

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

This project compares three farms with different supplement use on production, profit and environmental impact. Each farm is 28 ha. 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.

11 th March 2021	Pasture Only Farm	PKE Only Farm	PKE Plus Farm
Average Pasture Cover (kg DM/ha)	2119	2137	2105
Pasture Growth (kg DM/ha/d, last 2 weeks)	27		
Rotation Length (days)	36	36	33
Production/cow/day (kg MS)	0.83	1.12	1.39
Cows in Milk/Peak Cows	69/78	88/88	86/88
Production/ha/day (kg MS)	2.16	3.52	4.27
Production - Season to date (kg MS/ha)	856	1096	1190
Supplement Fed (kg DM/cow/day)	0	3.1 PKE 3.8 Silage	3.7 PKE 1.6 DDG 3.9 Silage
Supplement Fed - Season to date (kg DM/cow)	336 Silage	553 PKE 197 Silage	556 PKE 263 DDG/SH 200 Silage
Average Body Condition Score	4.0	4.0	4.2
Proportion cows under BCS 4.0	7%	20%	7%
Worry Score (1 = Low, 10 = High)	6	4	3
Nitrogen – Season to Date (kg N/ha)	174	172	168
Milk FEI	A	B	B/C
Rainfall (mm last 2 weeks)	28 mm		

CURRENT MANAGEMENT

- Rain showers have kept kikuyu growing just enough to keep up with demand
- Pasture Only cows have been milking OAD since Christmas and PKE Only cows since late January. This has held BCS. PKE Plus cows continue TAD other than heifers and light cows
- Home grown baleage has run out on the Pasture Only and PKE Plus farms. To reduce feed demand, empty cows have been culled from the Pasture Only farm. No other culls have gone.
- PKE supplemented farms continue feeding as much PKE as milk FEI will allow. The PKE Plus farm is purchasing baleage in as needed to keep cows well fed. We will continue feeding a small amount of DDG to PKE Plus cows to ensure protein levels are not limiting production
- FE spore counts continue to be low. Zinc supplementation continues at a low dose rate
- We will commence mulching kikuyu areas around 20th March. Drilling of Italian ryegrass will follow the mulcher, along with slug bait

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

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