

Weekly Farm Summary 18th November 2022

Farm-system impacts of: Kale vs Fodder beet for winter AND Reducing N loss to water by 30%.

	Std Brassica/ Baleage Pink	LI Baleage Blue	Std Fodder beet Green	LI Fodder beet Yellow
Farmlet area including wintering	82.7	60.9	82.7	60.9
Peak cow numbers	222	137	221	135
Milking Area	73.8	55.1	73.8	55.1
Current Herd size (cows)	222	133	215	134
Pasture Stocking rate (current)	3.0	2.4	2.9	2.4
Winter Feed Milking supplement	Swede/Bale	Baleage	Beet 80 days	Beet 60 days
	In-shed feed 500kg/cow + baleage as required			
Average Cover	2306	2443	2389	2398
Average Growth	73	74	70	75
Target rotation length	22	26	22	26
Last week act rotation (d)	22	27	22	26
Last week supp (kg DM/cow)	2.2	2.3	2.1	2.0
Average BCS	4.4	4.5	4.3	4.4
% of herd on priority feeding	8%	7%	10%	3%
Milk yield (L/cow)	23.6	25.7	23.5	24.5
Milk yield (kgMS/cow)	2.05	2.23	2.09	2.14
Nitrogen Cap kgN/ha/yr	180	50	180	50
% Nitrogen used (kgN/ha) YTD	32% (58kg)	44% (22kg)	32% (58kg)	42% (21kg)
Effluent N YTD	6	2	6	5
Profit/ha comp to Control	\$0	\$0	\$0	\$0
YTD supp (kg DM/cow)	327	209	284	248
YTD MS/cow	169	177	166	178
YTD MS/milk ha (YTD MS/farm ha)	508 (453)	441 (399)	498 (445)	437 (395)

Business Area	Current Status
Milk Production	Production has dropped off from peak but has stabilised for all herds. Some differences in milk composition emerging between herds.
Pasture & Feed	Continued focus on pasture quality with cows grazing the right pre-graze and identifying paddocks for baleage. Topping as required. Currently on grazing return intervals of 15-18 days as we drop paddocks from the top of the wedge for conservation. At this return interval and with maintenance K fertiliser having been applied we are closely monitoring magnesium levels to ensure we don't push cows into a grass tetany risk situation from a K to Mg imbalance in pastures.
Animals	Mating is continuing to go well. Second round of CiDRs went in 17 cows (5 were repeats from Round 1). Whole farm submission rate (SR) at end of week two was 71% versus 60% target. Additional iodine and copper being added to in-line dispenser in response to latest blood results
Environment	Continue to apply Round 3 of fertiliser for the Std farmlets. Round 3 for LI farmlets not due until early December
Wintering	All Fodder beet is now in the ground. Seven pasture paddocks are yet to be sown
People	Team continuing to pull together and show their ability for multi-tasking while other members cover mowing baleage when the contractor could not cut within the weather window that was available.
Research	Plantain trial is all set to be sown. Awesome turnout for the field visit to SDH by the joint NZ Grasslands, NZSAP and Agronomy society annual conference.

Milk Production

Principles of Milk Production management this week

Milk Production	Have dropped off peak but holding relatively steadily. LI FB herd has responded positively to changes in feed allocation.
Key Influences on Milk Production	Production changes most likely still being driven by pasture quality as it progresses through the reproductive phase and quality (energy & protein) declines. In-shed feeding continues to provide minerals and a high quality feed option, but looking to decrease this over the week. Continue to focus on quality to maintain production levels and minimize the decline.
Cow Management	18 cows on OAD for as have not cycled. Continuing to manage lighter BCS cows below 4 on OAD milking with priority in-shed feeding. X3 light BCS, high SCC cows on priority feeding only.

