ASB Provincial Committee Meeting with Alberta Seed Growers Association (ASGA) Room 3322, J.G. O'Donoghue Building August 20, 2018 Minutes

In attendance:

Corey Beck

Steve Upham

Merrill Harris

Wayne Nixon

Sebastien Dutrisac

Elden Kozak

Pam Retzloff

Maureen Vadnais

Ward Oatway, President, ASGA

Kelly Chambers, Executive Director, ASGA

The meeting was called to order at 11:05 am.

Introductions were made around the room.

Corey started the discussion by reviewing the ASB program and the direction that ASBs have given the Committee regarding *Fusarium graminearum*. Corey asked ASGA what their position is and where common ground could be found between the two groups.

Ward started by reviewing history of the disease and ASGA's position. They feel that the disease is becoming endemic within the south and eastern parts of the province and how the survey maps from the Canada Grains Commission are showing Fg is present in all parts of the province. The feel that having Fg on the Agricultural Pests Act as a pest has served its' purpose and that it is time to deregulate it because it is present in all areas of the province. The Act is punishing growers in the south and eastern areas of the province and hurting how product is delivered to market. He stated that Alberta is not able to benefit from new genetics because breeding institutions are unable to produce seed that has zero detectable rates. Plant breeders are unwilling to contravene the Act so Alberta doesn't have access to new varieties that Saskatchewan and Manitoba have. Any seed produced within Alberta that does have Fg in it moves out of Alberta into Saskatchewan and Manitoba which puts Alberta at a market disadvantage because seed isn't moving both ways into the province. He stated that only 20% of the seed that is put into the ground is pedigreed seed and it is unknown whether other seed is being tested or not. There is an underground market going on and it's impacting those that are trying to follow the rules. ASGA is trying to make it so that Best Management Practices (BMPs) that are already being followed are a greater benefit than having a regulation that is outgrown. The Province is beyond the point of having zero tolerance because it's already here.

Kelly stated that zero doesn't exist and hasn't for awhile. It creates a negative attitude and has negative connotations when it is discovered that someone has Fg. It's having a detrimental affect on proper management because people don't want others to know that they have it. If Fg if removed from the

Act, then it is easier to let the neighbours know that you have it and management practices can be adjusted accordingly. We have gone from trying to prevent Fg from the province and trying to prevent its' spread. It's time to move into a second phase in creating awareness and management. The current Act prevents management practice research and access to new genetics. Genetic material is sent to Manitoba and Saskatchewan nurseries for testing which is leading to a three to five year delay in getting new genetics to Alberta to be multiplied by seed growers. Alberta needs to have long term areas for management and for testing new products and needs to start developing a fungicide culture for watching for resistance. Fungicide needs to be watched the same as the disease itself as Fg adapts and they are now finding other strains occurring from Fg that are more toxic once the disease has a chance to infect wheat heads which affects more than the ability to grow food crops, it affects feed and livestock production. Fg is not just a seed borne disease, it's airborne too, which makes management more complicated. Seed industry has borne the brunt of not being able to get new genetics due to Fg. There is a need to create awareness so that all commercial producers are aware of the suite of management options they can use. Having Fg isn't a death sentence and it doesn't mean that you can't produce cereals. There is a need to focus on management and need a push to expand the toolbox and make sure all producers are using it.

Corey asked why producers don't have access to a full toolbox under current legislation?

Kelly replied that they don't have new genetics because seed must be heat treated before it comes to Alberta and heat treating reduces viability of the seed. The crops usually don't do well the first year and then get pulled from the trials.

Elden asked what the benefit of bringing in varieties that are positive is.

Ward replied that new varieties are being bred in areas where Fg is and it's showing resistance. These varieties would thrive in Alberta where there are low levels of Fg because resistance would be able to overcome current levels of infestation.

Elden asked why would a farmer want to knowingly seed something that is infected.

Ward replied that it's not just Fg resistance, it's impacts farmer's pocketbooks too with higher yield, etc.. Commercial producers wouldn't be getting seed that is infected because foundation stock would be going to pedigreed seed producers. He also said that seeding Fg seed one year doesn't necessarily mean that the next crop is infected. The disease gets killed with current management techniques, such as new seed treatments, and weather has a significant affect on whether or not the crop coming from foundation seed will be infected with Fg. Most times the disease isn't present in the plants propagated from the foundation stock. The new varieties have a list of positives including a wider suite of resistance to diseases, yield, maturity or desirability to end producers such as maltsters. Maltsters, for example, if they had a preferred variety would start to bring in that variety from wherever they can.

Elden asked why would maltsters want something with Fg in it.

