

## 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.*

10 <sup>th</sup> September 2020	Pasture Only Farm	PKE Only Farm	PKE Plus Farm
Farm Area (ha)	28	28	28
Average Pasture Cover (kg DM/ha)	2186	2064	2021
Pasture Growth (kg DM/ha/day)	37		
Rotation Length (days)	34	35	32
Cows in milk/total cows	72/77	84/88	86/88
Production/cow/day (kg MS)	1.39 OAD	1.91	2.00
Production/ha/day (kg MS)	3.48	5.51	5.83
Production - Season to date (kg MS)	160	214	237
Supplement Fed (kg DM/cow/day)	1.8 silage	3.2 PKE	2.3 PKE 2.6 Soya Hull
Supplement Fed - Season to date (kg DM/cow)	142 Silage	204 PKE	204 PKE 38 DDG/SH
Average Body Condition Score	Milkers 4.1	Milkers 4.1	Milkers 4.2
Proportion cows under BCS 4.0	11%	9%	9%
Worry Score (1 = Low, 10 = High)	5	5	7
Nitrogen – Season to Date (kg N/ha)	87	84	81
Milk FEI	A	B	B/C
Rainfall (mm last 2 weeks)	27 mm		

### **CURRENT MANAGEMENT**

- Pasture growth remains fairly flat despite continuation of N (Sustain) and Gibberellic acid.
- Pasture covers are holding but there is no surplus
- Milkers on all farms are on 110 m<sup>2</sup>/cow, or around 28-32 day rotations. PKE Plus cows have increased SBH to try and control FEI and lift residuals which are slightly below target of 15-1600.
- The Pasture Only herd returns to twice-a-day milking as pasture and cow condition is reasonable. We have around 15 days silage left at the present feeding rate.
- The PKE Plus herd has been receiving Soya Bean Hulls as it was cheaper than DDG and they did not require the extra protein.
- The Fescue paddocks are growing rapidly and will likely go on a faster rotation to keep the quality.

**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