AGRONOMY NEWS

SPRING 2017

What's New at Browns

Our sites are buzzing with activity as spring kicks off. We welcome a new General Manager, Conal Wills, who has hit the ground running. Koo Wee Rup has an interim depot manager, Chris Bourke, who will help us out over the busy spring season. Leongatha has a new Logistics Coordinator, Cameron Shanks, who brings farming and logistics experience to the role.

At Brown's we are taking a focus on bringing you relevant and local data on fertiliser applications. We are currently in the initial stages of two trails based around nitrogen application rate and potassium uptake into plants. Stay tuned for more information!



Understanding soil temperature

Ryegrass growth rates are highest when soil temperatures are around 18°C. Although rye grass will continue to grow at soil temperatures as low as 4°C growth rates will decrease dramatically.

Soil temperature plays a large role in seed germination and therefore sowing times.

Brassica - A High Value Feed for Summer

With digestibility of 80-88%, crude protein (CP) 12-16% and metabolisable energy (ME) levels of 12-13 MJ/kg DM, forage brassica crops can be a great source of quality feed during summer at a time when both quality and quantity of pasture can be low. They can also be an important break crop for pests and diseases of pastures and allow for control of perennial weeds. Forage rape, turnips and leafy turnip are ideal varieties for summer. It is important to have a think about when you are looking to have crop ready to graze to consider which species and variety will suit you the best. Talk to your local agronomist to discuss your unique requirements.

Planning summer feed in advance and working out what will work best for your grazing system will allow you to choose the best brassica for your farm. It is best to start with the time of year you will have the biggest feed gap and work backwards from this date to give the brassica adequate time to be planted and grow. Look to choose an area of the farm that is poor producing such as areas dominated in bent grass and low fertility species. Consider the nutrients required to maximise yield of the brassica crop and apply at planting.

The likelihood of achieving multiple grazings from leafy turnip or forage rape improve with the possibility of an early spring this year and with soil temperatures now on the rise. The planting window for rapes is now open, with mid-September a good target for planting leafy turnips.

Talk to your local agronomist for tailored advice and a fertiliser plan when considering summer crops.



Pest Profile: Red legged earth mite (Halotydeus destructor)

As the name suggests Red legged earth mite (RLEM) have been quite destructive this Autumn, with many people losing entire new ryegrass paddocks, or suffering severe damage. Traditionally it is known that RLEM affect clovers, but did you know they also affect new ryegrass, oats and other cereals? We have noticed particular issues in paddocks that have been direct drilled into existing pasture, or there has not been a complete kill on existing pasture. It is recommended to have at least 1 week of bare soil prior to seeding, especially when you are late to seed.

What am I looking for? RLEM are about 1mm long and 0.6mm wide, with 8 orange legs. You can see them on sunny days on the underside of capeweed or other broadleaf plants. On overcast days you can often see them on the soil surface or plant leaves. They lacerate plant tissue and suck the sap. You will see whitening and death of leaf tissue, which can look like frost damage or tip burn.

Life-cycle: RLEM hatch in autumn after 2 weeks of cooler weather and rainfall (below 20°C and above 10mm rainfall). This is often when we have made our minds up to start seeding. The females lay up to 100 tiny orange eggs on the underside of leaves in winter, taking 8-10 days to hatch. At the end of Spring once conditions are a lot warmer, over-Summering eggs are produced awaiting suitable conditions in Autumn.

What should I do? Sow systemic insecticide-coated seed, which will provide up to 4 weeks protection. We recommend daily monitoring from a minimum of 3 weeks post-sowing. The first autumn spray should be applied within 3 weeks of the first appearance of mites, before adults lay eggs. Look to follow the TIMERITE program in Spring. There is a date (16th October for most of us) where the majority of the mite population is in adult form, thus maximising the effectiveness of population control using spray insecticides. This can form part of the planning stage for pastures you are looking to re-sow next autumn. See: https://www.wool.com/woolgrower-tools/timerite/



RLEM damage on clover

RLEM infestation and damage on ryegrass causing moisture stress

Spring Application of Potassium

Potassium (K) is one of the major nutrients required in plants, and due to increased growth rates, a plant utilises more potassium in the spring. Potassium is required for photosynthesis, protein synthesis and water regulation in plants. When deficient in the soil, leaves appear stunted with chlorotic edges, first being evident in older leaves. Plants become less tolerant to drought conditions, pest burdens and disease. Potassium is a highly soluble nutrient in the soil and therefore is prone to leaching, particularly on sandy soils in high rainfall areas. Hay and silage remove large quantities of potassium, which is often redistributed unevenly on the farm when fed out. 1 tonne of pasture hay removes 17kg of potassium and 1 tonne of pasture silage removes 27kg of potassium. Therefore the average hay/silage crop could remove 250kg/ha Super Potash 1/1 that would be required to replenish nutrient in soil after cutting. When applying potassium in spring, be aware that plants can take up more than required. Luxury uptake of potassium can block the absorption of magnesium in the rumen, increasing the risk of grass tetany in animals. To avoid, ensure potassium application is based on soil requirements and supplemented with magnesium if required.

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