# Using *a* Laundry Spin Dryer *to* Remove Surface Water *from* Seeds

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## ABSTRACT

We discuss our use of a common laundry spin dry to remove excessive moisture from the surface of seed coats. Spun-dry seeds are flowable and easy to handle in various seed testing and sowing applications.

**KEY WORDS:** seed processing, seed treatments

laundry spin dryer is the hub for many operational procedures in our seed laboratory. Every time we immerse seeds in water for various sorting, cleaning, or sowing pretreatments, we follow that soak with a run through our spin dryer to remove surface water. The procedure is quick and safe. We find that seeds are easier to handle when surface water is removed. The benefits and reliability of spin-drying are summarized in Gosling and others (1994). From our experience spindrying seeds, we think the following

tips are important.

Keep the unit from hopping during operation by attaching a wood bottom plate to the rubber feet and screw the plate to the floor.

Plug the spin dryer into a wall mounted power bar complete with an on and off switch since replacing the power bar is easier and cheaper than wiring a switch for the dryer. This allows for a quick shut down of the dryer unit if necessary.

Dripping wet seeds, enclosed in fine mesh bags, are placed in the centrifuge basket. To prevent damage or premature wear to the dryer, ensure that the basket is balanced as the rpm level increases. When not balanced, the basket will bang on the inside wall. If an off center problem occurs, stop and recenter the bag of seeds.

Water tends to cling to smaller seeds more than larger seeds so they need to be spun longer. Rinsing seeds with a fine spray during the first stages of spinning has definite advantages—for example, seedcoat cleansing before and after stratification. We allow the unit to operate until the water draining out slows to an intermittent drip, at which time seeds will be almost flowable.

## BENEFITS

Utilizing a spin dryer creates efficient seed handling by removing excess external water from seed surfaces during various procedural phases.

Problems that could occur during stratification due to excess surface water are alleviated, thereby optimizing biological condition and sequence.

Seed surface drying is now a very simple operation and can integrate simply into tight seed schedules by substantially reducing the time requirements to dry seeds to a flowable state.

## **DRYER SUPPLIER**

We found a comparable dryer to our unit, offered by Compact Appliance, Austin, Texas. The unit is about 60 cm tall (24 in) and 35 cm wide (13.5 in), uses a 100 v outlet, spins at 3300 rpm, is U.L. approved, and costs US \$300 to \$400 (Figure 1). They can be reached by telephone toll-free (877-512-9724) or by Internet at URL: http://www.compactappliance.com/compactappliance/ spinxspindryer.html

#### REFERENCE

Gosling PG, Jones SK, Gardiner AS. 1994. Spin-drying soaked tree seed before prechilling improves seed handling. Tree Planters' Notes 45(1):33–35.

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Figure 1 • A laundry spin dryer can be used to remove surface water from seeds.