



Legislative Assembly of Alberta

The 28th Legislature  
Second Session

Standing Committee  
on  
Resource Stewardship

Bill 201  
Agricultural Pests (Fusarium Head Blight) Amendment Act, 2014

Monday, July 14, 2014  
1:30 p.m.

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The 28th Legislature  
Second Session**

**Standing Committee on Resource Stewardship**

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1:30 p.m.

Monday, July 14, 2014

[Mr. Khan in the chair]

**The Chair:** Well, folks, welcome to today's meeting of the Standing Committee on Resource Stewardship. My name is Stephen Khan, and I am the chair of this committee.

I will note that this is a very busy summer. We're particularly pleased to have a few members who have come from far and near to join us today. I'd like those at the table now to introduce themselves, and then we will go to the phones to introduce the majority of folks who are joining us over the phones. To my immediate right.

**Dr. Brown:** Neil Brown, Calgary-Mackay-Nose Hill.

**Mr. Xiao:** David Xiao, Edmonton-McClung.

**The Chair:** Thank you very much, gentlemen.

Before we get to our deputy chair, who is on the line, it's with great pleasure that we pass it to another colleague who has come from far to join us today.

**Mr. Goudreau:** Hector Goudreau, Dunvegan-Central Peace-Notley.

**The Chair:** Thank you very much, Mr. Goudreau.

Prior to getting to the folks who are on the phone, let's just finish with our folks who are at the table today. I guess if we go around the table, that would be yourself.

**Ms Dean:** Thank you, Mr. Chair. Shannon Dean, Senior Parliamentary Counsel and director of House services.

**Ms Leonard:** Sarah Leonard, legal research officer.

**Dr. Massolin:** Good afternoon. Philip Massolin, manager of research services.

**Mr. Tyrell:** Chris Tyrell, committee clerk.

**The Chair:** Terrific. That's all of our folks who have joined us today at the table.

With that, we will go to the phone lines. If I can ask my deputy chair, Mr. Hale, to start the introductions from the phone lines.

**Mr. Hale:** Yeah. Jason Hale, Strathmore-Brooks.

**Mr. Casey:** Ron Casey, Banff-Cochrane.

**Mr. Allen:** Mike Allen, Fort McMurray-Wood Buffalo.

**Ms L. Johnson:** Linda Johnson, Calgary-Glenmore.

**Mr. Young:** Steve Young, Edmonton-Riverview.

**Mr. Fox:** Rod Fox, Lacombe-Ponoka, substituting for Gary Bikman.

**The Chair:** I believe that's everybody on the phone lines.

We have another wonderful addition to our group here in Edmonton at the table. If we can revert to introductions at the table.

**Ms Calahasen:** Pearl Calahasen, Lesser Slave Lake.

**The Chair:** Fantastic. Thank you, all, so much for joining us.

Just a note. As Mr. Fox spoke to, he is an official substitute for Mr. Bikman pursuant to Standing Orders 56(2.1) to (2.3).

A few housekeeping items to address before we turn to the business at hand. The microphone consoles are operated by the *Hansard* staff. Please keep cellphones, iPhones, and BlackBerrys off the table as these may interfere with the audiofeed. Audio of the committee proceedings is streamed live on the Internet and recorded by *Hansard*.

Now we'll proceed with some more housekeeping. We have approval of our agenda. Has everyone had a chance to review the proposed agenda? Fantastic. If we can get a motion of approval.

**Ms Calahasen:** So moved.

**The Chair:** Show it moved by Ms Calahasen that the agenda for the July 14, 2014, meeting of the Standing Committee on Resource Stewardship be adopted as circulated. Thank you, Ms Calahasen. All in favour? Any objections? That motion is carried.

Now we move to the approval of our meeting minutes. Just to note, we have three sets of minutes to review today, and those will require separate motions. Has everyone had a chance to review the May 26 minutes? Terrific. Can I get a motion to approve those meeting minutes from May 26?

**Mr. Goudreau:** Mr. Chair, I'll move the May 26 minutes of the Standing Committee on Resource Stewardship.

**The Chair:** Thank you, sir. Show it moved by Hector Goudreau that the minutes for the May 26, 2014, meeting of the Standing Committee on Resource Stewardship be adopted as circulated. All in favour? Any objections? That motion is carried.

Moving on, we're looking for another motion to approve the meeting minutes from our June 25, 2014, meeting. Thank you, Mr. Xiao. Show it that Mr. Xiao has moved that the minutes of the June 25, 2014, meeting of the Standing Committee on Resource Stewardship be adopted as circulated. All in favour? Thank you. Any objections? Hearing none, that motion is carried.

Now that brings us to the final minutes to approve for our June 26, 2014, meeting. Could I get a motion of approval for the minutes from our June 26, 2014, meeting? Mr. Xiao again. Thank you so much. Show it moved by David Xiao that the minutes of the June 26, 2014, meeting of the Standing Committee on Resource Stewardship be adopted as circulated. All in favour? Thank you. Any objections? That motion is carried.

Thank you very much for helping us with our housekeeping.

That brings us to our research requests component of this meeting. As we recall, there were a few research requests made to our LAO research team back at our May 26 meeting. Dr. Massolin and Ms Leonard are here with us today to take us through the two documents they prepared in response to these requests. Members should all have copies of the economic impacts document and the crossjurisdictional comparison document.

Dr. Massolin, I will turn the floor – oh, just one moment. Mr. Goudreau.

**Mr. Goudreau:** If I may before we start. You know, I've had a chance to have a look at these papers, and I want to thank staff for doing a great job in putting them together, for summarizing and doing that. Certainly, before we forget, I want to make it clear that I really appreciate the work that was put in there. So thank you.

**The Chair:** Mr. Goudreau, thank you very much on behalf of all of the committee for those comments. Your comments are sage in their observation. We're most fortunate to have exceptional research staff, led by Dr. Massolin.

Dr. Massolin, thank you so much for your work. With that, the floor is yours.

**Dr. Massolin:** Thank you very much for your kind words.

I'll just pass it right over to Sarah, who did the work.

