

Fiji DAIRYNOTE 2.3 – Feeding and Nutrition: Feeding the 'Green Stuff'

Good Practice Guide for Fiji Dairy Farmers

What is the 'Green Stuff'?

When we refer to the 'green stuff' we are talking about the numerous types of grasses, forages and fodders that are on the farm.

All have different characteristics, such as:

- How they grow
- The size of the plant
- Adaptability to climate
- Nutritional value
- Growing season
- Time to maturity.

But the thing they have in common is the principles around the best time to feed or harvest the plant material to achieve the best nutritional and palatability value.

This is called feed quality.

Importance of the 'Green Stuff'

By having your farm producing plenty of good quality 'Green Stuff' you can:

- Increase the supply of feed to your animals
- Reduce reliance on concentrate feeds
- Have the ability to conserve surplus feeds in the form of silage for use at a later date
- Ensure a better diet for your animal/s cows require at least 60-70% of their diet as this type of feed to produce to potential.

You can get 100% of your animals' dietary requirements from the 'Green Stuff', which also gives you the opportunity for better profits

Feed quality

The quality of your feed has a dramatic impact on not only how much your animal/s can eat but also how many nutrients they can obtain from it.

The better the quality, the better the animal performance.

High quality 'Green Stuff' is young, tender and leafy. As it gets older, the plant becomes harder and harder for your animal/s to consume and digest.



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As plants mature, the:

- Leaf % decreases
- Stem % increases
- Protein and energy decrease
- Fibre increases
- Intakes decrease.

Having large areas of bulky older plants does not correspond to having more feed on hand.

Think quality not quantity!

Assessing feed quality

There are a number of ways to assess feed quality on farm.

Refer to the table below for examples.

High	Low
Stem easy to break and juicy	Stem hard to break, thick and dry
Plant green all the way to the base	Plant with brown leaves at the base
No seed heads	Seed heads
Animals eating it vigorously	Animals picking when eating
Days since last grazing/harvest 30-40 days	Days since last grazing more than 40 days

Photo 1: High Quality Plant



Photo 2: Low Quality Plant



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Plant Care

Plants are like any living thing – they need the right care and attention to get the best performance.

A plant will perform well if:

- It is well established in the first instance. For this, new seeding/plantings should be set into well cultivated, fertile seedbeds. Always follow the recommendations for the particular species you are planting.
- It has the nutrients it needs to grow. To achieve this, ensure plants are fertilised regularly. If possible, get a soil test done to determine the amount of fertiliser required.

 As a guide:
 - After every grazing/harvest apply 40kg/acre of urea; and
 - Annually apply 150kg/acre of 12-10-10 fertiliser or alternatively use regular amounts of cow effluent.
- It is grazed or harvested at the right time, i.e. when it is young, tender and leafy.
- It is not over or under grazed. For this, you can divide your farm into paddocks, which allows for
 easier management. It also allows for your animals to be confined to specific areas, allowing other
 areas to regenerate.

As a guide:

- The harvesting height for species such as Guatemala, Juncao and Elephant Grass should be 1-1.2 metres, harvested to a height of 15-20cm
- The grazing/harvesting height for species such as Setaria, Mulato and Paragrass should be 40-50cm to a height of 10cm.
- It is free of pests and diseases. For this, regularly check for pests and diseases and apply relevant chemicals to eliminate any that are present.
- It is fit for purpose for the climate and soil types it is introduced to.