

# Fine cleaning of small seeds by static electricity

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When preparing small quantities of seed for stratification, it is desirable to remove unwanted chaff for ease of counting, for reducing excess material on which mold spores may be borne, and for retrieving the seeds.

Cleaning seeds to the point where chaff or other particles are equal in size to the seeds is easy. I did this recently with small seeds of creeping sage (*Salvia sonomensis* Greene; 511,230 seeds per pound, 42 percent sound) by straining them through soil screens. But further fine-cleaning of such small seeds seemed impossible, until it was

found that it can be done by static electricity.

Two containers are needed—one plastic and one glass. I used beakers. Wipe the inside of the plastic beaker with a dry nylon cloth to charge it with static electricity. Then pour from the glass beaker into the plastic one. The dry chaff, and some seeds, are attracted to the sides of the plastic beaker (fig. 1). Pour the seeds back into the glass beaker as the plastic beaker is rotated. This movement increases availability of surface area for capturing the chaff. After the seeds have been poured into the

glass beaker, tap the plastic beaker sharply to dislodge seeds that also have adhered to its sides. Some of these seeds are sound. Most of the seeds not dislodged by rapping are hollow (90 to 100 percent were hollow in seven samples I took). Chaff will cling to the plastic beaker. Wipe it clean again with the nylon cloth, recharging it with static electricity, and repeat the process until the seeds are sufficiently clean.

<sup>1</sup> The author is at Redding, Calif.



Figure 1.—The small dry seeds of *Salvia sonomensis* Greene adhere to the sides of a plastic beaker charged with static electricity. After the bulk of the seeds are decanted and additional good seeds are dislodged, remaining seeds and chaff are wiped from the beaker with a nylon cloth, cleaning, and also recharging it with static electricity. Repeating the process results in clean seed.