Using a shop vacuum to clean SALICACEAE SEEDS

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KEY WORDS
Salix, Salicaceae

NOMENCLATURE
USDA NRCS (2002)

ABSTRACT

Producing stock from seeds requires much less labor than using cuttings. Willow seeds can be easily cleaned using a 1-horsepower shop vacuum and some window screen.

At my nursery, we grow 9 species or subspecies of native willows (Salicaceae) from seeds, including *Salix amygdaloides* Anderss., *S. bebbiana* Sarg., *S. drummon- diana* Barratt ex Hook., *S. exigua* Nutt., *S. melanopsis* Nutt., S. *geyeriana* Anderss., *S. lucida* Muhl. ssp. *lasiandra* (Benth.) E. Murr., *S. prolixa* Anderss (formerly *rigida* or *mackenzieana*), and *S. scouleriana* Barratt ex Hook. For us, producing stock from seeds requires much less labor than preparing cuttings and yields a plant more appealing to our customers.

In spring, we watch capsules and begin harvesting them just as the cotton begins to appear. Often the capsules will start to yellow at this time. We put capsules into paper bags and bring them back to the nursery. Depending on the amount of available space on our drying rack, we may have to refrigerate the capsules for a day or two.

In general, all methods of cleaning willow and cottonwood seeds involve air movement (Day and others 2003; Dreesen 2003). At our nursery we use a very low-tech method for separating the seeds from the cotton. We cover a wooden table with newspapers to catch any seeds that might fall through, and on top of that place a piece of recycled plastic decking for greenhouse benches. This decking has 2.5-cm (1-in) square holes and provides some aeration. On top of the decking we lay a piece of fiberglass window/door screen. We spread the capsules thinly over the screen, and then lay another section of fiberglass screen over the capsules, anchoring the newspaper, screens, and capsules with a few push thumbtacks around the perimeter. The assembly sits in a corner of my shop building.

After the capsules open (generally just a few days), we use a 1-horsepower mini-shop vacuum with a clean cloth filter to extract the seeds. We slowly and uniformly pass the nozzle over the top layer of screen. The seeds and just a little of the cotton are pulled through the screening; most of the cotton and the larger debris remains sandwiched in between. Inside the vacuum, the cotton adheres to the cloth filter and the seeds and minor debris collect in the bottom of the cannister. When the seedlot is finished, we simply pour the seeds into a zip-lock-type bag and keep them refrigerated for a few days until they are sown.

REFERENCES

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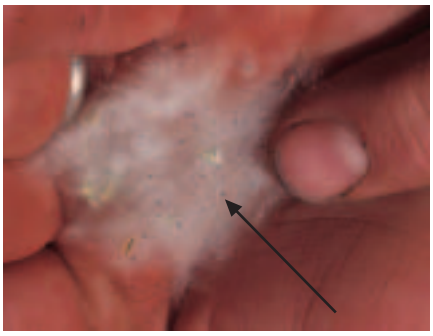
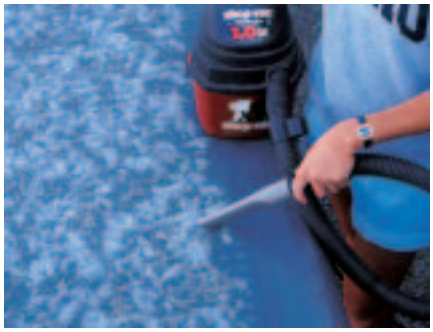


Photos by Kas Dumroese

Cotton and tiny dark seeds of *Salix exigua*.

Capsules are allowed to open on top of a wooden table. From bottom to top, the layers include a layer of newspaper, a plastic spacer, a sheet of fiberglass window screen, willow capsules, and a final layer of fiberglass window screen. The pieces are held in place with large thumbtacks.



A 1-horsepower shop vacuum sucks the cotton and seeds through the window screen—coarser debris remains behind. Inside the vacuum, the cotton sticks to the cloth filter and the seeds collect in the bottom of the canister.