



# MLA Producer Demonstration Sites

Nathan Dovey, CEO, SCF

In 2020 SCF started a project with funding from Meat & Livestock Australia (MLA) looking at alternative forage crops for southern WA. The project will run for three years, and SCF aim to measure the benefits to livestock carrying capacity and livestock weight gains from crops like Pallaton Raphno, Sorghum, Millet and long-season Canola. The 'alternate' forage crops will be compared to traditional feed sources such as dry pastures and crop stubbles.

One of our 2020 demonstration sites is being hosted by the Pyle family at Manypeaks. Brothers Tim & David planted a 45ha paddock to new crop Pallaton Raphno on September 2nd after seeing a demonstration crop grown locally in 2018. The Raphno crop can potentially be grazed multiple times depending on summer rainfall, grazing pressure and pest management. Tim sprayed for diamond back moth (DBM) on November 2nd with Affirm and applied 100L/ha of Flexi-N a day later. Despite the insecticide application, there were still signs of damage from the DBM on December 3rd.

SCF researchers took biomass cuts of the Raphno paddock and the neighbouring ryegrass paddock that was cut for silage on October 15th. On December 7th, SCF collected plant tissue samples to test the nutritional value of the feed sources. The Raphno will be grazed until all leaf area has been removed. After a grazing event, a sub-sample of the lambs will be weighed to measure weight gain from each crop. It is hoped there will be multiple opportunities to graze the Raphno paddock in 2021, and SCF will also be measuring the benefits to the Pyle's mixed farming system.

"We have spent a lot on this crop when you consider the soil amelioration required to break up the Kikuyu pasture and the costs of the seed itself," said Tim. "When you calculate how many tonnes of pellets we could have bought for the same money, there is some pressure on this crop to deliver benefits to our enterprise."

A glance at the closest SCF rain gauge, highlights how much rain has been received since early August.

Table 1: Summary of the rainfall since the 3rd of August, 2020 at John & Christine Howard's GoannaAg digital rain gauge located at the Drawbin and Pfeiffer road T-junction.

Period	Rainfall (mm)
The 3rd of August to the 2nd of September	129.8
The 2nd of September to the 1st of December	149.6
<b>Total rainfall</b>	<b>279.4</b>

The rainfall received since early August will provide an excellent test of Pallaton Raphno's ability to grow livestock feed in the Manypeaks region. The control paddock is a ryegrass pasture that has re-shot since being cut for silage on October 15th. Biomass cuts and plant nutritional analysis will be carried out on both paddocks to make comparisons between feed quality as well as quantity. We look forward to sharing the full results from this demonstration site in the 2020 SCF Annual trials review booklet.



Figure 1: Drone image of the Pyle's Pallaton Raphno crop on December 3rd, 2020 before 1500 lambs were put into the 45ha paddock. The cross-bred lambs had an average weight of 42.5kg when they entered the paddock.



Figure 2: Tim Pyle closely inspecting his Pallaton Raphno crop sown on September 2nd, 2020. Tim is looking forward to calculating the lamb's growth rate compared to the paddock of ryegrass regrowth next door, that was cut for silage on October 15th.