Amending clay and sand in Victoria's South-West

Location: Chrome Rd, Branxholme, Southern Grampians Victoria

Objectives:

- Assess the ameliorating properties of compost on two soil types in a side-by-side trial.
- Increase efficacy by combining compost and gypsum prior to spreading.

Background:

In a collaborative project with Elders Hamilton, this trial investigates the effect of compost on two different soil types in the same location at the same time. The two paddocks are neighbouring, each with newly renovated pastures. Management is high input and rotationally grazed with sheep. A greater understanding of which soil type benefits most from compost will be gained from this trial.

Crop Type: Permanent pastures

Start date: 13/06/2025

End date: 17/12/2025

Treatments:

	Clay	Sandy loam
Control	0	0
Treatment	AgriGro (7t/ha) Ozgyp (270kg/ha)	AgriGro (7t/ha)

AgriGro is a high-quality base compost designed for broad agricultural use. Ozgyp is an ultra fine granular gypsum.

Trial Measurements:

- Biomass and phenology – Monitored 2-3 times during the growing season.
- Soil tests – monitored

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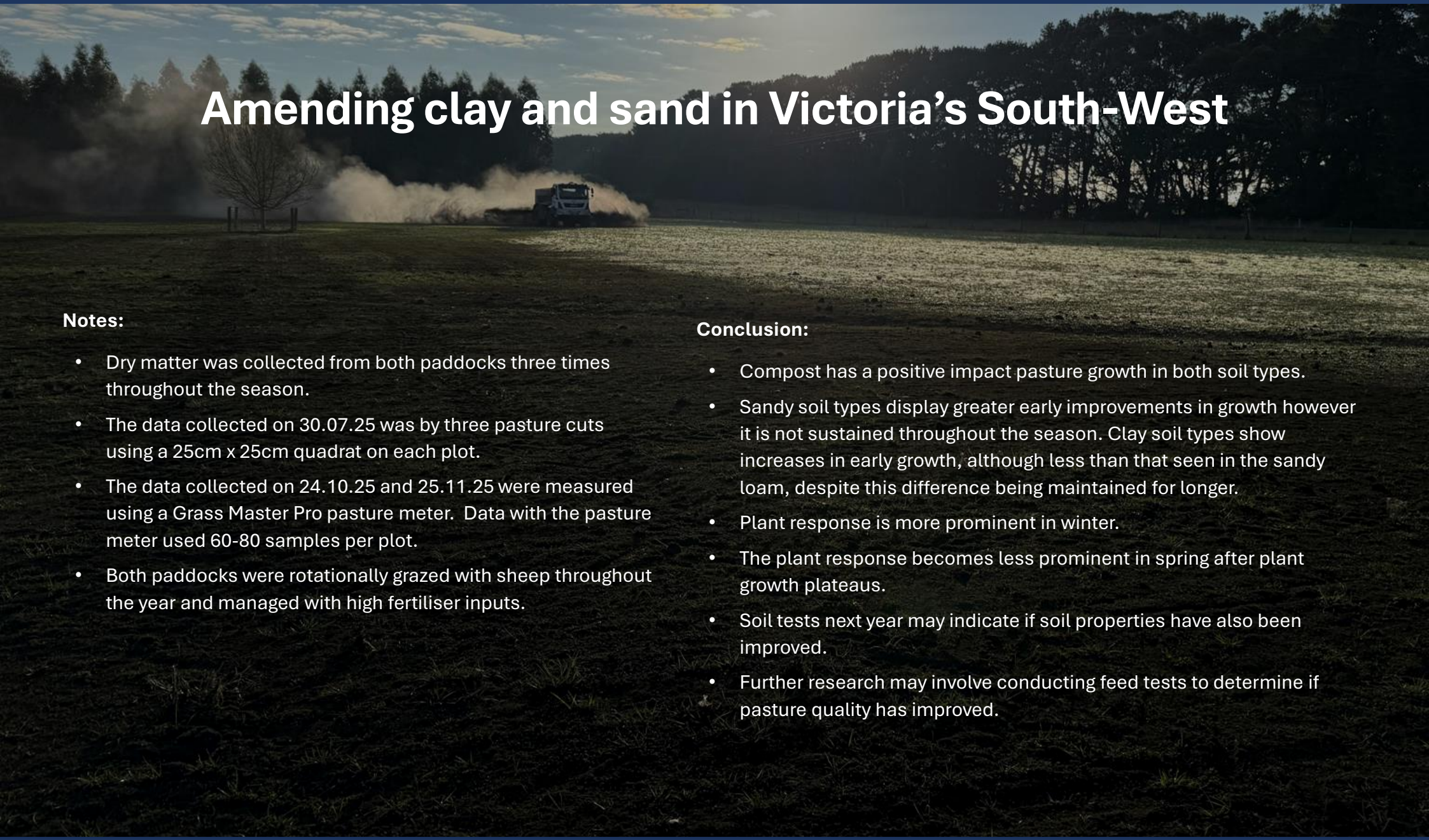

Notes:

- Dry matter was collected from both paddocks three times throughout the season.
- The data collected on 30.07.25 was by three pasture cuts using a 25cm x 25cm quadrat on each plot.
- The data collected on 24.10.25 and 25.11.25 were measured using a Grass Master Pro pasture meter. Data with the pasture meter used 60-80 samples per plot.
- Both paddocks were rotationally grazed with sheep throughout the year and managed with high fertiliser inputs.

