Ngāi Tahu Paritea

Notes
- Milking platform only
- Supplement and pasture is reported as 11 MJME/kg DM equivalent
- Overseer nitrogen numbers (red and green diamonds) include non-effective land, other metrics use effective area

Nitrogen summary	Calculation	14/15	15/16	16/17	17/18	18/19
Surplus of purchased N	+ Fert N + Supplement N – Product N – Stored supplement N	302 kg N/ha	141 kg N/ha	185 kg N/ha	230 kg N/ha	188 kg N/ha
N leaching	Overseer v6.3.1	88 kg N/ha	56 kg N/ha	61 kg N/ha	70 kg N/ha	60 kg N/ha
Nitrogen use efficiency	Product N / (Stored supplement N + Fert N + Supplement N)	25%	38%	33%	27%	30%

Farm characteristics

Soils

Soil family	Lismore
PAW60	65 mm

Climate

	14/15	15/16	16/17	17/18	18/19
Rainfall	430 mm	587 mm	577 mm	984 mm	707 mm
Evapo-transpiration	772 mm	772 mm	772 mm	772 mm	772 mm

Irrigation

	14/15	15/16	16/17	17/18	18/19
Irrigation applied	467 mm	553 mm	371 mm	354 mm	465 mm

Fertiliser

	14/15	15/16	16/17	17/18	18/19
Nitrogen applied (effective)	385 kg N/ha	247 kg N/ha	257 kg N/ha	312 kg N/ha	254 kg N/ha
	344	227	237	281	235

Farm management

Stock

	14/15	15/16	16/17	17/18	18/19
Peak cows	1278	1110	1063	1047	1054
Stocking rate	3.6 cows/ha	3.1 cows/ha	3.0 cows/ha	3.0 cows/ha	3.0 cows/ha
Live weight	456 kg/cow	495 kg/cow	495 kg/cow	502 kg/cow	489 kg/cow

Feed

Pasture

	14/15	15/16	16/17	17/18	18/19
Pasture eaten	14.2 t DM/ha	14.9 t DM/ha	13.2 t DM/ha	12.4 t DM/ha	12.4 t DM/ha
Fertiliser efficiency	37 kg DM/kg N	60 kg DM/kg N	51 kg DM/kg N	40 kg DM/kg N	49 kg DM/kg N
Water efficiency	16 kg DM/mm	13 kg DM/mm	14 kg DM/mm	9 kg DM/mm	11 kg DM/mm

Supplement

	14/15	15/16	16/17	17/18	18/19
Supplement per ha	3.1 t DM/ha	0.7 t DM/ha	1.8 t DM/ha	1.6 t DM/ha	1.5 t DM/ha
Supplement per cow	863 kg DM/cow	234 kg DM/cow	599 kg DM/cow	543 kg DM/cow	494 kg DM/cow
	60	17	41	34	34

Farm production

Products

	14/15	15/16	16/17	17/18	18/19
Productivity	1660 kg MS/ha 459 kg MS/cow	1397 kg MS/ha 445 kg MS/cow	1405 kg MS/ha 467 kg MS/cow	1284 kg MS/ha 433 kg MS/cow	1305 kg MS/ha 438 kg MS/cow
Milk from pasture	82%	96%	88%	88%	89%
Fertiliser efficiency	4.3 kg MS/kg N	5.7 kg MS/kg N	5.5 kg MS/kg N	4.1 kg MS/kg N	5.1 kg MS/kg N
MS as % of liveweight	101%	90%	94%	86%	89%
	102	85	84	77	77

Stored supplement

	14/15	15/16	16/17	17/18	18/19
Harvest crop area	0 ha	0 ha	0 ha	8.5 ha	16.9 ha
% of farm cut for silage	0%	47%	20%	12%	6%
Stored or exported feed	0 t DM	141 t DM	178 t DM	141 t DM	232 t DM
	0	8	9	8	4