	Std brassica/baleage Pink	LI Baleage Blue	Std Fodder beet Green	LI Fodder beet Yellow
kg Milksolids per cow this week / (last week)	2.05 (2.07)	2.23 (2.22)	2.09 (2.16)	2.14 (2.18)
kg Milksolids per ha this year / (same time last year)	508 (453)	441 (399)	498 (445)	437 (395)
% Var kg Milksolids per ha Season per ha to date vs last season to date	12.2	7.4	16.8	12.3
No. of Cows needing preferential feeding (% herd)	18 (8)	10 (7)	22 (10)	4 (3)
Animal Health peculiarities	None	None	None	None

Milk Production

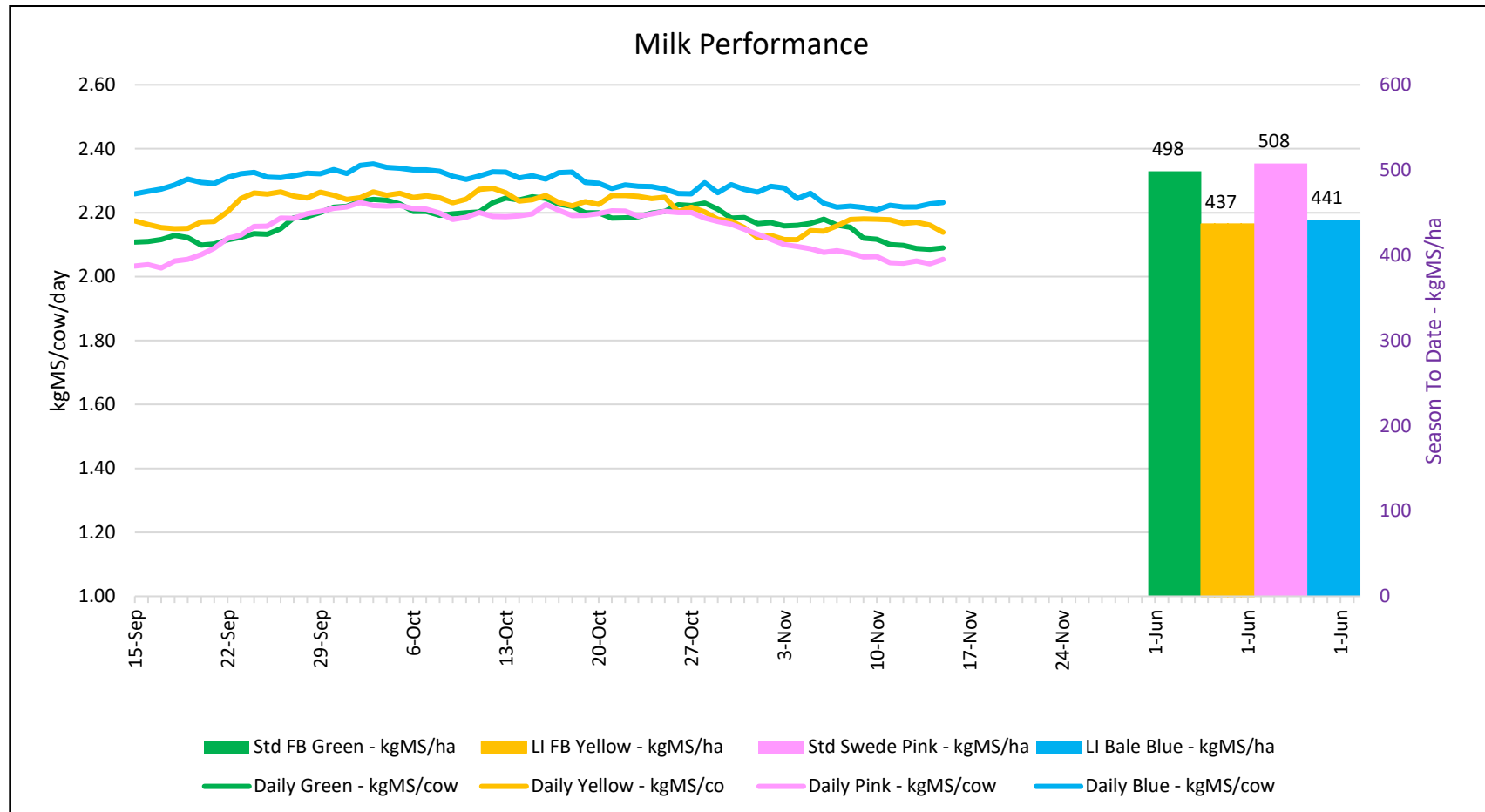


Figure 1: Milk solids production (/cow/day) plus cumulative season production (kg/ha)

