

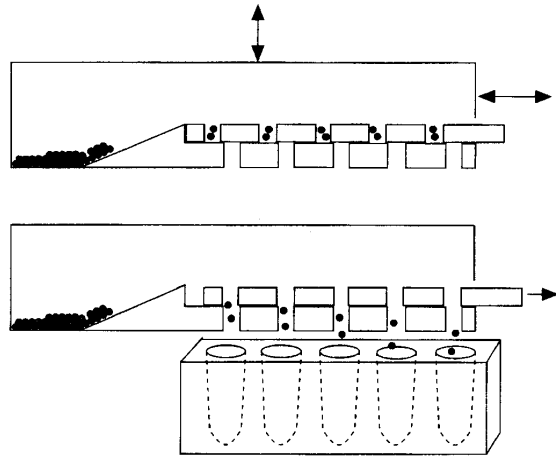
## Shutterbox Feeders

The simplest and least expensive seeder for containers is the shutterbox, a rectangular box with a seed reservoir at one end and a seeding frame at the other (**Figure J**). The seeding frame corresponds to the outside dimensions of the container block or tray, and contains a bottom plate with a grid of holes that correspond to the pattern of cavities in the container. This means that a shutterbox is custom built for a specific type of container and if different container types need to be sown, then a shutterbox will have to be constructed for each. The top layer of the seeding frame is a shutter with holes of the same pattern as the bottom plate, but offset to the side. The holes in the shutter are drilled just large enough to hold the number of seeds to be sown, usually two to six. Different shutters are needed to sow a different number of seeds per cavity or for another type of seed.



*Figure J: Shutterboxes are an inexpensive and easy way to sow seeds into block containers*

To operate the shutterbox, the operator hand-sweeps seed from the reservoir onto the shutter, making certain that each hole is filled. Excess seed is swept back into the reservoir. When the shutter is moved laterally so that its holes are aligned with



*Figure K: Shutterboxes are custom-made for each type of container and sow multiple seeds when the shutter is moved laterally.*

those in the bottom plate, the seeds drop into the container (**Figure K**). Operation of a shutterbox requires practice, but experienced workers can achieve acceptable seeding rates with this simple device. They work best with roughly spherical seeds, like those of pine species, and will jam if seeds are dirty.

Shutterboxes can be custom-made of wood, metal, or plastic, and also are available commercially. In fact, Eric Stuewe is looking for some growers who would like to test a shutterbox that he is thinking of marketing. If interested, contact Eric at:

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### Source:

Landis, T.D.; Tinus, R.W.; McDonald, S.E.; Barnett, J.P. 1994. Nursery planning, development, and management, Vol. 1, The Container Tree Nursery Manual. Agric. Handbk. 674. Washington, DC: USDA, Forest Service. 188 p.