Ward replied that Fg isn't a problem for maltsters but the level of DON produced. Seed that has 0.5% level of Fg, for example, could still be used in the malting process as long as there wasn't any DON in it and maltsters mix infected seed with non-infected seed to bring the levels down as low as possible.

Kelly added that it would also reduce the need for fungicide. Management trials being run in the province show that more resistant varieties won't develop Fg if it is part of the disease package. This decreases the risk of the disease moving to new areas. The stronger the disease package and genetics you can modify management accordingly.

Elden stated that 0.5% level of infection in seed isn't necessarily a problem then, it's the levels you hear about from other areas and how fast the disease can increase and spread.

Ward replied that in a place where there is already infection then it is, it doesn't make any difference.

Sebastien asked if any applications had been made to the province and municipalities to conduct trials.

Kelly replied that applications have been made in the past and were denied. The current legislation prevents a minimum of \$3 million dollars of research from coming into Alberta.

Corey stated that there seems to be some misunderstanding between the Act and the Fg Management Plan. He said that the Fg Management Plan is a recommendation and outlines Best Management Practices for Fg management to prevent its' establishment and spread. He stated that there is nowhere that states that Alberta has zero tolerance for Fg in the 2012 Fg Management Plan.

Kelly replied that the Act doesn't say zero tolerance but there should be no seed, transportation for a pest. This is where industry gets hung up on.

Sebastien said that need to look at all options on a regular basis because things change. Legislation isn't black and white and there is some leeway to interpret it to allow for management for Fg. Based on a strict interpretation where something that may contain a pest needs to be destroyed, then every lawn and garden in Alberta would need to have a notice issued against it and be destroyed because it may harbour a pest. Municipalities are not willing to do this and it is up to the municipalities to determine what enforcement for their area looks like. It may be time for new applications for research to the province because the situation with Fg has changed since 2002. Acts are tools used by municipalities to develop their own policies and procedures and determine what their active measures are to manage a particular pest to ensure sustainability for their producers.

Kelly said that this is where the disparity lies between the government and the municipalities. They have met with the government several times over the past 18 months and that the government states that there is a zero tolerance policy in the legislation. The government says that the Act requires amendment. There is a different interpretation between government and the enforcement branch. Government says that the legislation is black and white. Industry won't go against legislation and the government's interpretation. Government says no you can't do this and won't accept applications for research and industry won't go to municipalities to make applications for doing research trials because they don't want to have to apply with each individual municipality. Legally, industry has been told that they can't be growing anything less than zero and it can't bring in seed with any Fg in it and it's having impact in certain years when Fg levels are high. Zero doesn't exist therefore seed can't be brought into the province or sold.

Corey stated that the Minister can give exemption and why isn't the industry applying for an exemption.

Kelly replied that the they aren't going to apply for an exemption. The industry wants the same access to genetics and research for management for all producers in the province. The Act is currently stopping

research dollars from coming into the province at a time when research dollars are tight and research investment is decreased. ASGA wants the same access to research dollars and genetics as other provinces.

Sebastien stated that there are producers in certain municipalities that don't want what is being proposed. Doing something province wide isn't acceptable so there needs to be something done on a regional or municipal level. ASBs' duty is to protect sustainability of agricultural producers within the municipality and not all producers want Fg to be taken off the Act.

Kelly stated that we are still talking about managing Fg because maintaining low levels of Fg is beneficial to seed growers. Producers are transporting infested seed unknowingly or knowingly under the current legislation still because they aren't testing and doing the things they need to do because of the legislation. Fg is here and there is a need to do something about it. How can you have small groups of producers that are preventing the rest of the province from being commercially viable?

Sebastien replied that it is not a small pockets of producers that don't want to take Fg off the Act.

Discussion about what it means when Fg is found and mapped using Canada Grains Commission data.

Ward stated that Fg is present everywhere in the province.

Sebastien restated that there are lots of producers out there that want to try to prevent it from establishing and spreading and restated the responsibility of ASBs to protect all producers, including seed growers.

Kelly stated that no one wants Fg but there is a need to move to a management phase. If producers realize that they are moving disease around then perhaps the could be better management halt or slow down the spread to prevent the disease from developing in the first place.

Sebastien asked how deregulating Fg was going to help with moving to a management phase.

Kelly replied that as a pest it's preventing research and growers from bringing int new genetics into not just Fg resistance but other marketability characteristics. Alberta is 3-5 years behind in being able to meet the demands of new markets because they don't have access to the same genetics as Saskatchewan and Manitoba.

Elden asked for an example. What is Saskatchwan selling that Alberta currently doesn't have access to?