Body condition score

As at 16 November 2022 – updated fortnightly

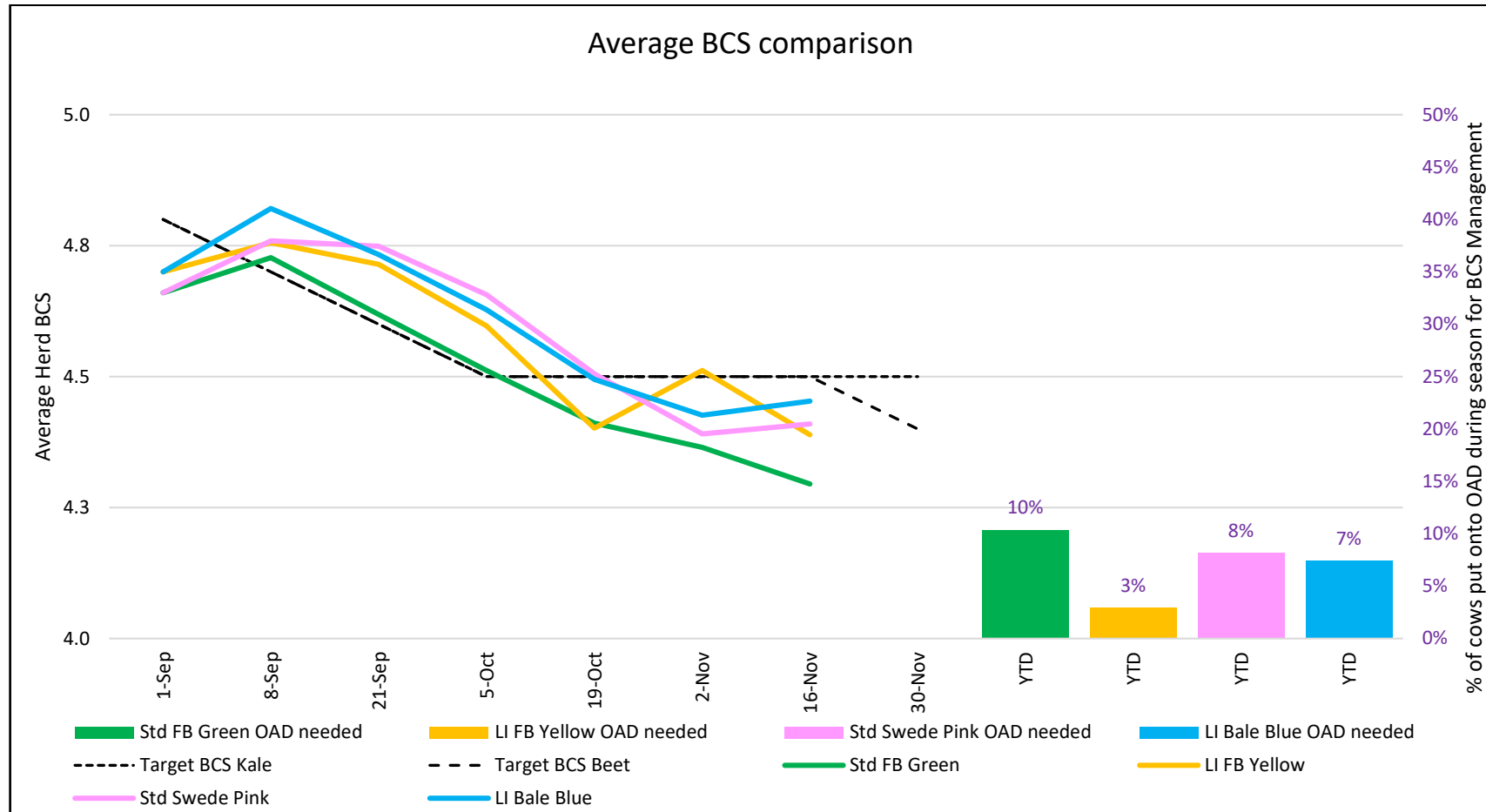


Figure 2: Fortnightly BCS trends and percentage of the herd requiring OAD milking season to date

Feed

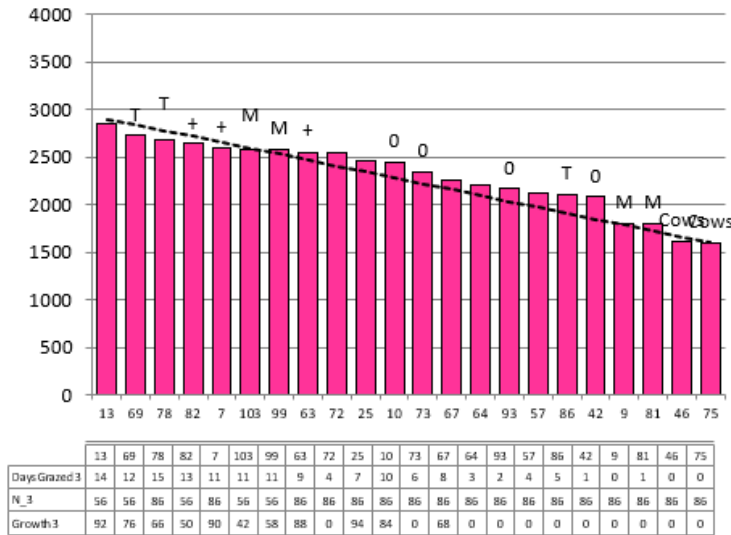
Principles of Feed management this week

Feed Quality	Remain focused on maximizing pasture quality via the growth rate management strategy below. Pasture ME currently ranging from 11.0 to 12.1 MJ/kg DM, crude protein from 13.6 to 20.5 % and NDF from 39.7 to 45.3%. Lignin results are high (7%) for paddocks with stemmy material in the base.
Growth Rate Management	Growing 30-50 kgDM/ha/day more than demand. The aggressive approach initiated three weeks ago to manage pasture quality by stepping over any paddocks greater than pre-graze target for baleage has been working well and has resulted in 267 bales being made. Have utilized up to 2.5 kg in-shed feed/cow/day at this stage to support this strategy. Have high quality silage or increasing in-shed feeding to fill gaps if we have been too aggressive and find ourselves in a pasture deficit.
Nitrogen Strategy	Std herds on 3 rd round of Nitrogen applications (25 kg N/ha), Second round applications (12.5 kg N/ha) to the LI farmlots have been completed. Third round applications (12.5 kg N/ha) due to begin early December

