

Fodder Beet Dry matter yield assessment guide

The use of Fodder beet as a winter feed crop, in New Zealand, has undergone rapid growth over the last 5 years. Fodder beet is now a major, if not the dominant winter feed crop of choice.

The most critical key to achieving a high fodder beet yield is attention to detail when growing fodder beet. Once this yield potential has been realised then grazing of the crop is another critical point for you and your crop.

Regardless if you have precision drilled your crop or used other establishment methods this download will provide you with the fundamental requirements you need to assess your crops dry matter yield.



Precision drilled crops - Yield assessment

On the face of it rather a long winded way to assess your dry matter yield however it's a very easy and simple plan to put into action. As your fodder beet crop yield will vary within the paddock it's important to repeat these steps several times throughout the paddock to get a reliable average. It's also important to assess the yield close to the time you are starting to graze it, and on bigger paddocks, it's important to re-assess the crop's yield from time to time as fodder beet will continue to grow throughout the season.

1. Calculating the width between rows. Using a tape measure, measure 11 rows from crest to crest. **Example:** 11 rows equals 4.58 metres.
2. Divide the measured distance by row numbers minus one
Example: 4.58 metres / (11 rows -1) = 0.458 metres.
3. To get a square metre divide step 2's answer into 1
Example: 1/0.458 = 2.18 m.
4. Get a piece of alkathene / wood measure to 2.18 metres long this gives you the equal to 1 sq metre weight all the fodder beet from this 2.18 m.
Example: 2.18 metres of row gave 20 kgs fodder beet total weight including tops).
5. Multiply this 20 kgs by your fodder beet cultivars typical dry matter yield (Click here to view the Specialty Seeds [Fodder Beet website page](#)). **Example:** For this example the cultivar's typical dry matter yield is 15% therefore 20 x 15% = 3 kgs.
6. Multiply this number by 10,000 (as there is 10,000 sq metres to a hectare).
Example: 3kgs x 10,000 equals 30,000 kgs dry matter weight per hectare.
7. **Final step:** Divide this number by 1000 to give you your assessed dry matter yield per hectare in tonnes. **Example:** 30,000 / 1000 = 30 therefore this crop has been assessed as having 30 tonnes dry matter per hectare.



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Non-precision drilled crops - Yield assessment

While we strongly suggest you precision drill your crop for best establishment results, there are many farmers choosing to use other methods of establishment. The information below will provide them with what I suggest is the best method in assessing your yield in these situations.

1. Make a 1 m² area make a circle out of a piece of alkathene 3.55 metres in length.
2. In at least 6-8 areas in the paddock place this circle on the crop making sure the selected areas are representative of the paddock.
3. Collect and weigh all the crop within these circles after removing any excess soil.
Example: 20 kgs fresh weight average per the 6-8 samples taken.
4. Multiply this weight by the crops typical dry matter % (see below link).
Example: 20 kgs x's 15% (your cultivars typical dry matter yield) =s 3 kgs
5. Multiply this number by 10,000 as there is this number of sq metres in a hectare.
Example: 3 kgs x's 10,000 =s 30,000 kgs.
6. ***Final step:*** Divide this number by 1000 (as there are 1000 kgs per tonne)
Example: 30,000 / 1000 = 30. Therefore this crop has been assessed as having 30 tonne dry matter per hectare.

Dry Matter percentage: Bulb and Tops.

The two methods of yield assessment require an assumed dry matter yield of both the bulb and the tops of your fodder beet crop. This information is provided by the plant breeder and can be found by going to the Specialty Seeds [Fodder Beet website page](#).

Or as the real dry matter percentage may significantly vary from the assumed dry matter percentage we strongly suggest you get a feed analysis test done by a professional feed sampling laboratory.

Specialty Seeds can arrange this service for you, which is provided by Hill Laboratories. Hills offer two tests either a dry matter only test or a full feed test. While the dry matter only test is cheaper the full feed test includes the following information Dry matter, Crude protein, Acid detergent fibre (ADF), Neutral detergent fibre (NDF), Crude fat, Soluble sugars, Starch, Ash, Digestibility (DOMD) and metabolisable energy (ME). The cost per sample is low and we recommend the full feed test.

For a self-sampling kit, which includes sampling procedure information, analysis request form, sample bags and a free courier bag please [contact Specialty Seeds](#).