Ward replied that Saskatchewan is getting new varieties of wheat with better disease packages, yield advantages, bred for a niche market and more early maturing because companies won't bring it to Alberta.

Elden replied that he is trying to make sense of how seeding something that is infected with disease is beneficial to producers. It's hard to convince people that don't have it to seed something that is infected.

Ward said people aren't testing so how do they know that they don't have it. The Fg maps from the show Fg is present in all areas of the province. There may be only one incident within that county but it's still present and there could be lots more present because people aren't testing.

Steve asked why would people start testing for Fg if the regulation was changed.

Ward replied that it won't necessarily change people's minds and have them start testing but the problem is that the majority of producers aren't doing any testing. Seed producers are wanting to bring in seed that will mitigate the problem because it's better than what they currently have. Telling producers they can't grow Fg infected seed because the disease is already present is counterproductive. If you are saying it's zero tolerance, then it's zero tolerance only for seed growers and not covering all producers in the province.

Kelly said that there are new varieties that are available in Saskatchewan and Manitoba that aren't available in Alberta because Alberta seed growers can't get Fg free seed to propagate. Producers are going to Saskatchewan and Manitoba to get these varieties. They have to go underground to get it because there is a stigma attached to having Fg but this starts a vicious circle of producers identifying they have a problem and bringing in more seed infected with Fg to access more Fg tolerant varieties because they can't get the same product from Alberta seed growers who may be able to produce it with very low or zero levels of infection. Alberta seed growers can't do this because the foundation seed has Fg in it which means that producers are potentially spreading the disease more because they are seeding these new varieties that have a high level and aren't buying the new varieties from Alberta seed growers that could possibly multiply it with low to zero levels.

Steve replied that he is worried that you are taking the brakes off a runaway train by deregulating Fg as a pest. Producers are saying they will change their habits once it impacts them economically but that is a large learning curve and it's better to stop and have the regulation in place to mitigate the risk. Need to have regulation to keep some control over and have options for helping to prevent the spread of it through legislation and through management practices. Have the legislation and management work in conjunction with each other.

Ward said that it's not a situation where are the brakes are off because it's already here. The Act was designed to keep it out. It's here now and it's time for the Act to be changed. It's punishing those that already have it in higher levels and there needs to be new tools put into place to manage the disease to help keep ahead of the game.

Corey said that the Committee agrees with ASGA that Fg is present throughout the province and that there needs to be a management strategy in place to deal with it. He stated that it was the Committee's understanding that ASGA wanted Fg removed from the Act as a pest and asked how Fg would be managed if it was to be removed from the Regulation. Corey said that there are other pests currently on the Act that are present in Alberta and that municipalities use the Act, Regulation and Management Plan as tools to help them prevent the spread of these pests. No one is asking to remove clubroot or rats from the Act and the province has infestations of these pests and they are managed using current legislation. Corey asked that if Fg were to be removed as a pest, how do you regulate and manage it.

Kelly said that was one of the reasons that they wanted to meet with the Committee. What are the options?

Ward asked if it was better to declare it a nuisance then at least it could be dealt with.

Corey replied that if it becomes a nuisance then the producer may manage it. There is nothing that requires a producer to manage Fg if it was to be regulated as a nuisance. It would then become a

"runaway train" until you could educate producers about it and they were being affected by it economically.

Kelly said this is why there is a push to make a change and create a "kerfuffle" to start managing it. This disease been present in the province for almost 19 years and there is need for change.

Corey stated that the Agricultural Pests Act provides authority to manage any pest that affects agricultural production and that statement confirms why Fg needs to remain on the Act. Fg affects agricultural production which is one of the reasons why it needs to remain on the Act. Corey clarified that ASBs have instructed the Committee to maintain Fg as a pest on the Act so that we have a regulatory tool to manage it. ASBs are not saying zero tolerance because we know that it is present throughout the province. The question is how do we manage it within the rules that are already there?

Kelly replied that you aren't in seed production and this zero tolerance in seed that is the problem.

Corey replied that the Minister has the ability to change that so for him to say that to go talk to the municipalities, that's the Minister lack of understanding of the Act. Corey restated that ASBs have a legislated duty to protect all producers within the province from pests and asked what the negative potential to the industry would be if the pest was deregulated.

Ward replied that the negative potential is unknown. Only 20% of the seed in Alberta put into the ground is pedigreed and tested. Producers aren't testing and this is potentially spreading the disease throughout the province as they move seed from different areas. ASGA wants all producers to have access to new genetics to increase tolerance to Fg while accessing other benefits such as maturity, yield, etc.