**Ms Leonard:** Okay. The first document that I'll take the committee through is the Economic Impacts of Fusarium Head Blight. The first thing I'll point out is that throughout this report you'll see that we refer to the losses that are caused by Fusarium head blight rather than just by Fusarium graminearum. As you've heard from a number of the experts who presented to the committee, Fusarium head blight is the disease that can be caused by a few other species of Fusarium fungus in addition to graminearum although graminearum is usually the most prevalent and probably the most harmful. But since many of the studies that we found mostly just discussed the economic effects of Fusarium head blight without specifying which species of fungus caused it, that's what we've done in the briefing as well.

I'll first take you to section 3, which discusses exactly how Fusarium causes economic loss. It does it in two ways: through direct or primary losses and indirect or secondary losses, which include things like losses in household income, tax revenue, retail trade, and employment.

Direct economic losses come from two sources: yield loss and quality reduction. Yield loss happens because head blight prevents some kernels from developing, and it causes other ones to become smaller and lighter and shriveled up. Both of these factors reduce the number of bushels per acre of the grain that can be harvested. These smaller, lighter kernels are called Fusarium-damaged kernels.

They're also a source of quality reduction losses because they can cause grain to be downgraded since both the Canada grain regulations and the Canadian Grain Commission's Official Grain Grading Guide have specific levels of Fusarium-damaged kernels that are allowed in different grades of grain. Of course, grain at a lower grade gets a lower market price than grain at a higher grade.

**1:40**

The other source of quality reduction comes from mycotoxins in infected grain. It makes the grain unsuitable for use as animal feed or in food products because it's toxic, and it sort of changes the physical properties of the grain. It makes it difficult to use it for food production or in beer, bread, pasta, that kind of thing, which also obviously limits the ability to market the grain to buyers.

A lot of the available information on the economic impacts of Fusarium head blight is related to a wave of serious outbreaks out east that started in the '90s. If you go back to section 2 of the briefing, you'll see that there's a brief summary of the history of the outbreaks. Essentially, Quebec, Ontario, Manitoba, and Saskatchewan along with 26 U.S. states were affected although not all to the same extent. For instance, the Red River valley in both the U.S. – I think it's North Dakota, Minnesota, South Dakota – plus Manitoba, their losses were significantly worse than other states. Since then outbreaks have continued to reoccur annually in different locations and with various degrees of severity.

Then if you turn to section 4, we have listed some of the data we found, the actual data on economic losses. In Quebec and Ontario the outbreaks in the '90s were estimated to have cost about \$200 million U.S. In Manitoba losses from 1993 to 1998 were estimated at \$300 million. And from '93 to 2001 cumulative direct losses in nine Midwest U.S. states were estimated at \$2.5 billion, with another \$5.2 billion in indirect losses.

In terms of economic loss in Alberta there isn't a lot of information available. In 2009 grade losses from Fusarium-damaged kernels were estimated to have cost producers between \$9 and \$39 an acre for various types of wheat, and then there would have been yield losses on top of that. In 2004 Alberta Agriculture and Rural Development did an economic assessment to determine the potential risk to Alberta's agriculture industry of Fusarium head blight, and it showed that average annual costs over a nine-year period could range from \$3 million to \$49 million, with total losses of up to \$64 million possible. So although Alberta hasn't suffered an outbreak like the other provinces and states, it's still possible that head blight could have a fairly significant effect on the agriculture industry here.

The other research request was for a look at how other jurisdictions in North America address Fusarium in terms of legislation and also in terms of management or mitigation strategies.

**Mr. Goudreau:** Mr. Chair, before we move there, I'm just wondering if we could have comments on this one.

**The Chair:** Certainly, if that's acceptable to our research team. I'm presuming, Mr. Goudreau, that you have some comments.

**Mr. Goudreau:** A few.

**The Chair:** Fantastic. We'll turn it to Mr. Goudreau, followed by Ms Calahasen.

**Mr. Goudreau:** Certainly, we talk about – and I'm referring to page 3 of the document, section 3 – how Fusarium head blight causes economic losses, and we have always talked about Fusarium head blight infecting cereal grains, including wheat, barley, oats, rye, and corn. I think one of the last presenters did talk about having found evidence of Fusarium in oilseed crops, including canola. So if we are going to talk about best management practices later on that include crop rotations in oilseeds, I'm quite concerned that oilseeds are not mentioned in here as a potential source in that way.

The other one. Again, we talk about yield losses, the losses certainly in Manitoba, for instance, and the values of those particular losses. When I look at the whole Peace Country, for instance, which I represent a portion of – my colleague to my right here represents another portion of the Peace – certainly agriculture in the Peace Country is probably as large if not larger when it comes to crop acreages as all of Manitoba. That's why we are so concerned about what may or may not happen up there.

There's no doubt that we need to look at it. If we look at an average of \$30 an acre, for instance – and that seems to be a number that's being moved around quite often – and we look at the millions and millions of acres in the province of Alberta, you know, the possible losses in Alberta are also very, very huge, the future losses.

I wanted to emphasize those particular points in the report. Thank you.

**The Chair:** Thank you, Mr. Goudreau, for that emphasis.

Dr. Massolin or Ms Leonard, would you care to reply at this point?

**Dr. Massolin:** Yes. Thank you, Mr. Chair. I'll just deal with the second point first, and that is that there is no good evidence for economic loss in either Alberta or Saskatchewan. Our numbers for Canada really come from the border east of Saskatchewan or from jurisdictions east of Saskatchewan.

I'll allow Sarah to comment on your first point.

**Ms Leonard:** Yeah. The reason that we didn't include the canola and other oilseeds in there is that we talk about it later, when we talk about best management practices and the paper that was mentioned, that there's some evidence that it can infect canola. But when the studies were done, in terms of economic loss it wasn't taken into account, and that's why it's not mentioned here.

**The Chair:** Thank you for that, Ms Leonard.

**Ms Calahasen:** Dr. Massolin actually answered some of my question, which was on page 6 of the report, on possible losses in Alberta. When we had the department of agriculture come speak to us, they indicated that they were willing to move to a certain position. I'm just wondering. Did you by any chance talk to them about where they would get their information for this kind of research that they would use to make a decision of this nature? Was there any kind of interaction?

**Ms Leonard:** All I know is that they pulled this information that they did the study with from several sources, but that's the extent of the knowledge that I know about, you know, where Agriculture gets its data from. I don't know what they would base their decision-making on.

