

LETS YOU TEST GERMINATION AND VIGOR

Here's A Seed Test You Can Do At Home

A pie plate, zip-lock bag and paper towel are all you need to conduct an at-home seed vigor test developed by Alabama farmer Jim Krauss who started testing his own seed about 10 years ago to double-check the ratings on certified seed.

The at-home germination and vigor test is even sanctioned, somewhat, by Alabama Department of Agriculture and Industries Seed Division director, Gurnia Moore. He says, "This home test can give fairly reliable results if conducted properly. But it is suggested that this test be used only in comparison with state testing."

Krauss originally developed the test in response to variations in test results from other labs. "The state said one thing and a private lab we use in Georgia said another. To triple check, we developed our own test," he explains.

After 10 years of trial, error, and comparison he has developed a reasuring test, which he uses most often with soybeans but which works with any seed. The following are step-by-step instructions for the "Krauss Home Germination and Vigor Test".

1) Pick out 100 seeds. Remove the shrivels or small seed. You can also bounce them over a screen.

2) Put the seed in a paper towel, fold into a square and place in a tin pie pan.

3) Moisten the towel. (Jim urges moist, not wet.)

4) Place pie plate in zip lock bag and close. Jim notes, "I used to wet

the paper towel twice a day before I discovered the bag. It really locks in moisture and builds humidity."

5.) Put the bag in a place with a fairly constant temperature. Jim likes the top of his refrigerator.

6) Wait 68 to 72 hours. (In winter it may take longer.)

7) Check seed. Sprout lengths will vary from 1/4 in. to 1 1/4 in. If, for example, 80 of the seed have sprouted, then the vigor test is 80 percent. Do not count beans that swell but don't sprout.

8) Leave the beans that don't sprout. Rewet the towel if necessary and store for another 24 hours.

9) If another 10 beans sprout in those 24 hours, germination is 90 percent.

The Krausses have been doing all their own germ and vigor testing for four years. According to Jim, "We've had good germination and good stands."

In fact, his tests may have been more accurate than the lab's, in one case. "This private lab said vigor was in the low 70s and germ was 80 to 81 percent. My test gave germination at 90 percent and vigor at 85 percent. That year we had soybean yields ranging from 54 to 60 bushels per acre."

The test has also saved money. The Baldwin County Alabama farmer explains, "It's not a lot of money, but every little bit helps."

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Backhoe digs as deep as 55-in. and has an 88-in. reach.

"BUMPER BUCKET" ALSO MOUNTS ON TRACTOR 3-PT.

Pickup-Mounted Backhoe

If you've ever considered buying a backhoe, you'll want to take a look at this new "Bumper Bucket" that's carried on the front end of a pickup or truck.

"It can be used to dig ditches, clean out drainage ditches, open up sewer lines, dig footings for small buildings, corner posts and many other small jobs," says C.W. Plunkett,



Plow digs 20-in. deep to cut through lateral "sucker" roots of hedge trees. A 50-hp. tractor can clean up 1/2 mile per hour.

TRIMMING BACK ROOTS BOOSTS YIELDS IN ADJOINING ROWS

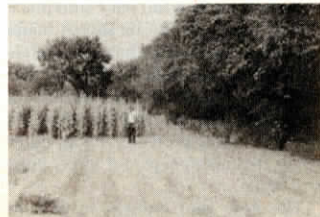
Root-Cutting Plows Save Hedge Rows, Crops

"Root plowing" is the best way to save hedge rows throughout the Midwest and plain states, according to officials of the Nebraska Game and Parks Commission who have bought several root plows and now loan them out free to farmers.

Root plowing cuts off the lateral "sucker" roots of hedge trees so they can't compete with cash crops for moisture. Deep cutting, single shanked root plows cut through roots up to 2 in. in dia., preventing regrowth for as long as 10 years. It costs about 20 times less to slice off hedge row roots than to bring in a dozer to take the entire hedge out.

"Hundreds of miles of hedge rows have been removed in Nebraska and our conservationists are concerned because hedge rows and shelter belts are home to wildlife such as quail, songbirds, rabbits and also because they provide a break to help prevent wind erosion," says Patrick H. Cole, of the Nebraska Game and Parks Commission.

Root plows, which sell for anywhere from \$300 to \$500, consist of a single, 36-in. long shanked cutter with a blunt edge. Working with a 50 hp tractor a farmer can clean up about 1/2 mile of hedge row per hour. It's necessary to make two passes, the first with the root plow at 12 to 15 in. deep and the second at the full working depth of 20 in. It's best to



No corn grows where hedge roots have not been cut, foreground, while corn thrives, at rear of photo, where roots have been severed.

work about 15 to 20 ft. from the edge of the hedge row. The process doesn't effect growth of the hedge, according to Cole, and roots regrow at 1 to 2 ft. per year.

It costs about \$50 per mile in time and fuel to cut roots using a root plow versus about \$1,000 per mile to dig out the hedge with a dozer.

The Nebraska Games and Parks Commission make the plows available through local SCS offices. Root plows of the type used in Nebraska are available from two companies. Contact: FARM SHOW Followup, The Waldorf Co., 3200 No. Summit, Arkansas City, Kan. 67005 (ph 316 442-1340), or FARM SHOW Followup, Saueressig Salvage, Rt. 1, Box 365, Burlington, Kan. 66839 (ph 316 364-2063).

director of marketing for Vernon & Sons Enterprises, Lebanon, Mo., the manufacturer.

The Bumper Bucket has a swing radius of 85°, a reach of 88 in. and a depth capability of 55 in. It weighs 435 lbs. and comes with 6, 8 or 12-in. wide buckets.

Hydraulic power is provided by a fan-belt driven pump with electric clutch. "It requires no modification of truck or tractor. The unit comes with mounting supports that are attached to the truck frame with U

bolts. Once installed, it's quickly detachable by removing 2 bolts and unhooking two hoses. The operator stands alongside the unit in operation," says Plunkett.

The Bumper Bucket sells for \$3,495. A 3-pt. tractor mounted model is also available.

For more information, contact: FARM SHOW Followup, Vernon & Sons, Enterprises, Box 29, Lebanon, Mo. 65536 (ph 417 532-3167 or 532-3168).