

Pestivirus: affects reproduction, conception and gestation

Many of the clinical effects and reproductive losses due to Pestivirus infection occur when heifers or cows are exposed to the virus during pregnancy, but exposure to the virus around the time of joining or AI may also reduce conception rates. When the dam is infected during pregnancy, the virus can cross the placenta and infect the developing foetus.

Depending on the stage of pregnancy, this infection of the foetus may result in early foetal loss (presenting as return to service), abortion or stillbirth. If the developing foetus survives to the end of pregnancy, the calf may be born with severe birth defects, die soon after birth or may be 'persistently infected' with the virus.

These reproductive effects present obvious complications to an AI or ET program. These can include increased costs associated with additional synchrony programs, lost genetic gain through loss of a foetus or poor conception rates as well as increased labor costs and time spent re-synchronising females.

Vaccination to prevent infection

A professionally tailored management and vaccination program can significantly improve the success of an AI or ET program. Pfizer Animal Health manufacture a vaccine called Pestigard that can help reduce reproductive losses due to Pestivirus.

Before starting a vaccination program, it is recommended that the Pestivirus status of a herd is determined. This can be organised through a veterinarian and involves blood testing different management groups to identify

whether a breeding herd has been infected in the past, whether an active infection is present in the herd, or if the herd has not yet been exposed to the disease. A vaccination program can then be designed specifically for your herd's requirements.

For more information on Pestivirus, testing procedures and vaccination programs please contact **Pursehouse Rural**.



Typical running nose of infected cow

Slugs in canola

With wheat prices being extremely low there has been increased areas planted to pulse and oilseed crops this year. The Canola plantings are well above average with Farmers taking the opportunity to get another break crop into their rotation system. The 2010 season has started well with most districts receiving good summer-autumn rainfall, filling soil profiles allowing for a big winter sowing. The majority of Canola has been sown so now is the time to be on the look out for slugs. Slugs have not been a wide issue in the past few growing seasons with unfavorable conditions. This year the favorable conditions mean Slugs could potentially be a problem. No-till farming is also favorable for slugs with the extra stored moisture helping slugs survive throughout the summer.

Ideal conditions for slugs include:

- Dense stubble paddocks
- Wet summers
- Damp conditions
- Sown crops close to pasture paddocks
- Wet areas, cracking clays

What to look for:

- Monitor canola seedlings and rosettes 3-4 weeks after sowing for following signs
- Chewed cotyledons and stems
- Bare patches
- Trails, shiny residue during the day
- Slugs feed at night, Look for slugs late in the evening
- Look under damp stubble for slugs

Control: Combined strategies including burning, cultivation, weed control and baiting are the most effective control measures. Good canola stands can compensate from some moderate slug damage, Recommendations are that baiting be commenced at first sign of crop damage. Baiting is only one of the methods of controlling slug populations and can reduce populations by 50% and should be used in conjunction with the above techniques for a whole pest management program. **For more information contact your local Pursehouse Rural agronomist.**



Slater bugs in emerging winter crops

Large populations of slater bugs have been discovered in winter cereals west of Narrabri in the past few weeks, this has prompted concern on their likely impact on plant populations in areas of heightened activity. Having seen the ground literally 'moving', as a result of Slater's recently, concern has increased significantly. There appears to be little information on the effects that Slater bugs have on emerging winter cereals. From the little information available this is what we have learnt.

- The species of slater bugs is referred to as *Australiodillo bifrons*
- Slaters are crustaceans, not insects as most people think
- Slaters have a hard exoskeleton meaning they are difficult to control
- Slater size differs between sexes – adult males can be as long as 9mm.
- Preferred habitat is generally wet, swampy areas.
- Prolonged exposure to warm dry conditions will increase mortality
- Damage is generally most evident on the leaf – after scratching a area high population area the slaters appear to chew the top off the emerging cereal.



Slater damage in cereals. Image by Vic French



Native slater *Australiodillo bifrons*. Image by A. Tsitsilas

Due to the fact that Slater's are crustaceans and that little is known about them, control options are minimal. It has only been the last few seasons that there has been sighting of large populations that more questions are being asked on what can be done to minimise damage. There are only a few options of registered control. These are, using methicarb or iron EDTA. Both of these options appear to be expensive and control is questionable. Looking at what is registered on Slater's in the home garden is a different matter. I have noticed that there are various granular lawn insecticides that have activity on Slater's. However, the same active ingredient is not registered in cereals. The question has been asked that maybe some research needs to be done using a similar product in the liquid form. At this stage, crops where there are large numbers of Slater's should be monitored closely. Speak to your local Pursehouse agronomist for further control options.