**Ms Calahasen:** Yeah. Okay. Thank you.

**The Chair:** Thank you for those questions.

**Dr. Brown:** On page 4 of this summary you're talking about the allowable limits on No. 1 and No. 2 wheat. I presume that when you say 1 per cent Fusarium, you're talking about 1 per cent of the grain kernels that are evidencing the presence of spores. Is that correct?

**Ms Leonard:** Yep, it's 1 per cent Fusarium-damaged kernels. They have criteria for determining what counts as a Fusarium-damaged kernel. I think that they take, like, a hundred-gram sample or something, and they examine it, and 10 per cent of those, if they're damaged . . .

**Dr. Brown:** So that's just showing any evidence on a kernel.

**Ms Leonard:** Yeah. Like, if it meets the criteria for damage.

**Dr. Brown:** Thanks.

**The Chair:** Thank you for that round of questions. Much appreciated.

We will continue on with our summary of presentations unless there are any further questions of Ms Leonard.

I am getting ahead of myself. We still have our cross-jurisdictional comparison that we have to get to. Thank you, Mr. Tyrell.

With that, I'll turn it back to Dr. Massolin's team.

**Ms Leonard:** Okay. Thank you.

The cross-jurisdictional: as I said, we're looking at how other jurisdictions address Fusarium both in terms of legislation and management strategies.

Section 2. We started off by just giving an overview of Alberta's current legislation. This is the Agricultural Pests Act and the pest and nuisance control regulation as well as the policy that's been developed to further the goals of the legislation, which is the Fusarium graminearum management plan. The essence of the legislation is that with a declared pest landowners and local authorities must take active measures to control, destroy, and

prevent the establishment of *Fusarium graminearum*. This is what's commonly referred to as the zero tolerance approach. Bill 201 is proposing to increase the permissible level of Fusarium to .5 per cent, and it would only be considered a pest once the levels cross this .5 per cent threshold.

The management plan is essentially a set of guidelines that are meant to help producers and municipalities comply with the act. It's made up of two sets of best management practices, or BMPs, one for cereal and corn production and one for grains that are to be used for feed and other industrial purposes. I think that by now the committee has heard a lot about these BMPs from the experts and stakeholders. These include things like crop rotation, not planting corn and cereals together or subsequently, using fungicides and seed treatments, planting clean seed, that kind of thing.

*1:50*

Section 3. We had a look at other Canadian jurisdictions, and neither *Fusarium graminearum* nor *Fusarium head blight* is regulated through legislation in any other Canadian province or territory. We looked more closely at the governments of Saskatchewan, Manitoba, and Ontario to see how they manage Fusarium in their provinces, and generally it appears that their approach is to educate and inform producers about the disease and about best management practices. The main difference between the provinces, really, is that in Ontario and Manitoba, where Fusarium is already well established and widespread, the advice tends to focus on harvesting and storage practices as a way of minimizing Fusarium damage whereas in Alberta and Saskatchewan, which have areas where Fusarium isn't established or it isn't commonly found, you would see more emphasis on the use of clean seed in order to avoid the introduction of Fusarium into the areas.

Other than what you'd call maybe this difference in focus and advice, the provinces all advocate very similar BMPs, and they're all along the lines of what Alberta advises in its management plan. These are all widely accepted throughout the industry as being effective at controlling the spread of Fusarium. I'm not going to go into too much detail, but sections 3.1 to 3.3 have all the information on Saskatchewan, Manitoba, and Ontario.

The federal government has some jurisdiction that's related to Fusarium. CFIA, the Canadian Food Inspection Agency, sets permissible levels of mycotoxins in grain products, and the Canadian Grain Commission establishes grade specifications for grain, as I mentioned. Those are the Fusarium-damaged kernel percentages for grain grades.

We also looked at American states. We looked at 21 U.S. states where the crops most commonly affected by Fusarium are grown. Most of the states have plant, pest, and disease legislation. They define plant pests very broadly, and they give the agriculture department the power to require that the plants be destroyed or that measures be taken to eliminate the pests. None of them specifically mention *Fusarium graminearum* except Idaho. It's defined as an invasive species there, and it's prohibited to plant, release, transport, or cultivate it unless a permit has been obtained. There are a few other states that require anyone who wants to conduct research on Fusarium to get a permit because it falls under the broad definition of a pest. The U.S. federal government also requires a permit for transporting it because it is a pest.

However, none of the states has any legislation that sets permissible levels of Fusarium in plants or seeds, nor could we find any government policy managing *Fusarium head blight* or *Fusarium graminearum*. Instead, the primary method that the disease is managed by in the states appears to be through the dissemination of information on best management practices by

university extension services. There's a lot of research actually going on in universities in the states on the disease, and there is a fair amount of federal funding and research initiatives, so that's how they get the information out to producers there. The information that they give out on best management practices is very similar to those that the provincial governments in Canada give out.

Finally, the last section, section 5, looks at the regulation of mycotoxins. Many jurisdictions actually focus on regulating the levels of mycotoxins that *Fusarium* produces rather than on regulating the levels of *Fusarium* itself. For instance, the CFIA, the U.S. Food and Drug Administration, and the EU have all set maximum levels for deoxynivalenol, which is the primary mycotoxin that *Fusarium* produces. We found some BMPs that focus on reducing mycotoxin contamination in grain which were produced by the Codex Alimentarius Commission. This is a body established by the UN and the World Health Organization which developed standards and guidelines for the international harmonization of food standards.

Again, many of these BMPs are identical to the ones that are advised to reduce *Fusarium* infection since, obviously, if you control *Fusarium* infection, that will lead to managing the mycotoxins that are produced by *Fusarium*. They were pretty much identical although there were a few that weren't really seen in the U.S. and Canada such as using propionic acid as a preservative on stored grain, harvesting at a low moisture content, and minimizing insect damage. There's much more detail on this in section 5.2 of the briefing.

That's the crossjurisdictional, and I'd be happy to answer any questions on that.

