

## Supplement Use in a Variable Climate Project – NARF (Dargaville)

This project compares three farms with different supplement use on production, profit and environmental impact. The three farm systems are:

1. **Pasture Only Farm** - No imported supplement - 2.7 cows/ha
2. **PKE Only Farm** – PKE used to fill feed gaps within milk FEI limits – 3.1 cows/ha
3. **PKE Plus Farm** - PKE used until milk FEI limit and then other supplements added – 3.1 cows/ha

*This project is funded by DairyNZ, MPI (Sustainable Farming Fund) and Hine Rangi Trust.*

20 <sup>th</sup> November 2019	Pasture Only Farm	PKE Only Farm	PKE Plus Farm
Average Pasture Cover (kg DM/ha)	2514	2259	2397
Pasture Growth (kg DM/ha/day)	57		
Rotation Length (days)	28	27	25
Production/cow/day (kg MS)	1.54	1.60	1.50
Production/ha/day (kg MS)	3.79	5.02	4.71
Production/ha season to date (kg MS)	419	593	642
Supplement Fed (kg DM/cow/day)	0	3.1 PKE	3.1 PKE
Supplement Fed 19/20 season (kg DM/cow)	162 Silage	518 PKE	508 PKE 105 Silage 23 DDG
Average Body Condition Score	4.1	4.19	4.09
3 week submission rate	90%	83%	81%
Worry Score (1 = Low, 10 = High)	1	1	1
Nitrogen – Season to Date (kg N/ha)	120	123	126
Milk FEI	A	B	A
Rainfall (mm last 2 weeks)	28		

### CURRENT MANAGEMENT

- Pasture cover has risen on all farms due to a bit of rain during the last two weeks and silage paddocks coming back into the rotation. All farms are in a comfortable position leading to the manager having a very low worry score.
- Two or three paddocks will be dropped out for silage on the Pasture Only farm. Debated taking some off the other farms, however with no rain predicted for the next 10 days decided to keep all in the rotation.
- With comfortable feed levels on all farms and drier weather predicted, the rotation length will be stretched a bit to 30 days. This will mean allocating 120 m<sup>2</sup>/cow/day on the Pasture Only farm and 106 m<sup>2</sup>/cow/day on the PKE supplemented farms.
- Both PKE farms will continue feeding PKE at around 3 kg DM/cow/day. Milk FEI on the PKE Only farm has lifted up into the B zone, this will be watched closely.
- Ready to apply nitrogen if we get rain.

**For more information including past updates and field day handouts, go to [www.nddt.nz](http://www.nddt.nz)**

**The Northland Dairy Development Trust thanks our sponsors:**

Farm Source & Fonterra / Ballance Agri-Nutrients / Avoca Lime / GEA-FIL / Cashmanager RURAL online