

Monitor the digestibility of your summer pastures for more profitable supplementary feeding of livestock

Producers often ask: ‘What is the pasture digestibility around my area doing at the moment?’ The simple answer is that it is highly variable and depends on many factors, such that using an average or assumed value to calculate feed budgets could potentially cost money. If we work to an average, there can be significant fiscal differences in what you are spending.

The digestibility of pasture usually declines by approximate 5 per cent each month (without rain), however, there is variation caused by:

1. The type of pasture; for example a ryegrass-dominant pasture compared with a silver grass dominant pasture.
2. Stage of maturity and composition of the pasture sample submitted.
3. The amount of rain that has fallen on the pasture prior to sampling as rain decreases digestibility.
4. The districts the samples have come from, as variations in the stage and conditions of the growing season will influence the quality.
5. The amount of clover or clover burr present in the sample.
6. The amount of green material (if any) in the sample.

I have monitored (and tested) different paddocks on the same property over the course of summer (Nov-Apr) and found variation in digestibility across the farm, which makes working on averages for your farm difficult. It is not cost effective to test every paddock on the farm, however, you should identify ‘important’ paddocks such as those where weaners will be run or paddocks where the maiden ewes will be joined. This enables you to accurately calculate supplementary feeding rates and work out your supplementary feed budget for summer and autumn.

The following table shows the average digestibilities based on four samples taken from each of four different paddocks on the one farm on the same day.

	Paddock 1	Paddock 2	Paddock 3	Paddock 4
DDM (%)	52.1	46.8	43.4	48.5

In the following example, I work through how much supplementary feed livestock will need when grazing a summer pasture.

To set some benchmarks, a dry pasture that has an available mass of 1500 kg/ha dry matter, a digestibility of 45 per cent and digestible energy content of 6 MJ/kg, the intake of a 60 kg ewe grazing this pasture will be approximately 6 MJ of metabolisable energy (ME) per day.

If this ewe was found to be carrying a single lamb when scanned at 70 days, her energy requirement will be approximately 10.5 MJ ME/day, which leaves her 4.5 MJ ME short each day if she is only grazing the above pasture. The inclusion of barley in her diet, which has an average ME content of 12.3 MJ/kg, will make up the deficit if she eats approximately 2.6 kg of barley each week.

If for example, you tested your pasture and its digestibility was found to be 52 per cent, then ME deficit of a single-bearing, 60 kg ewe reduces to approx. 2.7 MJ ME/day, which equates to approximately 1.5 kg of barley per head per week, saving you around 1.1 kg per head per week.

If you are running 2,000 breeding ewes, this represents a saving in supplementary feed of around 2,220 kg or 2.2 tonne per week. Based on an average barley price of \$250/t, this equates to a weekly saving of \$550.00, minus the cost of your test (\$66.00), which equals to a saving of \$480.00 for the first week of feeding and \$550 for each week thereafter per week. Not a bad investment!

There is a strong argument in favour of testing your pasture digestibility over summer. Consider starting in November or December and perhaps test two or three of your paddocks running weaners or joined ewes.

In a 'normal' summer with little or no rain, it is a fair assumption to work on a decline in digestibility of 5 per cent per month. So if your pasture tested 60 per cent digestibility in December, you would expect it to be, without any rain, 55 per cent in January.

You need to have a starting point to work from, and if you receive summer rain, you may need to test your pasture quality more frequently.

Remember, once pasture digestibility drops below 55 per cent, it is difficult (in most cases) to maintain the weight and condition of sheep without supplementary feeding!

Talk to Dynamic AG to discuss feeding options for livestock over summer and to develop cost effective feeding strategies on (03) 5571 1760.

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