**The Chair:** Looking to the floor, are there any questions from the floor?

**Mr. Goudreau:** Just maybe a few quick comments, maybe to re-emphasize a couple of things. One, under the Agricultural Pests Act, section 5(2), on page 5 it says the "owner or occupant of land or property... [must] take active measures to prevent the establishment of pests on... the land." I think that that's what we're trying to do up north; it's what we failed to do in southern Alberta. Notwithstanding what Manitoba and Saskatchewan did, I think it was pretty evident in the presentations that we didn't do our work here, and now we're having to deal with the particular issue.

On page 6, Canadian jurisdictions, we talk about Ontario and Manitoba. Having travelled there and having worked with agricultural producers there and having looked at their best management practices, we need to keep in mind that those provinces, especially southern Manitoba and all of Ontario, have a lot more crop alternatives than people in Alberta or northern Alberta. You know, we don't see thousands of acres of tomatoes being grown here or vegetable types. Those are important rotations when it comes to pest management, and we need to do that.

Then on page 13 it talks about the code of practices – that's when we talk about the UN – setting out good agricultural practices "[considered] in the context of their local crops, climate, and agronomic practices," which means that the best management practices will vary by where you are in the world and vary by where you are in Canada or even in Alberta. We need to recognize that certainly Alberta and, more importantly, northern Alberta have a totally different context in terms of growing crops. Our main crops are cereal crops interspersed with oilseeds. We can't move away from that. That's our way of life in a lot of ways. To

say, "Well, you know, consider a broader crop rotation" won't work. It's not there. It's not one of our alternatives, actually, in most of Alberta.

My comments.

**The Chair:** Thank you for those comments, Mr. Goudreau.

I think that we've got Ms Calahasen next. If there's anybody on the phone lines that cares to comment, we can move to you, but first Ms Calahasen, please.

**Ms Calahasen:** Thank you very much, Chair. On page 12 you talk about: "the primary method [of] FHB management in the US appears to be through the dissemination of information on the disease and on best management practices to producers via university extension services." What was the result of that kind of practice and information sharing? Did you get anything from the information that you provided that would give us an idea as to what the results were of such . . .

**Ms Leonard:** In terms of effectiveness or whether it works?

**Ms Calahasen:** Yeah. Like, in the U.S. specifically, because we know that it's not working in Alberta. I'm just wondering if there's anything that we have learned and gleaned from there that we could apply to what we're trying to do.

[Dr. Brown in the chair]

**Ms Leonard:** If you correlate it to the economic losses, you can argue that maybe it's not been that effective, but I don't know what the practice was back when the outbreaks were happening. I don't know when this started, like, when they started sending this information out to producers.

**Ms Calahasen:** So there is no information on that either? There was no date?

**Ms Leonard:** No. So I don't know how effective these have been.

**Ms Calahasen:** Okay. Thank you.

**The Acting Chair:** Linda Johnson, on the line, you had a question?

2:00

**Ms L. Johnson:** Yes, I did. Is there additional information on the management plan that's been developed for Alberta? If anyone at the table could comment on that. Like, is the plan working? Is it ongoing? That's on page 4 of the report.

**Ms Leonard:** Do you mean: is the *Fusarium* Action Committee continuing to develop it or, like, working on . . .

**Ms L. Johnson:** I was wondering if the industry has accepted the management plan, that it's a reasonable plan that they feel they can have success with if they follow it.

**Ms Leonard:** Well, I know that industry was involved in developing the plan because a number of those industry organizations were on the *Fusarium* Action Committee. So I think that industry accepts it, and I know that it's consistent with best management practices throughout the industry.

**Ms L. Johnson:** Okay.

Mr. Goudreau, had you heard of it?

**Mr. Goudreau:** Well, if I may comment, Mr. Chair. If we look at the best management plan – you know, we've got management

plans, and they're typically the same or very similar for a lot of the pests that occur in the province of Alberta. The best management plans, in my opinion, are made to slow down, not necessarily to eradicate or stop, the diseases. Obviously, it may have worked in the province. We don't know. But the one thing we know is that Fusarium is slowly spreading, and if we were to have been extremely effective with our best management plan, we would have stopped it. It would have stopped, or it wouldn't get worse. As we see acres and more Fusarium being identified in broader areas of the province, I have to question the effectiveness of the best management plan, Linda. It certainly, no doubt, is an effective plan to slow down a particular disease, but I'm not sure that it will stop it or eradicate it.

[Mr. Khan in the chair]

**Ms L. Johnson:** Okay. Thank you.  
That's it, Mr. Chair.

**The Chair:** Thank you very much.  
Do we have further comments? Mr. Goudreau.

**Mr. Goudreau:** Thank you, Chair. When we talk about grades later on in the appendix, we see that it's pretty easy to go from a No. 1 to a No. 2. The minute you start changing grades, you lose a considerable amount of dollar value there. On page 12 in the third paragraph it says: "adjusting combines to blow [Fusarium-damaged kernels] out". If a farmer knows that he's got that, he might adjust the sieves, and he might adjust his wind and actually start blowing out something to maintain a grade level. As soon as he starts doing that, he's affecting his yield. He's blowing out some seed that normally would be harvested. When we talk about the impact on cost, we don't know how much is being blown out there, you know, to try to maintain a yield. So we have to question the numbers often that they use in these particular results. I guess, when I look at overall costs, I have to say that they're questionable.

**The Chair:** Thank you for those comments.  
Mr. Xiao, I believe you have some comments.

**Mr. Xiao:** Yes. By comparison you talk about the loss in other jurisdictions. In Ontario or in some other states, you know, they're suffering from several hundred million dollars of loss versus the number in Alberta. Probably the reason we don't know it is because, I just assume, it might not be that significant yet. But as Mr. Goudreau said, it's spreading slowly – I like the word "slowly" – because we have zero tolerance. My question to you is: what about those jurisdictions? Do they have zero tolerance legislation in place?

**Dr. Massolin:** Not all of them do.

**Mr. Xiao:** Oh, they don't. So that really is very telling. Because we don't have such a significant loss so far, I believe that although we still have a management problem, that might play a very certain effective role, which is to contain the spread of that disease.

Thank you.

**The Chair:** Thank you, Mr. Xiao.  
Ms Leonard, Dr. Massolin, do you care to offer any comments to those comments?

**Ms Leonard:** I would just confirm that, yeah, no other jurisdiction. Alberta is the only one in North America, as far as we

could see, that had any sort of zero tolerance legislation or any sort of level whatsoever.

