

Seedling Stock Types

Barerooted Seedlings

Seedlings that are grown outdoors and grown from seed are barerooted, which means that their roots are separated from the soil when they are to be moved to the planting site. To grow larger seedlings, smaller seedlings can be lifted and replanted in widely spaced rows, where they will have more space for growth. These are called **transplants**. Transplants also are barerooted. Barerooted seedlings usually are described by age class, using two numbers separated by a hyphen. The first number is the number of years the seedling has been in the bed where the seed was sown. For example, a 2-0 seedling is two years old. The second number is the number of years the seedling was in a transplant bed. For example, a 2-2 seedling was in the first bed for two years, then transplanted in to another bed where it remained for another two years. A 2-2 seedling is four years old. Barerooted seedlings are boxed; the number of seedlings in a box depends on the size of the seedlings. Red pine 2-0 seedlings are shipped from the State Nursery Program 1,000 seedlings to a box.



Barerooted seedlings are grown outdoors in beds.



2-0 seedling



3-0 seedling



2-2 transplant

Containerized Seedlings

Seedlings grown in pots or blocks are containerized; they are moved to the planting site in the soil in which they were grown and planted with the soil still attached to the roots.



Containerized seedlings usually are grown in a greenhouse. Seeds are sown in to cavities in large styrofoam blocks, often called styroblocs. Cavity size (volume) can be selected to accommodate different species and ages of seedlings. Common cavity sizes used for forest tree seedlings are listed in the table –

Block #	Cavities/Block	Cavity Volume (in ³)	Cavity Depth (in)	Cavity Diameter (top)
2A	240	2.4	4.5	0.9
4A	198	3.7	5.2	1.1
4	160	4.0	5.0	1.2
6	112	6.6	5.9	1.4

Typically, forest tree seedlings are produced in a 4A block type. They are produced either single-flush (one growing cycle) or double-flush (two growing cycles). Double-flush containerized seedlings have greater stem caliper diameter than do single-flush seedlings. Jack pine is usually produced single-flush; red pine, white pine and white spruce are usually produced double-flush.

Seedlings are shipped either in the styrobloc, or extracted from the block and bundled. Extracted seedlings are wrapped in bundles of 20 and boxed, usually 600 seedlings or so to a box, and then frozen until they are shipped in the spring.



At left - 4A, double-flush, red pine containerized seedling.

At right – Containerized red pine seedlings extracted from the styrobloc and bundled with wrapping such as Saran Wrap or Glad Wrap.

