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Aspen and balsam poplar [Populus tremuloides; P. balsamifera] seed collection and storage

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ASPEN AND BALSAM POPLAR SEED COLLECTION AND STORAGE

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Propagation of *Populus tremuloides* and *Populus balsamifera* by seed had been attempted several times without success. The method originally used was collection of seed pods and scattering of these seed pods into cold frames. This gave very poor results.

Work done by several individuals indicating success with propagation of aspen and balsam poplar by seed, led us to try it and develop a satisfactory method of collection and storage.

Seed pods of both species were collected just as the pods were beginning to crack and the seed escape. The pods must be watched carefully since the time period between the pods cracking and the seed dispersal is very short. The pods are then placed in ventilated boxes for drying to allow the pods to burst and the seed to escape the pods.

After drying, the fluff is placed in a tray with a mesh bottom (30 X 30 mesh, steel wire cloth, .014 diameter wire). Another tray is placed over this and compressed air is blown through from above. The seed is forced through the mesh and is collected under the bottom tray on a plastic sheet.

After collection the seed is placed in vials and the vials are stuck into a jar filled partly with "drierite". The vials are left open and the container holding the drierite and seed vials is sealed.

Table 1.— *Summary of Provincial Tree Nursery seed collection as of July 1977*

Species[1]	Date Of Picking	Location	Date of Extraction	On hand (grams)	Germinative Energy (percent)	Date Depleted
ASP 1-76	May 20, 1976	P.T.N.[2]	May 1976	20	89	May 1977
BAL 1-76	June 28, 1976	P.T.N.	July 1976	.5	77	May 1977
BAL 2-76	July 1976	Aspen Beach	July 1976	1.65	17	May 1977[3]
ASP 1-77	May 13, 1977	P.T.N.	May 18, 1977	10	92	
BAL 1-77	July 28, 1977	P.T.N.	July 1977	35	86	--------

[1]ASP = aspen; BAL = balsam poplar.
[2]Provincial Tree Nursery.
[3]Arrived in sealed plastic bags.

Keeping the seed as dry as possible at all times is very critical. Seed has arrived in sealed plastic bags (high in humidity) and it gave very poor results.

The seed must be collected, dried, cleaned and placed into storage as quickly as possible using the procedure outlined above which has been successful here (see table 1).