

## Spring Production Bulletin - Grazing Canola Crops

### MAXIMISING THE GRAZING BENEFIT

Canola crops do contain reasonable levels of Energy & Protein for Sheep & Cattle. For that reason they make an attractive grazing option when the season begins to tighten up. The problem is Canola crops do present some significant risks to the health and potential performance of animals grazing them.

Those risks include problems like Nitrate toxicity, Scours, Bloat, PEM & Grass Tetany, all of which in one way or another, are caused by poor nutrient balance in the plants - A problem often made worse by moisture stress.

### Canola crops - The main challenges to grazing animals

#### Nitrogen, Nitrates & Nitrites

Brassicas tend to have high concentrations of Non Protein Nitrogen (NPN), including compounds like Ammonia, Nitrates & Nitrites. Like most plants, the concentrations of Non Protein Nitrogen (NPN) in Brassica increases substantially under moisture or frost stress.

Nitrites are highly toxic. Their effect is to significantly reduce the Oxygen carrying capacity of red blood cells. In some cases this problem becomes so severe that it causes animals to effectively suffocate to death. And, even at non-lethal levels can place significant pressure on the respiratory system causing reduced immunity and loss of production.

Increased NPN levels in plants also mean elevated Ammonia concentrations in both the Rumen and bloodstream of the animals grazing them. In Sheep & Cattle excess Ammonia significantly reduces the pool of energy available for growth. It also interferes with those Liver processing systems that are key to delivering large amounts of high quality energy to cells.

#### Scours, PEM, & Grass Tetany

Apart from high dietary NPN's, Canola crops often contain relatively high amounts of Potassium. They also tend to be quite deficient in those rapidly fermentable carbohydrates required to drive optimum rumen fermentation. This combination of factors often leads to Magnesium deficiency, markedly increasing the risks of Grass Tetany and Bloat.

Canola is often high in Sulphur and that (coupled with low Copper) can contribute to the development of Scours. High NPN's are also associated with the development of Scours on green feeds.

High Sulphur levels can induce a deficiency of certain B group Vitamins. Polioencephalomalacia (or P.E.M.) is a disease caused by a B group Vitamin deficiency. So, when grazing Canola keep a close eye out for symptoms of P.E.M including muscle twitching, a high-stepping gait, blindness and head pressing, lying down, seizures, leg paddling and drawing the head back stiffly so it is pressed against the spine.

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### **Photosensitisation**

Canola can also cause grazing animals to develop sunburn like symptoms on the face, ears and udder. This problem results from damage to the Liver allowing waste compounds to build up in the bloodstream, eventually causing the skin to become much more sensitive to sunlight. Keep a close eye out for signs like reddened or "sunburnt" ears, swollen eyes, Dermatitis / peeling skin and avoidance of sunlight. The key to minimising the risk of Photosensitisation is to ensure healthy rumen fermentation and liver function are maintained.

### **Beating the challenges for safer and more profitable grazing**

Start by using the natural ability of Rumen microbes to "trap" NPN's and other toxins before they reach concentrations high enough to cause problems in animals. To do that, animals must have continuous access to a rich source of rapidly fermentable carbohydrates whilst they're grazing. Adding high potency sources of Magnesium and B Group Vitamins to the diet is also key to minimizing the risks to health and productivity caused by the challenges from Potassium, NPN's, Sulphur and other toxins present in Canola crops.

### **A simple recipe for success**

Start with A.I.M Grazemax Ultra powder lick. It's unique combination of rapidly fermentable carbohydrates, Magnesium, B group Vitamins and more will be critical to delivering a trouble free and productive outcome from grazing Canola.

Then add the following ingredients:

1. Imprint animals on to Grazemax Ultra well in advance of introducing them to the feed. Ideally treatment with the lick should begin at least 3-4 days prior to introduction to crop to ensure animals have reached full intake.
2. Use a bit of hay or roughage for the first 3-5 days of introduction to crop to help mitigate the effects of any abrupt dietary changes.
3. Make sure animals are treated with Clostridial Vaccine, B12 & ADE at least 14 days prior to induction onto the Canola forage

Call A.I.M. on 1800 106 006 to arrange to meet with one of our technical Sales Specialists, or to find out more about our products and the remarkable success they deliver for our customers head to [www.animalinnovations.com.au](http://www.animalinnovations.com.au)

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