Conclusion:

- Compost has a positive impact pasture growth in both soil types.
- Sandy soil types display greater early improvements in growth however it is not sustained throughout the season. Clay soil types show increases in early growth, although less than that seen in the sandy loam, despite this difference being maintained for longer.
- Plant response is more prominent in winter.
- The plant response becomes less prominent in spring after plant growth plateaus.
- Soil tests next year may indicate if soil properties have also been improved.
- Further research may involve conducting feed tests to determine if pasture quality has improved.

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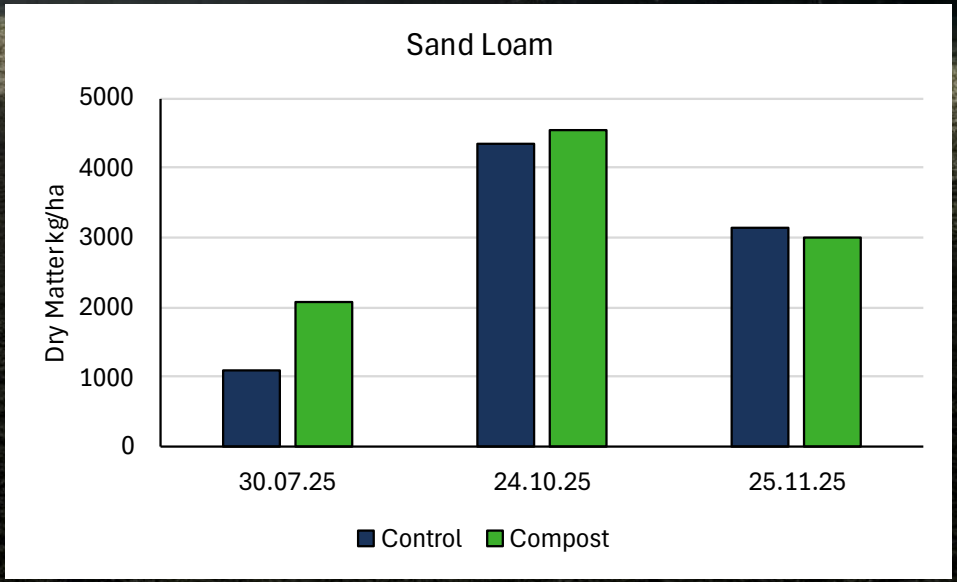
Sandy Loam Paddock Results:

- This paddock is an established perennial ryegrass pasture.
- Early season data show compost resulting in a 90% increase in dry matter. A small sample size of three samples per plot was used. A larger sample size will allow results to have greater accuracy.
- The difference becomes less prominent in October, with the compost dry matter being only 5% greater than the control.
- In November, the control treatment overtakes the compost by 4%.
- Without individual readings from every sample, statistical significance cannot be determined for the October and November data.



	30.07.25	24.10.25	25.11.25
Percentage change	+90%	+5%	-4%

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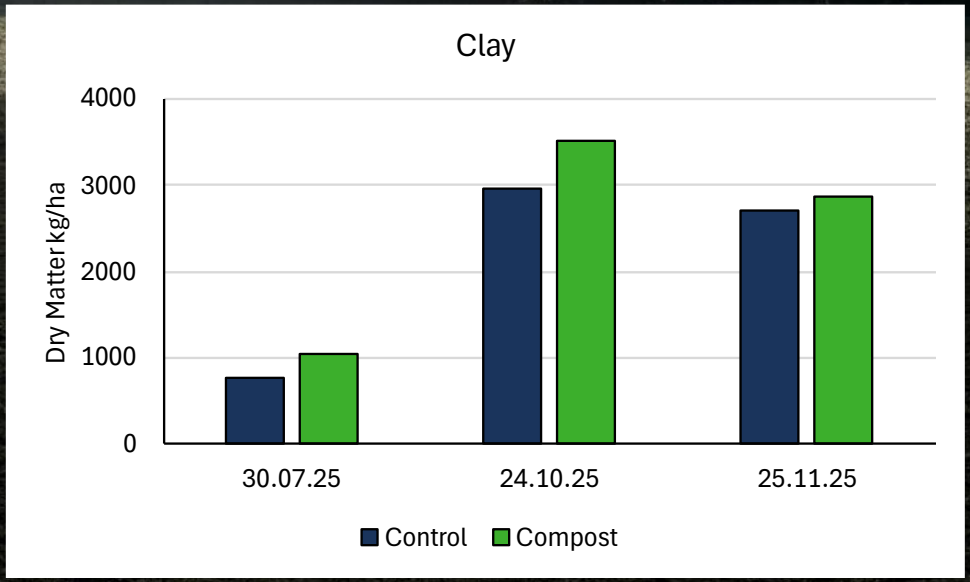
Clay Paddock Results:

- This pasture is a chicory, clover and perennial ryegrass sown this year.
- Compost was combined with Ozgyp prior to spreading.
- This paddock displays similar trends to the sandy loam paddock.
- Plant response is greater in earlier in the season. However, contrary to the sandy loam, spring growth had not yet plateaued in October. This allowed the compost treatment to maintain a 19% greater biomass compared to the control in October.
- By November, the compost is still outperforming control, although statistical significance cannot be determined.



	30.07.25	24.10.25	25.11.25
Percentage change	+38%	+19%	+6%