

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.

17th December 2020	Pasture Only Farm	PKE Only Farm	PKE Plus Farm
Farm Area (ha)	28	28	28
Average Pasture Cover (kg DM/ha)	2139	2204	2165
Pasture Growth (kg DM/ha/d, last 2 weeks)	36		
Rotation Length (days)	33	30	33
Cows in milk/total cows	77/77	87/87	86/86
Production/cow/day (kg MS)	1.42	1.47	1.45
Production/ha/day (kg MS)	3.91	4.58	4.46
Production - Season to date (kg MS/ha)	606	738	792
Supplement Fed (kg DM/cow/day)	0	1.6 PKE	1.7 PKE
Supplement Fed - Season to date (kg DM/cow)	181 Silage	338 PKE	317 PKE 147 DDG/SH
Average Body Condition Score	4.1	4.0	4.0
Proportion cows under BCS 4.0	8%	12%	16%
Worry Score (1 = Low, 10 = High)	5	6	4
Nitrogen – Season to Date (kg N/ha)	174	172	168
Milk FEI	A	B	B
Rainfall (mm last 2 weeks)	12 mm		

CURRENT MANAGEMENT

- Pre-graze pasture covers are dropping fast and residuals starting to drop too, so PKE feeding will be maximised as FEI allows, and DDG will be added to the PKE Plus diet
- Discussion centred around levers to pull if it rains or doesn't rain
- All herds will remain on current rotation lengths of around 30 days
- If good rain and growth occurs we will pull supplement out and if needed drop paddocks out to maintain residuals on kikuyu
- If no rain and growth stays low we will increase DDG to the PKE Plus herd.
- The PKE Only herd may use some silage to top up intakes.
- The Pasture Only herd has very limited silage so will save this for later and meanwhile use OAD to reduce feed demand when production drops below 1.2kgMS/c/d.
- All cows get their first PD early January to get accurate dates.
- We are monitoring spore counts to watch facial eczema loading and may start zinc trough treatment

For more information including past updates and field day handouts, go to www.nddt.nz

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