Understanding Seed Drills

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Important Tips

- Clean drill of other seed and insure it is working properly (wheels turn, engages, etc)
- Booklet of charts and setting instructions for machine is present
- Set drill at recommended numbers from booklet
- Use the correct box for the right seed size
- Prime the seeder (start seed flow)
- Seeding depth checked after first 20ft test drive
    - Larger seed (sudans) around 1 inch
    - Smaller seed (clover, fescue, orchardgrass) ¼ to ½ inch

Calibrating a Seed Drill

1. (If no crank wheel is present) Measure the drive wheel (around) in feet and jack up the drive wheel so as to turn it in step 4.
2. Place seed in box near 3 of the drop areas (half full)
3. Take tubes off the 3 drop areas and place a catch bag/box under the 3 areas.
4. Engage drive and Prime the drill (turn wheel until seed flow starts and dump first seed back into seed box)
5. Turn wheel as to go 100 ft (example wheel measures 7 ft around then turn the wheel 14.3 times to equal 100ft. Use air intake valve to count)
6. Measure seed in ounces or grams (make sure to subtract catch bag/box)
7. Know how wide drill is. (6 ft or 4 ft) And know how much area those 3 drop areas represent. (3 drop areas = 1/3 of the drill area) Example: a 6 ft drill that travels 100 ft drills 600 sq ft, by catching 1/3 of the drill area 200 sq ft is used for calculations in formulas below.
8. Use formulas to determine pounds of seed per acre. See back page

Formula for grams:

Seed weight(grams) x 43560(sq ft in acre) = pounds of seed per acre

454 (grams in a pound) x area drilled (sq ft)

Formula for Ounces:

Seed weight(grams) x 43560(sq ft in acre) = pounds of seed per acre

16 (ounces in a pound) x area drilled (sq ft)

Example:

30.5 grams of fescue seed was caught using 3 seed drop areas (1/3 of 6 ft wide drill) using the 14.3 turns of the wheel. The producer used a 6 ft wide drill. If the 6 ft drill traveled 100 ft then the drill would cover 600 sq ft. Only 3 drop areas were used to collect seed, therefore, on 1/3 of the area would receive seed. That is why we must take 1/3 of 600 sq ft to give us the 200 number used in formula below.

30.5g x 43560 = 1,328,580 = 14.6 pounds an acre

454 x 200   90,800

In this example the presetting's are a little low. One may want to adjust settings to have more seed flow.

Parts of a No-Till Drill

Bottom of small seed hopper box

Bottom of large hopper box

Seed cups

Seed metering drives

Drop tubes

Down pressure springs

Small seed path

Large seed path

Double-disk opener

Press wheel height adjustment

Coulter spring

Press wheel

Rolling coulter