

## READER'S

## REMINDERS:

**Customer Meeting**  
**Feb. 12, 2015 9am**

While at Farm Tech 2015, I attended a session about root rots of pulse crops. It was very interesting and with the number of pea acres growing next year, I thought this might be a good topic to write about. Root rots affect the below ground portions of the plant, which in turn results in a poor performing pulse crop. The diseases are soil borne and will affect the plant at any stage of its lifecycle and once your plant has been affected, there is no control measure like a fungicide application to help with the issue. Being able to identify the disease will help, as planning for prevention is your only option right now.

Look for poor emergence, stunting, yellowing of the above ground tissue, reduced root system which can also appear brown. Nodules are often not that bright salmon colour that we like to see, but are pale in colour. The disease typically will occur in patches. If you see these patches go and dig up and clean off the roots with some water so you can try and identify what you are looking at. The problem is that pathogens associated with root rots sometimes appear as a complex, as more than one pathogen might be present, which will make identification difficult.

There are many root rot pathogens. Many fusarium species can cause issues. To identify fusarium, you need to cut the roots of the pea plant open. There will be a red discolouration of the vascular tissue below the soil line. Aphanomyces and pythium root rots belong to a group of fungal-like root pathogens that are referred to as "water moulds". They like, and are adapted to, wet areas of the field and will attack there. Pythium can be controlled by a seed treatment, but the aphanomyces has no effective seed treatments that will work. With the longevity of the pores in the soil and no control measure, aphanomyces is the most serious pathogen that we are dealing with today.



Caramel coloured roots are a key symptom of aphanomyces root rot. Left: Diseased plants, Right: Healthy plants. SOURCE: CROP DEVELOPMENT CENTRE

## ROOT ROT

By Colette Thurston

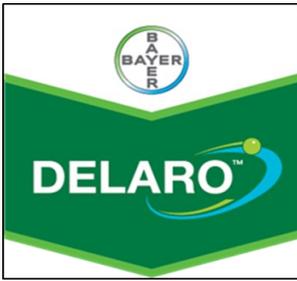


Red discolouration from fusarium root rot. SOURCE: ALBERTA AGRICULTURE AND RURAL DEVELOPMENT

Factors that lead to these diseases developing in our fields are as follows:

- ◇ **Wet Conditions:** Being too wet causes stress to the plants and reduces rhizobial activity. Root rots need water to germinate and infect roots.
- ◇ **Cool Temperatures:** Slow plant growth does not help to promote plant growth.
- ◇ **Shortened Rotations:** This will increase the level of the pathogen in the soil.
- ◇ **Heavy Textured Soils:** These soils are more prone to waterlogging and compaction which will further develop the disease.

What do we need to do to help prevent getting these diseases in our fields? Choose the right field. If you know that you have root rot issues on a field, follow a good rotation of being out of peas for 4 to 6 years. Soil testing is key and make sure to apply nutrients as needed. Plant good quality seed and apply a seed treatment if you have seed borne diseases or if you are planting in cool soils. Use the appropriate inoculant and apply it correctly. If you have aphanomyces, seeding peas might not be a good choice. Looking into something like faba beans, which are not affected by aphanomyces, may be a better option. Seed into warm soils. The faster the pea gets out of the ground, the more vigorous that seedling will be! Make sure to scout throughout the season, both above and below the ground and follow label directions with herbicides and fungicides. If you do think you have an issue, get one of our agronomists to come out and have a look. Sending plants away for testing is always an option to see what is going on in your field. Planning is a good way to prevent issues in season!



## PRODUCT PROFILE

By Calvin Ireland

### Delaro Pulse Fungicide (G 3 & I1)

Bayer's first pulse fungicide has hit the market!

- ◇ Multi-mode of action for long lasting protection against all major pulse diseases.
- ◇ All in one product that controls:
  - Mycosphaerella blight
  - Aschochyta blight
  - White mould (sclerotinia)
  - Grey mould (botrytis)
- ◇ Maintains crop standability and increases yield potential.

#### ASCOCHYTA CONTROL IN LENTILS



UNTREATED

DELARO 355 mL/ac.

Delaro applied at early stages of disease development provides long-lasting control of ascochyta, resulting in higher yields

## Customer Meeting

February's customer meeting will be held on Thursday, February 12, 2015 at 9:00am in the Club Room at the Vermilion Regional Centre. This month's speakers will be from insurance provider, Global Ag Risk Solutions, and Decisive Farming, which provides variable rate services.

If you are planning to attend the meeting please call the office at 853 -6565 by Wednesday, February 11, 2015. We look forward to seeing you there!



## TEXAS HOSPITALITY

By Calvin Ireland

Recently I had the opportunity to attend DuPont's "Bug University" in Austin, Texas. Discussions were centered around, you guessed it, bugs, but more specifically DuPont's Group 28 chemistry that was first introduced in the Lumiderm seed treatment. Coragen foliar insecticide is a new active ingredient for the control of all major pest insects, with the exception of piercing and sucking bugs (lygus). Coragen is unique in that it has a very, very, very low toxicity to mammals and other beneficial insects such as pollinator species and parasitic wasps. Another advantage when looking to control army worms or flea beetles late into the growing season is Coragen's one day pre-harvest interval. This means rather than wait 7-21 days before straight cutting or swathing, you can continue to control those pests up to 24 hours beforehand. It was an interesting experience learning alongside other retailers and agronomists from all over the Western provinces, and learning what's new and exciting in the future of sustainable pest control. Once our information sessions wrapped up, we got the chance to tour around Austin in the 20 degree weather, taking in many live bands and street performers before heading home to the Great White North.



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