**Mr. Xiao:** Also, we have the least infected crops?

**Ms Leonard:** I couldn't confirm that at all by any means.

**Mr. Xiao:** Okay.

**The Chair:** Mr. Goudreau, please.

**Mr. Goudreau:** Thank you. It's interesting to see and I think you did identify the fact that if you had Fusarium, you needed a special permit to transport it, which provides rules and regulations when it comes to – what happens if a farmer can't get a permit to transport? I would assume that he would have to destroy his crop if he can't use it or can't market it or can't sell it. So, in effect, there are some rules in other jurisdictions.

**Ms Leonard:** Yeah, there are. I'm not really clear on what the procedure is for crops in the States. It seems like it's more focused towards the use of it for research, like, the actual pathogen being transported, as opposed to on crops or plants. It was difficult to find more information.

**Mr. Goudreau:** Okay. Yeah, it's not clear. Thank you.

**The Chair:** Any further question or comment from our phone lines?

Seeing none, we'll carry on. That brings us to our summary of presentations. As well, we had asked our capable LAO research staff to prepare a document entitled Summary of Presentations and Submissions, which was posted to the internal website for the consideration of the committee members. Dr. Massolin will now take us through that particular document.

**Dr. Massolin:** You know what? All I'll do is I'll turn it over to Ms Leonard, and she'll take us through it. Thank you.

**The Chair:** That seems to be a pattern, and that's more than acceptable.

Ms Leonard, please proceed.

**Ms Leonard:** Thank you. Now we are looking at the Summary of Presentations and Submissions, and this summarizes the major issues from the eight written submissions and the 17 oral presentations heard by the committee. This includes the briefing from Agriculture and Rural Development, on May 26, and the various stakeholders and experts, who presented on June 25 and 26.

In section 2 we've just provided a scientific overview of Fusarium and Fusarium head blight taken from the expert presentations, describing Fusarium as a fungus that causes the disease Fusarium head blight, which damages cereal crops and causes the production of mycotoxins. Many of the experts talked about how Fusarium is spread. The spores live on plant tissues such as crop residue left in fields. From here they can disperse themselves through wind and rain onto plants in the same field or in other fields. Then infected plants can produce infected seeds, which can in turn develop into infected crop residue, and then the cycle starts again.

All of the experts emphasized the importance of weather, especially moisture, as the main driver of Fusarium graminearum development both in terms of its existence and intensity. Many of them also noted that once Fusarium is established in an area,

eradication probably isn't possible and management is really the only option.

Another issue that came up a lot was infected seed. Dr. Turkington and ARD both pointed out that the focus of this issue really varies depending on whether *Fusarium* is established in an area or not. If it's already found, infection in seed isn't an issue because *Fusarium* will already exist in crop residue in the area. So, really, the only issue is whether those infected seeds are healthy enough to germinate into seedlings. On the other hand, in areas where *Fusarium* isn't commonly found, planting an infected seed can increase the risk of creating infected residue. So although you're not going to necessarily get a full-blown *Fusarium* infection immediately, the residue can build up over years if you've got favourable conditions, and then you can eventually end up with a serious situation.

In section 3 we looked at the current zero tolerance approach to *Fusarium*. Pretty much all of the stakeholders agreed that the zero tolerance approach hasn't worked to control the spread of *Fusarium*. Although a few supported maintaining the current legislation with increased enforcement, most proposed alternative approaches. Those in favour of maintaining zero tolerance – and there were really only about three – said that this was really the only adequate method of slowing down the spread of the disease across the province until it can be eradicated and that increasing the permissible levels of *Fusarium* would really only increase the risk of making the disease prevalent across the entire province.

## 2:10

They all pointed to the failure to consistently administer and enforce zero tolerance across Alberta at multiple levels – this included the agricultural fieldmen, the ASBs, seed cleaning plants, and local authorities – as the reason that the current approach has failed to prevent *Fusarium* from spreading, and in the future rigorous enforcement and provincial support would be necessary for the zero tolerance approach to be effective.

Most of the stakeholders were opposed to zero tolerance, and many noted that it hasn't stopped the spread of *Fusarium* and it fails to recognize the reality that it does exist in Alberta. A few pointed out that since weather is the main factor in its spread, therefore it's inevitable and that efforts should really be focused instead on education and implementing best management practices.

A number of stakeholders talked about the negative effect zero tolerance has had on the sustainability of the seed industry by impeding trade or increasing costs to seed producers, and they also mentioned the inconsistent implementation of the zero tolerance approach by seed cleaning plants. Several stakeholders also mentioned the negative effect zero tolerance has on other producers. This has increased their costs and limits their access to new crop varieties, including those that might have improved resistance to *Fusarium*. Another issue was enforcement. Several stakeholders discussed the difficulty of strictly enforcing zero tolerance in areas where *Fusarium* exists and the severe economic hardship it would cause to all elements of the agriculture industry.

There wasn't really any unconditional support for the .5 per cent level in Bill 201 although the Alberta grain commission did support the level in northern Alberta as part of a regional strategy and the Association of Alberta Agricultural Fieldmen noted that some of their members support .5. But, ultimately, most stakeholders felt that it was too low for a number of reasons. Many of them said that essentially it's the same as having a zero tolerance policy: it lacks any flexibilities; the problems that you have with zero tolerance, you'll still have with .5; and it's still so low that it's going to be unenforceable.

There was one suggestion from the Association of Alberta Co-op Seed Cleaning Plants to reclassify *Fusarium* as a nuisance rather than a pest. There was another from the Association of Alberta Ag Fieldmen to change the regulatory system entirely to give municipalities the power to determine how aggressively they want to deal with *Fusarium*, depending on their particular level of infection.

Then in section 5 quite a few experts and stakeholders proposed a regional strategy, where you would have different approaches to managing *Fusarium* depending on whether it's established in the area or not. The Alberta Grains Council, the Seed Growers' Association, and the Alberta Wheat Commission all supported a 5 per cent tolerance in seed in areas where *Fusarium* is commonly found, which are mostly in southern Alberta. Then in the north, where it's not commonly found, the Alberta grain commission supported .5 per cent, and the Seed Growers' Association and the Wheat Commission both thought that you should keep zero tolerance in the north.

