Simple Acceleration

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Materials and Methods. Our softwood cuttings are taken starting in early July into August. This was the schedule for our softwoods, mostly being deciduous shrubs in 1997 at Riverbend Farms.

In March of 1998 we took our rooted softwood cuttings from the shallow K1020 flats filled with perlite or perlite and Pro-Mix and transplanted into Jiffy 220 plugs of Pro-Mix BX. We don't have enough room for direct sticking efficiently due to space limitations.

The plugs develop rapidly under clear double poly and minimum heat provided by propane heaters. Applications of 10N-52P-10K fertilizer, and a couple of prunings create a well branched 6- to 8-inch liner for May-June transplanting to the field or into containers.

In addition, in March 1998 we transplanted some of the rooted cuttings directly into 1-gal containers in Pro-Mix BX. We fertilized the 1-gal pots along with the regular Jiffy 220 plugs with 10N-52P-10K fertilizer approximately at 2-week intervals and with 20N-20P-20K a couple of times at regular recommended label rates for bi-weekly feedings.

Results. Some plugs that were never transplanted into containers or the field remained 6 to 8 inches. The accelerated 1-gal plants achieved an approximate range of 2 to 4 ft of growth.

Simple acceleration, utilizing plastic and minimum heat, with a good mix can rapidly finish cuttings to market size faster than that of conventional field or containers outside.

For another test we grafted a dwarf Korean lilac, *Syringa meyeri* var. *spontanea* 'Palibin', in January, flushed the scion, made a cutting in March which when rooted was forced into a 12-inch saleable 1-gal plant by July. The 1-gal plants were not pruned, but allowed to grow unchecked to measure growth (Table 1).

Table 1. Growth measurements for some of the 1-gal plants (measured from top of pot).

	Plant height (ft)	Spread (ft)	
Cornus alba 'Elegantissima'	3½	1½	
Forsythia 'Northern Gold'	2	2½	
$Prunus \times cistena$	4	2	
Spiraea japonica 'Little Princess'	1	11/2	
Weigela 'Red Prince'	4	1	

We concluded that simple acceleration as outlined above produced saleable plants in a short time ready for market ahead of regular outside-grown field or container stock. This method could provide a shortcut when a product is required fast.