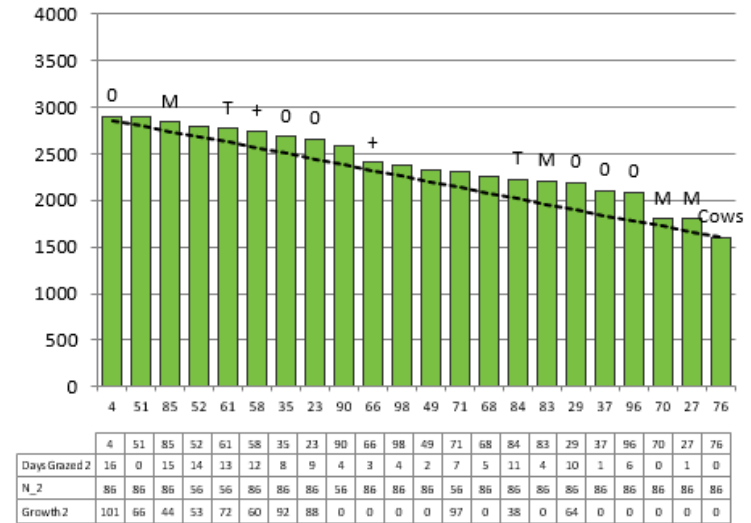
	Std brassica/baleage Pink	LI Baleage Blue	Std Fodder beet Green	LI Fodder beet Yellow
Quantity	Surplus	Surplus	Surplus	Surplus
Quality	Stem elongation	Stem elongation	Stem elongation	Stem elongation
Surplus Management	X 3 pdks conserved, x2 pdks ID to skip	X 4 pdks conserved	x5 pdks conserved	X 3 pdks conserved, x2 pdks ID to skip
Deficit Management - kgDM (diff from last week)	1.5 (-0.7)	1.5 (-0.8)	1.5 (-0.6)	1.5 (-0.5)
Target Rotation Length (days)	22	26	22	26

