



## SEEDER CALIBRATION (TARP METHOD)

Prior to pasture or range planting the equipment should be calibrated to allow the best chance of a successful planting. Calibration is especially important when seeding small seeded grasses, which usually require only small amounts of seed to be planted per acre. This method can be used for either broadcast or drill type equipment. The initial settings of the seeder or drill should be based on manufacturer's specifications if available.

### PROCEDURES

1. Spread a 10 x 10 foot tarp on the ground out of the wind, and secure all edges.
2. Set the planting equipment to the approximate setting needed to apply the desired amount of seed.
3. Using the same seed you intend to plant, start operation of the planting equipment far enough away from the tarp so that you will be at operating speed when you pass over the tarp. Pass over the tarp distributing seed as if you were planting.
4. Carefully gather the seed and weigh it in grams or ounces. Grams are more accurate, since they are a smaller unit of measure.
5. Calculate the bulk rate per acre as follows:
  - a. Grams x 0.96=lbs./acre total bulk
  - b. Ounces x 27.2=lbs./acre total bulk
  - c. For other tarp sizes the formulas are as follows:  

$$(\text{Ounces} + 16) \times (43560/\text{the tarp sq. ft.}) = \text{lbs./acre total bulk}$$

or

$$(\text{Grams}/454) \times (43560/\text{the tarp sq.ft.}) = \text{lbs./acre total bulk}$$
6. Convert the bulk seed to pure-live-seed (PLS) basis, using the test results for the seed. Pure-live-seed is calculated as follows: (germination + dormant seed) x percent purity. For example, if the seed tag states that germination is 70.5%, dormant seed is 8.0% and the purity is 98% the PLS is equal to (70.5 + 8.0) x 98% which equals 76.9%.
7. If the seeder swathe or drill width is over 10 feet, corrections are not needed. If the seeder swathe or drill width is less than 10 feet, correct the calculated rate per acre to the width of the planter. Use the following equation.  

$$[\text{lbs./acre from the tarp} / \text{actual swathe width (ft)}] \times \text{the tarp length (ft)} = \text{corrected lbs. per acre bulk}$$
8. Reset the seeder or drill if necessary and retest until the rate being applied is close to the recommended rate.
9. Make the final determination during the actual planting. Monitor the amount of seed used and the acreage planted throughout the planting day. Periodic adjustments may be needed during planting to maintain the desired seeding rate.

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