SDH October growth rate and pasture quality summary (to 29 January 2024)

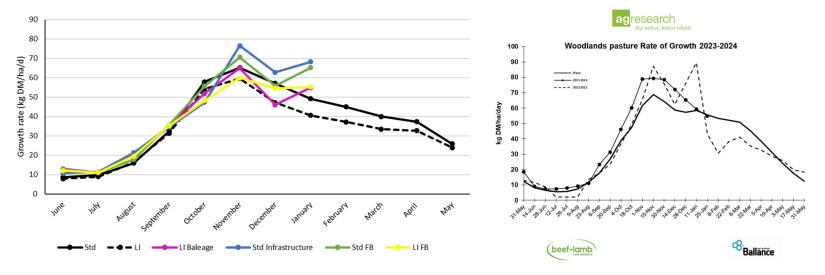
Growth has continued to exceed predictions through January with good rainfall and soil temperature creating ideal growing conditions. Both the Standard and LI farmlets have grown approximately 1 T DM/ha more compared with the four-year average. Relative to last season all farmlets are also ahead in growth. Weather conditions have enabled us to continue with N fertiliser applications to both farmlets with the LI farmlets having received 75% (37.5 kg N) of their annual 50 kg N allowance while the standard farmlets are finishing their 6th applications (130 kg N/ha season to date).

On the pasture quality front, the 7th round pastures in the Standard farmlets have increased in DM while the LI have decreased. ME has increased in the LI farmlets and remained stable in the Standard farmlet. Crude protein in the Standard farmlets has dropped while the LI farmlets have increased, most likely due to the strong clover in these paddocks. There has been an increase in non-structural carbohydrates and soluble sugars across both systems.

Differences between paddocks with and without plantain are small for most nutrients, although those with plantain are higher in DM and non-structural carbohydrates in round 7 but lower in crude protein.

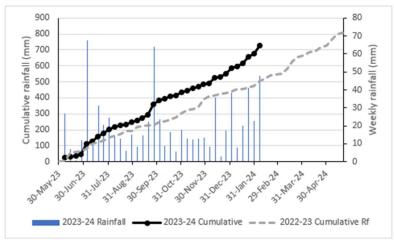
Table 1: Cumulative pasture growth compared with previous years.

		180-190 kg N						50 kg N					
	Days	Mean	2019-20	2020-21	2021-22	2022-23	2023-24	Mean	2019-20	2020-21	2021-22	2022-23	2023-24
June	30	9	6	12	10	7	12	9	7	9	11	5	13
July	31	10	12	7	12	10	11	9	10	8	9	9	11
August	31	17	13	19	19	13	20	17	14	19	18	15	20
September	30	30	29	31	31	39	35	29	26	32	30	37	35
October	31	57	56	50	65	61	51	53	50	50	58	59	50
November	30	65	69	67	59	66	74	59	62	61	53	63	63
December	31	53	53	57	50	69	59	43	48	44	37	60	50
January	31	55	50	73	43	31	67	44	44	52	37	30	55
February	28	49	51	57	41	31		40	42	41	36	29	
March	31	39	42	51	23	43		32	32	42	22	39	
April	30	33	42	33	24	51		28	33	32	20	46	
May	31	24	23	24	25	31		22	20	21	24	30	
STD (kg DM/ha)		9085	8790	9637	8827	9030	10055	8031	7996	8369	7729	8463	9082
Total (kg DM/ha)		13408	13479	14535	12264	13744		11655	11776	12419	10816	12793	
Diff to 4 yr Average							970						1051
Diff to 2022-23							1025						619



Average monthly pasture growth for the four SDH farmlets and the Woodlands long-term growth rate trial





Pasture quality results

Table 2: Pasture quality from standard and lower impact monitor paddocks for each grazing

