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Strategic versus Tactical Drenching



With an increase in sheep numbers throughout the Mallee and for some growers, a return from a long absence from running a livestock enterprise, the link below to an article on the WormBoss website offers some timely advice for summer drenching. The article answers the questions:

- What are strategic and tactical drenches?
- Principles for choosing and using drenches.
- When are strategic drenches given?
- When should tactical/therapeutic drenches be given?

To read the full article follow this weblink:

<http://www.wormboss.com.au/tests-tools/management-tools/strategic-and-tactical-drenching.php#summer>

Why is Summer Weed Control so Important?



The below link is to an article compiled by The Independent Consultants Australia Network's John Cameron. As we are currently expecting significant rainfall throughout the Mallee this is a timely reminder of why summer weed control is so important.

He says the research compiled shows that summer weed control is both a water and nitrogen story.

“The weeds you haven't controlled in the summer fallow tie up and rob a lot of the plant available nitrogen that would otherwise have been available to the crop.”

“It's an absolute 'no-brainer' that if you have significant summer rainfall, controlling weeds is one of the best investments you can make on the farm,”

“With in-crop season rainfall, if you average 20 kilograms of grain per millimetre PAW you're doing very well. However, a soil type that is capable of storing water deeper in the profile could provide in-crop season rainfall equivalent to 60kg grain/mm PAW. Under this situation, an extra 10mm of water could be worth an extra 0.6t/ha of grain in the bin.”

<http://www.grdc.com.au/GC109-SummerMoisture>

Forget the Silly Season, it's Botulism Season

An update on botulism appeared in a recent December DEPI newsletter. Below is an edited extract as a reminder about what botulism in cattle is, what causes it, and some key points.

The botulism season is upon us again. Botulism is a paralytic disease caused by several different strains of the bacterium *Clostridium botulinum*. Spores of *C. botulinum* are naturally abundant in soil and water, and are resistant to temperature extremes and desiccation (resulting in lengthy survival). They can also be found in intestinal tracts of live, healthy animals such as horses, cattle, poultry and fish.

When environmental conditions are right (e.g. a combination of warm temperatures, high pH levels, oxygen-deprivation and suitable nutrients such as decaying plant or animal material), *C. botulinum* spores germinate and enter a vegetative growth stage, producing the botulinum neurotoxin. Animals can contract botulism if they ingest contaminated materials.

What might you see in affected animals?

The botulism neurotoxin causes characteristic paralysis leading to progressive muscle weakness and eventually respiratory arrest. The amount of toxin ingested determines the onset of clinical signs (high doses = rapid onset of 12-24 hours; low doses = onset of 7-20 days).

- Livestock appear uncoordinated, may collapse.
- Inability to walk (livestock may stumble, display knuckling when walking).
- Paralysis of inner eyelid and tongue, salivation.
- Generally in good body condition (due to rapid progression of disease), however may appear emaciated in the case of chronic poisoning.



Cow displaying tongue paralysis (source: Botulism Agnote, Northern Territory Government).

There are seven different strains of *C. botulinum*, A through G. Cattle are generally affected by type C or D, and may be exposed through bone chewing (seen in dry conditions when animals are deficient in protein and phosphorous), contaminated feed (e.g. by carcasses) or spoiled feed (e.g. decaying vegetable matter). Diagnosis is based on clinical signs and detection of toxin in suspect material or carcasses of affected animals.

Disease in cattle can be prevented by vaccination (available against type C and D toxin) and is highly recommended for all feedlots, dairies and beef farms that feed rations including hay and silage.

If you require more info on the Zoetis Botulism vaccines, please don't hesitate to contact your local North West Ag branch.