Dr. Bisht, from Manitoba, thought that a good regional strategy might be zero in the north, .5 in the central part of the province, and 1 per cent or higher in the south. Both the CSTA, the Canadian Seed Trade Association, and the Alberta Seed Growers' Association felt that anywhere from .5 up to 5 per cent would be acceptable for the north – I believe that they got these numbers from Dr. Tekauz's review of the *Fusarium* management plan – and then in the south anything up to 10 per cent wouldn't increase the risk too much.

But I'll also point out that all of these proposals also stress the importance of incorporating appropriate best management practices for the region as part of the strategy. So regardless of what the tolerance level is, it's really just one aspect of an integrated strategy for managing *Fusarium*.

That leads me to section 6 of the briefing, which is where we discuss best management practices. All of the stakeholders and experts emphasized that they are a crucial part of a management strategy because no one method of controlling *Fusarium* is completely effective, so you have to combine multiple methods.

A few stakeholders questioned whether using best management practices as a management strategy would be effective because you can't enforce them. But quite a few other ones thought that once producers are educated about the economic advantages of adopting them, they'd be more willing to do so.

I won't go into a lot of detail about the individual best management practices because you're all familiar with them and have heard all about them before, but there are a few issues that I'll point out. A few stakeholders disagreed on whether or not resistant varieties actually do exist. Another one raised the issue of the effectiveness of fungicides. There was also discussion on the importance of using clean seed and the possibility that *Fusarium* can infect oilseeds and pulses, as we discussed earlier.

Finally, in section 7 there were a couple of miscellaneous issues that were raised. One was related to the correlation between DON levels – that's the mycotoxin – and *Fusarium* levels in grain. The other was whether there's a possible relationship between the spread of *Fusarium* and the increased use of a herbicide called glyphosate.

That's it. Any questions?

**The Chair:** Mr. Goudreau.

**Mr. Goudreau:** Thank you, Chair. I'm really not sure where to start. A couple of comments, nonetheless. I think we had talked about tolerant varieties and some of those becoming more and more available. There's quite a big difference between tolerant



varieties and resistant varieties, and I think we need to make sure that we keep that in the back of our minds. Although work is being done in that area, I think we need to do more. Certainly, as a variety is developed and evolved, a particular variety might be suitable to a particular part of the province and not necessarily suitable for other parts of the province. Over the years it takes many, many varieties that might be resistant to respond to the need of producers in the province of Alberta.

When we talk about the spread of diseases – and you did a great job when it comes to wind and rain and the movement of seed – probably one of the biggest movements of pests in the province of Alberta is through farm auction equipment and industrial activities. We might have a rig that's working in south-central Alberta somewhere, and overnight it packs its bags and ends up in Reno, Alberta, in the north, and is established there. There are no rules or regulations that stipulate that equipment must be washed or steamed down or cleaned. With some diseases there are, but with this particular disease there is none of those kinds of things.

When we look at the spread of diseases – and farm auctions occur all across western Canada. Farmers are quick to actually buy equipment. Some are very meticulous in terms of cleaning equipment before sale or before transport, but not everybody does that. So trash movement occurs that way as well. You know, it's certainly another big concern that has not been really identified in here.

If I go back to page 4 of the report, it does say here, "A 0.5 per cent tolerance level in seed, coupled with the use of [best management practices], is appropriate for areas where [Fusarium] is not established." I really have a hard time with that. Any level of disease is not appropriate for that. You know, I hate to use comparisons, but we went through a measles outbreak, and it was much less than .5 per cent, no doubt, of our total population. We would never accept a level where: well, there's only one or two in a population the size of the city of Edmonton, so it's okay. We go aggressively against it, and we do it. Yet the comment here is that a .5 per cent tolerance level in seed is appropriate, and I'm not so sure.

2:20

I spent my Saturday at Teepee Creek and in Fairview this weekend, in two very, very strong agricultural areas, and I got hammered on this the whole day. Farmers are scared. They are petrified that we would make it easier to have a disease in the province of Alberta. People are saying that we're dealing with food. It's our food that we're dealing with. Reminded again that AAMD and C was very adamant, opposed the resolutions that over – and those are representatives from all around the province that have turned down, I believe, a number of resolutions over the last couple of years to see any changes, and we need to keep that in mind. You know, they're the elected representatives on the local basis. They're the ones that have to face the music. They're the ones that will eventually have to deal with changes in all of this.

The other comment that I've got says that – and it seems opposite. That's, again, on page 4, section 4, the fourth paragraph. "Other problems that exist with zero tolerance will still exist with a 0.5 per cent tolerance level." It talks about, you know, farmers not being able to access new seed, farmers not being able to access new varieties, and then it ends up by saying: "which will put the Canadian wheat brand at risk on the global stage." I'm just wondering if the lack of varieties will do that or the opposite if we have more Fusarium, trying to export a Fusarium-infected grain. Which one will put the Canadian wheat brand at risk the most? I'm very concerned the disease will have a greater impact than

maybe a lack of variety out there. I guess we need to really think about this very, very carefully.

Thank you.

**The Chair:** Thank you for those comments, Mr. Goudreau.

Is there anyone else who cares to offer some comments or questions? On the phone lines, anybody with comments or questions?

Okay. Seeing none, I do want to thank, again, Dr. Massolin and Ms Leonard for your outstanding research. I think you did an excellent job of capturing our submissions and summarizing all of that information, and we're very much appreciative of your work.

Okay. Moving on, then, we'll move to a discussion of our Bill 201. Before we begin the discussion on Bill 201, I'd like to bring to the attention of the committee members that my office received four written submissions from stakeholders prior to the June 30 deadline. The assumption was that the copies had been sent to the committee services branch as well; however, it turns out that that was not the case. As a result, the four submissions have not been included in the research documents provided for the committee members.

I think that at this time I'll just turn it over to Dr. Massolin for some comments about this.