Feed

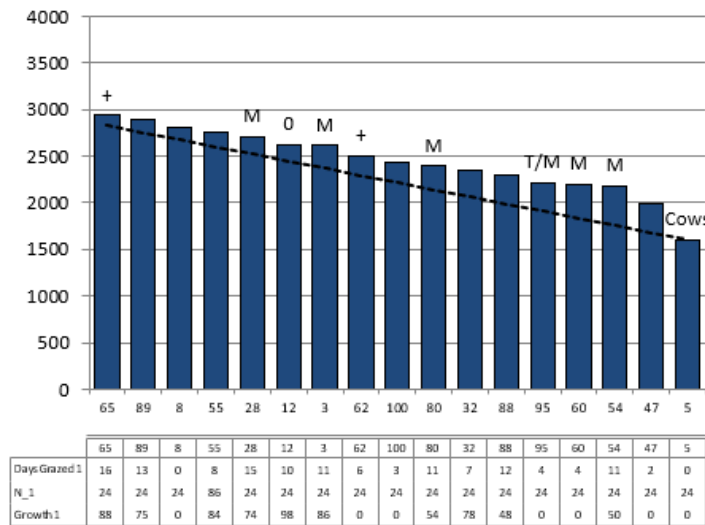
Standard Brassica/Baleage



Standard Fodder Beet



Lower Impact Baleage



Lower Impact Fodder Beet

