



## What's THAT in my Corn?

Fortunately, after months of cutting hay, hanging laundry and killing spiders in order to catch the attention of Mother Nature and her rain, she finally took notice. August rains were timed perfectly for pod fill. The expression of "rain makes grain" is certainly fitting for this year's soybean yields. The harvest of 2018 will be one for the books! That being said, Mother Nature has taken too much notice and forgot to turn the taps off (seriously, the rain can stop anytime now!). The high amounts of rain are something to pay attention to when it comes to your corn crop as late season diseases set in.



Figure 1: The tip of the cob is the first place to check for Gibberella. It typically starts at the tip of the cob and works its way down the cob.

Below, Figure 1 illustrates one of the most common ear molds appearing around Middlesex and Lambton county recently. Gibberella, which is easily identified by the presence of pink mold at the tip of the ear, has set in to many fields in the area. It is a mold that thrives in cool, wet conditions and can easily spread throughout an entire cob. It has the ability to produce vomotoxin, a mycotoxin that is harmful to livestock.

Trichoderma (figure 2) is a mold that grows on and between kernels. Insect feeding to the ear of corn provides an entry point for this mold to set in. It can be confused with Penecillium ear mold that also produces a mold that is green. Penecillium ear mold infections occur to kernels that have been damaged by frost, hail or insects. The sigh of relief with both these ear molds? No known production of mycotoxins!



Figure 2: Trichoderma growing between the kernels on a cob of corn.



Figure 3: Fusarium and its unique "starbursting" of kernels

Figure 3 highlights an identifying feature of Fusarium, a mold that is not new or good news. The "starbursting" of kernels is due to fungal growth damaging channels within the pericarp of the kernel. Fusarium is also identified by a white or pink-coloured mold scattered across the cob. Unlike Trichoderma, Fusarium produces a mycotoxin called Fumonisin, which is toxic to livestock (especially horses).

## Safety Tips Going into #Harvest2018

Harvest is one of the most exciting times of the year. After months of planning, hard work, a few prayers and rain dances, it is the moment that every farmer waits for. However, it also seems to be the time that everyone forgets to take a moment to breathe. Keep these tips in mind whether you're in the cab of a combine or sharing a road with a piece of farm equipment:

1. **SLOW DOWN** - This cannot be stressed ENOUGH. There is nothing that cannot wait an extra 5 minutes when sharing the road with a slow moving farm implement. Let's all do our part this fall to make sure everyone gets home safe.
2. Don't Farm Tired - try a tag-team approach to harvest this year. Operators beginning early in the morning should switch off with partner early afternoon to ensure they can get enough sleep. Power naps are man's best friend during harvest!
3. Be on the Lookout - if you are driving on a rural route, make sure that the operator sees you. Remember, farm equipment can make unexpected turns!
4. Circle Checks Pay - before heading out to the field, take some time to make sure all your lighting and flashers are working properly. Use them ALWAYS!