**Dr. Massolin:** This one I'll do myself for a change. Earn my keep.

**The Chair:** Okay.

**Dr. Massolin:** Yes. Thank you very much, Mr. Chair. As you indicated, there are four submissions here that just recently arrived in our office. So what I'll do, with your permission and for the benefit of the committee, is to just briefly summarize the essence or the salient points in the submissions.

Submission 9 is from the county of Barrhead No. 11. I'm quoting here an excerpt.

It is the opinion of both our Agricultural Service Board and our Council that a zero tolerance position on fusarium graminearum is not practical. The zero tolerance position to restrict the spread of the disease has not stopped the disease. Our farmers have low incidence of fusarium in their wheat and barley crops and the zero tolerance restricts cleaning their seed.

And this is in bold.

We ask that you and your fellow Members of the Legislative Assembly for the Province of Alberta support Private Members Bill 201, the Agricultural Pests (Fusarium Head Blight) Amendment Act, 2014.

Now for written submission 10 from the county of Forty Mile No. 8. I'm summarizing here, saying that their ag service board has been addressing the Fusarium graminearum issue for quite some time. And I'm quoting now.

The zero tolerance is now negatively affecting our seed growers as they are unable to produce certified seed and our producers are unable to source adequate seed. We feel that increasing the tolerance level based on the best available science will provide opportunity for seed growers to produce certified seed and will also allow for the development of resistant/tolerant varieties of cereals. The Fusarium Action Committee recently voted to increase the tolerance level in seed based on scientific review and we support this action as well.

Now for written submission 11 from Lethbridge county, and I'm quoting again.

We strongly support the amendment as it would not deem fusarium head blight a pest or nuisance unless it is found at a concentration of greater than 0.5% in any plant, seed, crop, vegetation or other matter.

This amendment would aid seed producers in the province by creating a tolerance level on seed that could be legally sold . . .

Lethbridge County feels that the proposed changes to the Agricultural Pest act will aid all producers in the Province to procure good viable seed for future crops.

Lastly, written submission 12, the municipal district of Taber. I'm summarizing here, saying that the council and the ag service board of the MD of Taber have been advocating actively for an amendment to the Agricultural Pests Act since 2004. Now I am quoting.

A provincial policy that declares a zero tolerance for a pest already present and which is impossible to eradicate is virtually unenforceable. It is impossible to legislate a fungal pathogen which overwinters in crop and grass residues on or in the soil and moves in the wind out of existence.

The M.D. of Taber has advocated that agricultural producers implement "Best Management Practices" for the management of the disease which include crop rotation, the planting of resistant cultivars, seed treatment, irrigation management and fungicide application at early flowering.

Thank you.

**The Chair:** Thank you very much for that, Dr. Massolin.

There was also an additional written submission received by – oh.

**Ms Calahasen:** Not on this issue, on just written submission.

**The Chair:** On written submission. Okay. Well, Pearl, I'll turn it to you right now.

**Ms Calahasen:** When I was reading the information and trying to figure out why some people were so against it and why some were so, what I would call, almost lackadaisical in terms of what should be allowed and shouldn't be allowed, the one thing that I found was that people are saying that it's a toxin, yet I don't see anything about the ingesting of this toxin in humans as well as animals and what the results would be if one was to ingest those toxins and what level is a harmful level. As a group of legislators are we willing to allow people to ingest toxins that could create harm to them? Why is it that we're so not into talking about that specific component of our food chain?

**The Chair:** Good questions, Ms Calahasen. We have had presentations that spoke . . .

**Ms Calahasen:** Unfortunately, I wasn't here.

**The Chair:** Yes. We understand. We have had some presentations that spoke to that and Alberta's strategy, if you will, for how to mitigate the toxins and the DON, that can affect the produce for both livestock consumption as well as human consumption.

Ms Leonard, do you care to comment?

**Ms Leonard:** Yeah. I was just going to say that that's more of a federal jurisdiction, legislating sort of food safety issues. So the Canadian Food Inspection Agency does set levels for the mycotoxin in both food for human consumption and animal feed. It's not legislated, but they're recommended levels. They're just basically suggestions. They're standards. I guess they're not technically enforceable.

**Mr. Goudreau:** I'm not sure about DON in food.

**Ms Calahasen:** Does anybody know?

**The Chair:** If I may, Ms Calahasen. During our submissions from our experts who spoke about what they're doing to monitor DON and the toxicity levels of DON, I believe the consensus we heard is that even at the present levels that we know Fusarium exists at in Alberta, there was more of a concern perhaps for the pork, less of a concern for the beef and the poultry. At the current levels, even at the levels which exist in places like Manitoba and Saskatchewan, there's not enough of a perceptible level of DON to adversely affect human consumption.

2:30

**Ms Calahasen:** Okay. At these places where they have Fusarium, have the levels changed in the last how many years that they've had this Fusarium graminearum for the ingestion of food? Do you know? Have they changed in any way, shape, or form? Have they gone up? Have they gone down?

**Ms Leonard:** Do you mean the permissible levels of mycotoxin in food?

**Ms Calahasen:** Yes.

**Ms Leonard:** I'm not sure. I can look into that for you.

**Ms Calahasen:** So we don't have that information in terms of – I'm just worried. Like, if we say that we're going to do this all across the province of Alberta, then all of a sudden we say, "This is okay," then the next thing we know, it's going to be .10 or whatever it is, and then it just continues to increase. I'm just wondering. What level is it that other jurisdictions have experienced where they would say, "No. Enough is enough, and we're not going to allow this to happen anymore. This is as far as we go"? Do we have any comparisons in that way at all?

**Ms Leonard:** I think part of the problem is that because the Fusarium and DON levels aren't necessarily directly correlated, it's very hard to compare, to draw any sorts of conclusions.

**Ms Calahasen:** Okay.

**The Chair:** What we did here, less so from the DON perspective but more from the Fusarium perspective: a jurisdiction like Manitoba had significant issues with Fusarium, but through promotion and utilization of the best practice – and our research has presented us with an exhaustive list of the best practices we discussed – they've actually been able to manage their Fusarium issue to the point where the DON issue is less of an issue.

**Ms Calahasen:** So nobody cares? Or it just stays static?

**The Chair:** I think it's fair to say, if my memory serves me well . . .

**Ms Calahasen:** I'm testing your memory. Sorry, Mr. Chair.

**The Chair:** The materials will show that even in jurisdictions such as Manitoba, where we know Fusarium exists at significantly higher levels than in Alberta, the incidence of DON is not so prevalent as to adversely affect human consumption.