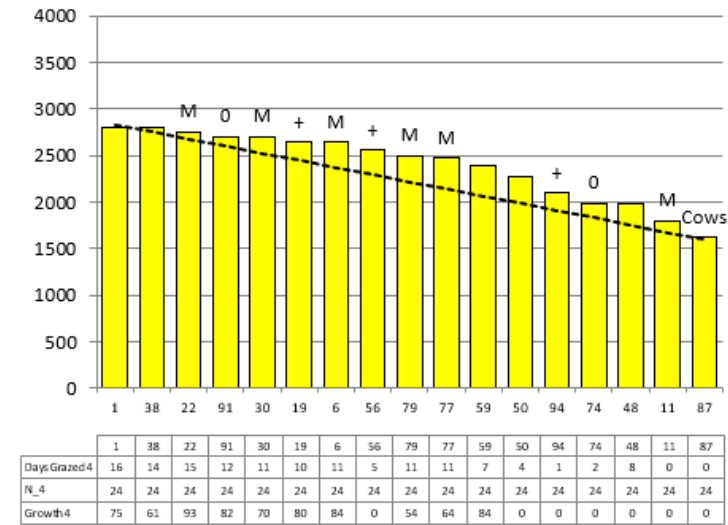


Figure 3: Feed Wedges as of 16th November 2022

Feed

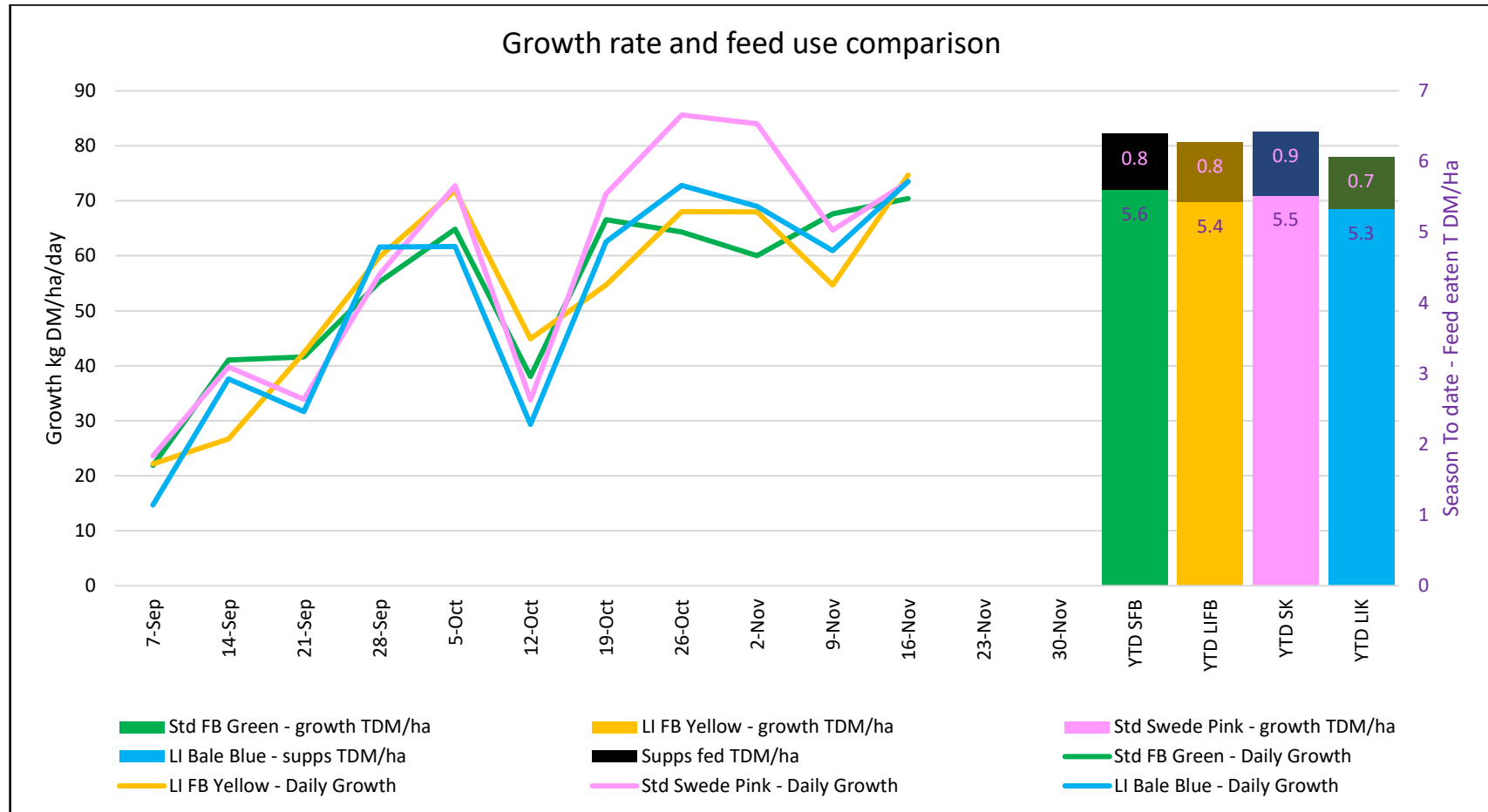


Figure 4: Weekly growth rate (kgDM/ha/d) & YTD feed use

