

Fodderbeet

Sampling Notes

The nutritional status of this fodder crop is monitored using soil tests and plant analysis. Monitoring regularly is important to help sustain optimum levels and avoid nutritional disorders. If disorders do occur, rapid diagnosis is necessary to assist correction.

Fodderbeet has the potential to produce high yields (from 20 - 30t DM/ha) but needs careful management to achieve this.

Instructions for forage quality testing are included in the DIY Feed Test Sample Kit.

Leaf - Mid Growth

Sampling Time: When the root is half grown

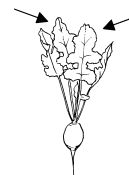
Plant Part Youngest Mature Leaf (50-60 DAS)

Collect From:

Quantity per Sample: 20 - 30 leaves.

Recommended Tests: Basic Plant (BP), Molybdenum (Mo).

Comments: To help diagnose an obvious problem, leaves showing the first signs of the distinctive symptoms should be collected as soon as abnormalities appear. If sampling outside the normal sampling time it is useful to take a second sample of similar, healthy leaves from nearby unaffected plants for analysis as a comparative standard.



Soil

Sampling Time: Prior to crop establishment.

Core Depth 15cm.

Collect From: Randomly throughout the area to be planted.

Quantity per Sample: 12 - 20 cores.

Recommended Tests: Basic Soil (BS), Sulphur profile (S), Available Nitrogen (AN), Boron (B)

Comments: If a problem is suspected during the growing season, then a sample should be taken from the rooting zone immediately adjacent to the plant. Collecting a second sample from an unaffected area may help identify the cause of the problem.

Comments

Fodderbeet have a relatively higher fertility requirement than other root forage crops, particularly for potassium and sodium.

Nitrogen deficiency will appear as a purple pink coloration in the foliage. This symptom can also be induced by other factors such as cold weather, root damage from nematodes, drought stress and water logging. Requirement for N will depend on soil reserves.

Fodderbeet are also prone to deficiencies of potassium, magnesium and boron. Fodderbeet will not grow rapidly without a source of sodium, particularly if potassium is low.

Results for copper, zinc and manganese in leaves sprayed with fungicides will not be reliable due to adhering spray residues on the leaves.

Iron deficiency symptoms may exist even when leaf levels appear satisfactory. This may be due to the presence of physiologically inactive forms of iron within the tissue. Also, soil contamination of leaves growing near the ground may elevate total iron results.

The optimal pH for fodderbeet is 6.2, with the crop performing best in deep, friable soils.

References

Blackmore, L.C; Searle, P.L and Daly, B.K. 1987. Methods for chemical analysis of soils. NZ Soil Bureau Scientific Report 80. NZ Soil Bureau, DSIR.

Reuter, D. J. and Robinson, J. B. (Eds) 1997. Plant analysis. An interpretation manual. Second edition.

Disclaimer

Normal Range levels shown as histograms in test reports relate specifically to the sampling procedure provided in this crop guide. The Normal Range levels in test reports and Comments provided in this Crop Guide are the most up to date available, but may be altered without notification. Such alterations are implemented immediately in the laboratory histogram reports. It is recommended that a consultant or crop specialist be involved with interpretations and recommendations.