Merill asked what the Act says about allowing infected seed from other provinces to be grown within a particular municipality. If a seed company applied to the agricultural fieldman, could the agricultural fieldman allow that seed to be planted?

Sebatien replied that it would be at the discretion of the ASB. The most likely scenario would be that an ASB would review available data, allow a trial and determine if the presence of that seed were to be beneficial.

Merrill replied that if it were beneficial to a particular area, then he could see municipalities granting permits to grow these new varieties, even if the seed had low levels of Fg infection in them. It would be a way of getting some of the new genetic material into areas where Fg is well established. This would be one way to start the flow of genetic material to help producers out, especially in southern Alberta where Fg is considered endemic. This would prevent it from being grown in areas where Fg isn't established.

Elden stated that there are many producers that won't clean seed without a Fg test because they don't want it to become established in their areas. Producers in his area want to maintain the status quo. Elden says that he isn't sure that status quo is necessarily working, but since he works for them, he is working to do seed testing and programs to help keep it out of his area. Producers in his area believe the Act and zero tolerance policy has slowed down the spread of Fg and are resistant to change. Elden would need information to convince his producers that putting Fg infected seed has a significant benefit for them in regards of genetics. Elden doesn't think that removing Fg from the Act will be readily accepted.

Ward replied that even in Manitoba and Saskatchewan they have rules regarding Fg. Saskatchewan growers are planting seed with up to 20% Fg. Fg levels are so affected by weather conditions that it's impossible to determine the levels of infection from year to year. Ward discussed that testing isn't completely accurate and how there are still producers and mobile seed cleaning plants that aren't testing which has potential to increase the spread of the disease.

Maureen clarified what the regulation and permits regarding movement of a pest says. The regulation does permit a municipal inspector to grant authority for a pest to be grown as long as that pest isn't moved outside of the municipality but would require a permit from a provincial inspector to bring a pest from another province or jurisdiction.

Ward replied that seed companies and Agriculture Canada don't look to the municipalities for authority to conduct trials and research. They look to the province for the rules and the Act because it's very "cut and dry". The federal government will not deal with municipalities individually but you could see movement from the seed companies to work at the municipal level. They don't want to figure out what the municipal rules are and have to determine where seed can or cannot go.

Kelly said that industry said if there is some form of deregulation and municipalities can make their own rules causes too much unpredictability with municipal policy so they would rather see provincial wide legislation. Some trials, especially management trials, would need to be run for 10 to 15 years due to the variability of conditions for Fg.

Sebastien provided information about the Act and stated that the Act isn't meant to prevent establishment of a pest and outlined that a municipality's responsibility is to have active measures to manage the pest. He gave the example of how blackleg was managed within their municipality and how they use a combination of education and enforcement with notices. He outlined how municipalities will still have different rules across the province. The province would have to set rules for everyone, everywhere and get rid of municipalities. There doesn't seem to be any movement towards this kind of system.

Kelly replied that the Act currently doesn't allow for elevation of an organism from a nuisance to a pest.

Sebastien replied that a pest under the Act is currently like a noxious weed under the Alberta Weed Control Act and that enforcement may or may not be done for those species.

Ward asked what the point of having a species on the Act is if enforcement wasn't required.

Sebastien replied that the intent was to give ASBs the authority to intervene when needed. For example, when a particular species was starting to affect other producers because one producer let it go out of control.

Kelly said that the problem is that ASBs don't have authority to give all seed growers the ability to grow seed sell seed infected with low levels of Fg. It also prevents seed growers from being able to get new genetics to producers province wide so they can be commercially successful. There is a stop that prevents them from selling their product.

Sebastien replied that the Peace, NW and NE regions would likely not accept new varieties if they had low levels of Fg in them, even if those varieties had better genetics.

Kelly said that this forces an underground market because some producers still want to have these varieties and will access them however they can.

Elden asked what the "ask" of ASGA is. Is the "ask" to remove Fg from the Act or to allow for a certain level in seed?

Kelly replied that management for Fg, possibly including incentives, be ramped up. There can be low levels of Fg seeded if it's managed properly. This ask is coupled with removing Fg from the Act as a pest.

Steve asked about potentially setting up test farms in southern Alberta so that research could be done in the province. He asked about the efficacy of colour sorting to remove Fg infected kernels and if research had been done.

Ward replied that colour sorting will remove FDK kernels but the spore can still be present in undamaged kernels. Ward talked about some of the testing and how a DNA test can give a positive result and when grown out on a plate test have a negative result. The Fg spores can be present but not alive. This is a grey area because it's detected but zero percent because the spores were dead. Is that now zero percent or is it detected and can that seed be used?

