



# CALIBRATION OF SEED DRILL

Determine the nominal width of coverage of the drill. It is equal to the multiplication of row spacing (S) and number of rows (n) e.g. 4 furrow openers x 30 cm row spacing = 120 cm = 1.2 m is the width of coverage of the seed drill.

Calculate the circumference (C) of the drive wheel of the seed drill.

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**Calculate the number of revolution required (N) to cover 1/100<sup>th</sup> of a hectare**

$$N = 10000 / C \times S \times n \times 100$$

- **Calculate the wheel revolution  $N_1$  after allowing 10 % wheel skid e.g,  $N_1 = N - 0.1N$**
- **Put a mark on the drive wheel to count the wheel revolutions**



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- **Jack up the seed drill so that the drive wheel will be free to rotate.**
- **Set the seed index lever to desired seed rate position**
- **Fill the seed box to the full and turn the drive wheel by 2-3 revolutions so that the seeds will fill into the feed cup of the seed-metering device.**
- **Place gunny bags or containers to collect seeds.**



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**Rotate the drive wheel to  $N_1$  revolutions at an appropriate speed. The speed of operation of an animal drawn seed drill will be 2-2.5 kmph whereas that of the tractor drawn seed drill is 3, 5 and 8 kmph. Exmp: A 60 cm dia. wheel will make 21 revolution per minute when traveling at 2.4 kmph speed.**



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**Weigh the total seeds (W) collected in different bags. Calculate the observed seed rate ( $R = 100W$ ) and compare that with the recommended seed rate.**

**If the difference is over 5 % take necessary adjustment to reduce the seed rate. All the seed tubes of different furrow openers should drop equal amount of seeds. Take two replications of each observation.**



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**Repeat the process with the hopper  
 $3/4^{\text{th}}$  and  $1/2$  full.**

- The fertilizer calibration can be done in the same way along with that of the seed.**



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# CUP FEED TYPE