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		DM (%)	ME (MJ/kg DM)	Crude protein (% DM)	NDF (% DM)	ADF (% DM)	Ash (%)	NSC (% DM)	Soluble Sugars (% DM)
Standard	1st round	17.6	12.2	20.0	39.8	20.6	9.9	26.9	11.4
180 kg N/ha	2nd round	18.3	12.3	23.0	39.2	20.9	10.7	23.7	10.7
	3rd round	15.8	12.0	23.4	43.3	21.7	10.6	18.7	8.1
	4th round	18.0	11.5	22.3	47.6	24.3	10.6	15.7	4.0
	5th round	19.8	11.3	22.8	48.3	24.8	10.9	14.2	4.0
	6th round	18.7	11.7	21.9	45.1	22.7	9.7	19.6	7.1
	7th round	19.8	11.7	20.6	45.7	22.4	9.4	20.6	7.1
Range		8.7-23.3	10.6-12.9	13.2-29.5	34.6-55.9	18.8-29.0	8.6-13.5	4.7-34.5	0.8-16.2
Lower Impact	1st round	17.1	12.2	20.8	39.3	20.0	10.4	25.8	11.0
50 kg N/ha	2nd round	16.4	12.1	22.8	39.3	20.8	11.3	23.5	12.4
	3rd round	16.1	12.1	20.6	40.2	21.1	10.5	25.5	11.4
	4th round	17.9	11.4	22.5	47.0	24.3	11.3	15.5	4.7
	5th round	19.4	11.3	20.7	46.9	24.7	11.2	17.5	5.0
	6th round	19.2	11.2	18.2	44.5	23.4	9.4	24.7	7.5
	7th round	17.7	11.5	21.8	42.8	22.8	10.4	21.6	8.4
Range		11.8-23.7	10.4-12.9	16.7-25.7	32.8-52.9	17.8-28.8	8.8-14.9	5.9-34.8	1.3-22.1

Table 3: Pasture quality from monitor paddocks with and without plantain for each grazing

		Da4 (o/)	ME	Constant and the (of Dag)	NDF (0/ DA4)	ADE (0/ DA4)	a - b /0/)	NCC (o/ DAM)	Soluble Sugars (%
		DM (%)	(MJ/kg DM)	Crude protein (% DM)	NDF (% DM)	ADF (% DM)	Ash (%)	NSC (% DM)	DM)
With Plantain	1st round	17.8	12.3	19.3	38.1	19.5	9.8	29.4	12.4
	2nd round	16.3	12.0	21.7	39.7	21.0	11.1	24.2	12.2
	3rd round	12.0	12.2	21.9	39.0	20.4	10.7	25.0	11.3
	4th round	18.9	11.2	17.0	45.1	24.7	11.1	23.8	8.0
	5th round	19.4	11.2	22.3	48.3	26.1	12.1	13.4	2.7
	6th round	17.7	11.6	21.0	43.9	22.7	9.7	22.0	7.0
	7th round	20.1	11.5	19.9	42.0	22.4	9.7	24.8	7.5
Range		8.7-23.0	10.6-12.7	13.2-25.6	32.8-51.6	17.8-29.0	8.6-14.9	9.5-34.5	2.3-22.1
No Plantain	1st round	17.0	12.1	21.2	40.6	20.8	10.3	24.2	10.4
	2nd round	18.2	12.4	23.8	38.9	20.7	10.9	23.1	11.0
	3rd round	17.6	12.0	21.8	42.5	21.7	10.5	21.7	9.5
	4th round	17.6	11.5	24.5	48.3	24.1	10.8	12.4	2.8
	5th round	19.7	11.4	21.3	47.1	24.0	10.5	17.4	5.7
	6th round	19.7	11.4	19.3	45.2	23.3	9.4	22.7	7.4
	7th round	18.9	11.7	21.7	47.0	22.6	9.7	17.9	7.5
Range		13.2-24.2	10.4-12.9	13.9-29.5	34.6-55.9	18.8-28.8	8.0-13.5	4.7-34.8	0.8-18.0