Elden said that testing is never substantiated in legislation either and that testing is one of the problems faced.

Ward said that the testing is pretty standard and certified internationally.

Steve said that that the problem isn't that it isn't designated as a pest but it's beyond that. There is a problem in the process behind the legislation and how it's dealt with. Steve also mentioned that this could be a long process, especially in getting movement with ASBs and changes with the Act.

Ward said they acknowledge this as one of the challenges facing making any changes.

Corey added that we sympathize with them on how slow government can move to make changes.

Ward said that their ask is that Fg be removed as a pest. They understand that any changes that will be made will more likely be more moderate but are primarily looking for some movement and change to make management of this disease easier as this will be where producers and ASBs will most likely accept. Anything is better than the current situation. The point of this meeting is that if ASBs say that taking Fg off the Act isn't an option and ASGA is saying that leaving it on the Act isn't working for them, then how do we find common ground. We have to figure out to make it so that it's allowable under the Act and make it clear to everyone what the new standards are and what is allowed in each municipality.

Sebastien says that looking for solutions that benefit everyone.

Ward replied that the seed companies say that they are doing a lot of recreational trucking because of Fg because it can't be sold in Alberta.

Steve said that there needs to be some notwithstanding clauses put into the Act to allow it to remain on the Act but still be managed to accommodate seed growers better.

Ward said that could be something that could work.

Corey asked what flexibility do ASGA need within the Act? If it's removed as a pest, there will no longer be enforcement unless individual municipalities wanted to created their own bylaws to enforce it. This creates a lot of extra work and duplication for the municipalities that don't want to keep it in. ASBs would rather keep it on the Act where we already have the power and authority to manage the disease and work with ASGA to find solutions within the Act to manage the disease. Removal of Fg from the Act won't likely gain support from ASBs because it then removes them from managing the disease and ASBs feel that the current Act gives them tools to manage it properly. Need to find flexibility within the Act to manage it.

Wayne asked about the chemical and seed companies and what they are doing as far as developing resistant varieties and fungicides to control Fg. They have proven that they are able to find solutions for canola diseases within short periods of time in response to clubroot.

Ward said that cereal breeding isn't as lucrative as canola and is harder to do.

Wayne said that malt barley is becoming more like canola and more attention is being paid to its' breeding.

Ward replied one of the problems with malt barley is that it has a poor disease package. Maltsters were having problems with high DON content. Quality is the first priority with malt barley and little attention is paid to disease resistance. Cereals aren't as "sexy" as pulses and canola and seed companies don't spend as much money on cereal breeding. Durum is becoming a higher priority as it's a more lucrative market but durum is still highly susceptible to Fg. He gave an example of a variety he can't get in Alberta because the seed comes from areas where Fg is endemic but growers want because it's early maturing. This variety did well in tests with high Fg pressure and wouldn't likely have any problems with in Alberta because it flowers early.

Elden asked if Ward would seed Fg infected seed on his land as a seed grower.

Ward replied that if he has a Fg free option, then that is his preference. The seed can be treated so it's non-detectable so what is it really. He would grow seed infected with low levels if it was a variety that his customers wanted.

Kelly said that one of the tools that the province discussed at the last round table was an economic analysis for Fg. The goal is not to increase the level of Fg, it's to make producers more aware and to manage better because we don't want to become like Saskatchewan and Manitoba. We have the same goal in mind but are using different approaches to reach that goal.

Corey asked what the next steps are and how to educate producers.

Kelly said that ASBs are seen as being a valuable tool for educating producers.

Steve said that putting notwithstanding clauses into the Act would work but that need to maintain Fg as a pest. This would create some consistency, especially for producers that have land across multiple municipalities.

Kelly asked if this would be something that is province wide.

Steve replied that he sees it as something that would be province wide.

Sebastien said that he thinks the tools are already in the Act but the tools aren't being used appropriately. Awareness needs to be created to let producers and ASBs know what these tools are and how to use them and that there is some flexibility in how those tools are used.

Kelly replied that there needs to be a common understanding on the interpretation of the Act.

Ward said that some municipalities have said in the past that we know that they have it so we aren't going to test. This was especially true for seed cleaning plants that would have been adversely affected for not cleaning seed. There are situations where ASBs aren't looking and aren't enforcing. This is where part of the problem comes with the individualization comes between the municipalities due to differences in enforcement.

Corey asked for additional comments and thanked ASGA for coming and educating the Committee on their position. Sebastien added that the two groups needed to continue to meet so we can inform each other on issues affecting them and to work together on issues such as Fg.