOR AUTOMATIC TRANSPLANTER SYSTEMS

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Abstract.--Much work has been done on developing seedling containers. The job that a container must do has been well analyzed (Kinghorn, 1974) and many containers have been developed. Sometimes the container has been developed with minimum thought as to how it will fit into a completely automated system, thus, possibly restricting the degree to which transplanting systems could be automated. This is not always the case, however (Huang, 1973).

In working with establishment of grasses in pastures and rangelands, I thought that if a completely mechanized method of transplanting could be developed, then costs might be reduced enough so that transplanting could be a viable alternative to seeding. It was from this background that I developed the bandoleer concept of containers (Brewer, 1978). Cells connected together in a flexible string (bandoleer) might ease the mechanization process (Fig. 1).

Dr. James Barnett, USDA Forest Service at Pineville, LA, is evaluating the use of the containers in growing tree seedlings. If these experiments are successful, then the removal of the plug from the container just prior to planting should allow maximum freedom for the roots to grow uninhibited into the surrounding soil (Fig. 2).

Additional keywords: Seedlings, reforestation, stand establishment, grasses.

LITERATURE CITED

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Fig. 2. Plug is removed from container just before planting.

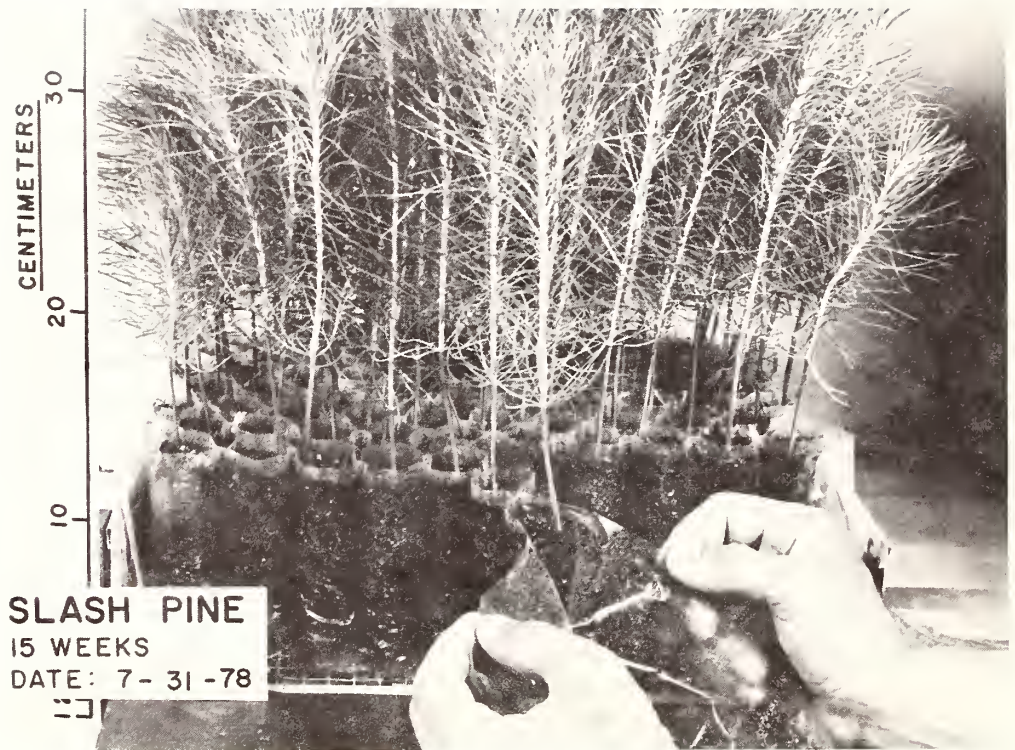


Fig. 1. Seedlings raised in 1 mil polyethylene cells formed into a bandoler.