Nitrogen

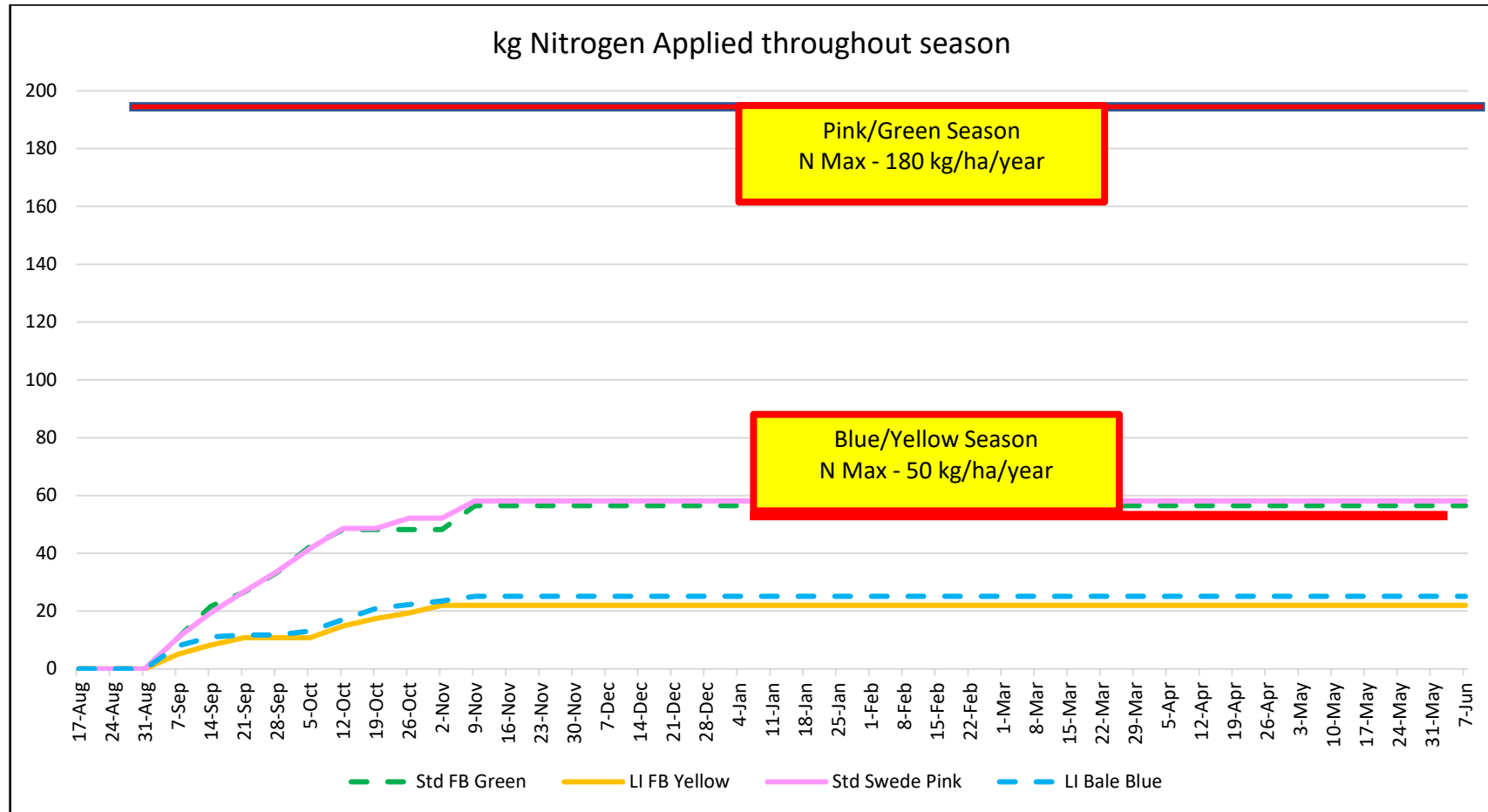


Figure 5: Cumulative nitrogen fertiliser applications (kg N/ha) for the 2022-23 season