

Seeding Methods for Small-Seeded Legumes

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Ideally, small seeded legumes should be planted using a cultipacker-seeder (prepared seedbeds only) or the small-seed box on a no-till or conventional drill. This provides the most accurate control of the seeding rate. However, the use of a no-till or conventional drill often results in small-seeded legumes being planted too deep (i.e., deeper than ½ inch). Some drills cannot be adequately adjusted to maintain a consistently shallow planting depth. Planting depth is harder to control when planting into wet soil, a soft seedbed, or rough ground.

If these equipment or condition limitations exist, successful seed placement can occur if the seed are broadcast directly behind the drill's shoes and in front of the press wheels. To do this, disconnect the tubes from the small seed box where it enters the drill's shoes and secure the tubes behind the shoes or in front of the press wheels with wire or cable ties. This should allow the seed to be metered out on the soil surface and the press wheels (with proper down-pressure) should firm the soil around the seed. This practice will ensure that the seeds are not planted too deep.

Accurately broadcasting small-seeded legumes (i.e., legumes with seeding rates less than 8-10 lbs/acre) is difficult with large spinner-spreaders. If the available equipment cannot be adjusted to apply the low rate that is required, the inoculated seed can be mixed with coarse sand or some other inert material that is similar in size and weight to the seed. Smaller seeds should not be mixed with larger seeds in the hopper or seed boxes, since the small seeds will settle to the bottom. Also, legume seeds should not be mixed with fertilizer, since the fertilizer may kill the inoculant.

Broadcasted seed may not have sufficient seed-soil contact. Conventional-till seedbeds should be firmed with a cultipacker before seed are broadcast. Footprints left by an average person on a properly prepared seedbed should not be more than ¼ inch deep. Broadcast seeding on a prepared seedbed should be followed with adequate firming of the seedbed with a cultipacker.

When planting into an existing sod, broadcasted seed should be "scratched-in" to the soil by using a chain drag or spike-toothed harrow. Some producers have also successfully used a pasture aerator. However, the aggressive use of a drag, harrow, or aerator can damage the sod and/or expose areas to soil erosion or weed encroachment.

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