

afflictions can be controlled without difficulty. The species is used as an indicator plant for indexing certain viruses, but this sensitivity does not impair its life or its beauty.

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Propagation of *Prunus tomentosa*

Collection, cleaning and storage of seeds.

The fruits of *Prunus tomentosa* are sufficiently mature in the last week of June in the Arnold Arboretum and can be harvested. Once fully ripe, the fruits are enticing to birds and to men, and the crop disappears quickly. Ripe fruits are placed in a small amount of water to allow the pulp to separate from the endocarp generally referred to as the "seed." Finally, cleaning can be done by hand with the aid of a sieve or a strong jet of water. Although it is not good practice to hold seeds of *Prunus* in dry storage for long periods, experimental lots of *Prunus tomentosa* germinated without loss of viability after storage in an unsealed polyethylene bag in a heated room for 21 months. A second lot stored under comparable conditions but in a cloth bag for 45 months produced a 52 per cent germination.

The natural dormancy of *Prunus tomentosa* seeds can be broken down by cold treatment. Seeds sown without cold treatment have not germinated unless well aged. A three month treatment of cold stratification will produce about 98 per cent germination.

Seeds sown in the fall out of doors germinate in the spring. The seeds, however, are attractive to rodents and must be protected with wire mesh. Artificial stratification can be accomplished by placing the seeds in a medium of equal parts sand and peat moss. This, in a plastic bag tightly sealed to be vapor proof, can be placed in a refrigerator at 40 degrees for 3 months. The contents of the bag can then be sown and full germination will occur within a week of sowing. In the Boston area fruits collected in June are stored dry until February, then subjected to cold stratification and sowed directly in mid-May. A stratification beginning in December allows planting in flats in greenhouses in March for transplanting to field locations during the summer.

Cuttings.

Prunus tomentosa rooted readily from softwood cuttings taken in the Boston area in mid-June. A root-inducing substance should then be used and the cutting placed in a polyethylene chamber or under mist.

Bud-grafting.

Bud grafting of selected clones is best accomplished in late July or August using the species as understock. *Prunus tomentosa* seedlings have been used experimentally as a dwarfing rootstock for peaches and plums (Arnoldia 10: 76. 1950) and as an easily transplanted root system for clones of the beach plum *Prunus maritima*.

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