



MLA PDS Alternative Forage Crops - Pyle Raphno

Farm Host: Pyle Family, South Stirling

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Background

In 2020 Stirlings to Coast Farmers (SCF) began a project with Meat & Livestock Australia (MLA) looking at alternative forage crops for southern WA. SCF aim to compare alternate forage crops to traditional feed sources such as dry pastures and crop stubbles for nutritional value and the ability to put live weight gain (LWG) on lambs or weaner cattle. The Producer Demonstration Sites (PDS) project will run for three years (2020-22) and is currently in its second year. The project is measuring the benefits to livestock carrying capacity and livestock weight gains from crops like Pallaton Raphno, Sorghum, Millet, and long-season Canola.

Pyle site 2021 sowing

Following on from great results from their 2020 planted alternate forage crop, Tim and David Pyle, planted another 59ha of Pallaton Raphno. The 59ha was fertilised a couple of weeks before seeding, with 120kg of K-Till Extra. The Raphno was then planted on September 20th. A month later, the crop received a Diamondback Moth (DBM) spray of Affirm 150ml with wetter and then two weeks later 50L/ha of Flexi-N on November 9th. The control paddock is 30ha of canola stubble with regrowth and a reasonable pasture feed base coming through underneath. The pasture base is predominantly clover.



Measurements

Plant samples from the Raphno paddock and the control paddock were taken during the last week of November. These samples included biomass cuts, plant tissue and soil samples from both paddocks. Lambs will graze each paddock after being weighed on November 26th. The top 1580 lambs were put onto the Raphno paddock with an average weight of 41kg/head. The bottom 670 lambs, with an average 38.2kg/head, were put on the canola stubble. The Raphno will be grazed, with the first draft of lambs to be sold before Christmas. As the lambs are removed, they will be weighed to track and measure weight gain from each crop. Results will be available in our 2021 Trials Review Booklet.

Rainfall and moisture measurements

Under the Australian Government's Future Drought Fund, Stirlings to Coast Farmers have also recently installed a Metos digital rain gauge and an 80cm soil moisture probe at the Pyle Raphno site. The probe measures soil temperature and moisture levels in 8x 10cm increments and will be utilised to better understand the region's crop and soil water dynamics. The data generated from this station and other rainfall & climatic stations will be made publicly available next year when SCF releases its pasture forecasting and weather dashboard.

Table 1: Summary of the rainfall data from the station closest to the Pallaton Raphno paddock from 1 month before seeding to the end of November.

Period	Rainfall (mm)
20th August - 20th September	74.8
20th September - November 30th	117.0
Total rainfall	191.8

Outlook

David and Tim are confident there will be multiple opportunities to graze the Raphno paddock in 2022. Last season, their 45ha Raphno crop supported 1400 lambs from December 3, 2020 to January 4, 2021. After a month's break, another 700 lambs grazed the paddock from February to April 30, followed by 400 lambing ewes through May and June. The Raphno paddock then supported 2200 weaned lambs for six weeks from the start of September.



Australian Government



Future Drought Fund