Can I go to Ms Leonard? Did my memory serve me well in that capacity with that answer?

**Ms Leonard:** So the question essentially is: does the DON level stay at the same level if the Fusarium – sorry.

**The Chair:** The question that I heard Ms Calahasen ask was: even in jurisdictions where we know Fusarium exists at higher levels

than in Alberta, is there concern about the incidence of DON affecting human consumption?

**Ms Calahasen:** And does it increase in terms of: yeah, all of a sudden you have .5 now, and then the next thing you know, you have a 1.0 or whatever, you know?

**Ms Leonard:** The DON levels are in federal jurisdiction, so they apply across Canada equally.

**Ms Calahasen:** Okay. Thank you.

**The Chair:** Mr. Goudreau, further comment.

**Mr. Goudreau:** Mr. Chair, if I may, up till now we've been able to find enough clean seed or clean feed or clean supplies to blend, to stay below those levels and meet our export standards, our food standards, all of those kinds of things. But the lady in Manitoba who presented over the phone did indicate that in her small community even the feed mills could not find and source enough feed there without bringing a pile of feed in from outside because the levels got so high that there was nothing left to blend there, and I think we need to recognize that. Under a year of extreme severity there might be issues that will come up where we've surpassed all the acceptable levels with feed. Imagine that if in southern Alberta, from Calgary south, for instance, all the feed had extremely high levels. They'd be scrambling for feed somewhere to be able to blend to bring their levels down to a level that's suitable for livestock feed and, if it's high enough in DONs, then suitable for human consumption.

I think we need to keep that in mind. Up till now we blend, we mix, we improve. I can take a truckload of grain that's infected and mix it up with three truckloads that are clean, and I'm below the acceptable levels, and I meet all the standards. But the lady did mention that in her community one year they could not do that then because everything was so infected.

A couple of other comments. I think that MLA Calahasen is right. Once we reach the .5 per cent, if we choose to go there, then what? Where do we go from there? The same groups are going to be right back to us and say, "What are we going to do now?" in that way. Certainly, the presentations or the additional letters that were submitted – and I see that, you know, they're from municipalities that have lost their votes at the AAMD and C convention. They might have lost it at the ag service board level or even at the seed plant association levels. They're all a group of producers representing – as I indicated before, they're ratepayers, so they're coming back through this door here as another avenue. I see them having lost the vote down there, and now they're trying this process. I'm not sure who we're going to favour by doing any changes.

I'll close by indicating, you know, that we need to remember that there were, I believe, a few hundred seed producers in the province of Alberta, maybe as many as 700 producers, asking the rest of the population to accept their losses because they're having a harder time marketing seed. They want to make more money, and I commend them for that. It's the almighty buck, and that's extremely important, but they're going to pass on their cost to everybody else, all the other 40,000 farmers and the industry that has to deal with it. That's what I'm not willing to accept.

**The Chair:** Thank you for those comments, Mr. Goudreau and Ms Calahasen.

Is there anybody on the phone lines who cares to add further comment or perhaps a question at this point?

All right. Well, hearing none, I would like to let the committee know that there was an additional written submission received by the committee services branch on July 11, from Alberta Barley, which has been posted to the internal committee website. Would the committee like to accept the late submission? If so, it will be posted to the external committee site with the rest of the submissions. In order to accept that, we would need to see a motion in favour of accepting the late submission.

**Mr. Goudreau:** I'm prepared to move to accept.

**The Chair:** Okay. Then let it be shown, as moved by Hector Goudreau, that

the Standing Committee on Resource Stewardship accept the written submission from Alberta Barley received after the June 30, 2014, deadline for written submissions.

Thank you, Mr. Goudreau.

All in favour? Any objections?

**Dr. Brown:** Maybe we could poll the individuals on the phone. It would be nice to know if they're still there.

**The Chair:** For the sake of time rather than to have to deal with the phone, anybody on the phone object?

Hearing none, then . . .

**Dr. Brown:** Is there anybody in favour?

**The Chair:** Yes, we have six online. If we hear no objections, we are all good. I don't want to slow the meeting down by having to clumsily deal with our phone lines and trying to do a roll call. So that motion is carried. Thank you, all, very much.

As members are aware, Bill 201 has been referred to this committee under Standing Order 74.2 prior to having received second reading, which permits us a broad scope of review. The subject matter of the bill is before the committee, and the committee's role as set out in Standing Order 74.2 is to "report its observations, opinions and recommendations with respect to the Bill." Once we are ready to report to the Assembly, we will table a report recommending that the bill either proceed or not proceed. In either scenario the committee may include additional recommendations within its report. The House will then decide whether or not it concurs with the report tabled by our committee. If at the end of the report-writing stage members of the committee have dissenting opinions concerning the report's contents, minority reports are permitted and will be attached as appendices to the committee's report.

LAO research has prepared another document for us, which summarizes the views expressed by all of the stakeholders we've heard from today. They will take us through the document following any preliminary comments committee members would like to make concerning the report. Any questions or comments at this point from the floor?

2:40

**Dr. Brown:** Mr. Chairman, are we going to have further opportunities, then, for us to sit around and discuss some of the potential amendments or suggestions to go with the bill?

**The Chair:** Certainly, Dr. Brown. We'll have a working group, and I'm happy to meet with any of the committee members individually prior to the working group meeting. I'd be very happy to take feedback. Any specific comments at this point in time?

**Dr. Brown:** Well, I will make a few comments at this point. First of all, I think Mr. Goudreau makes a very compelling case with

respect to northern Alberta, where there are areas that this head blight is not prevalent. I know there are physical barriers to the spread of it up in that area. Last time I drove to Grande Prairie, I went through a lot of forest on the way, a lot of areas that weren't cropland. We also have prevailing winds from the north and west of the province. I think the opportunities, you know, to keep control of that up in that region are certainly much better than in other parts of the province. I can't see us impinging on those zero tolerance levels up in northern Alberta.

As far as the southern part of the province I think we should have some deference to the municipalities where those areas of prevalence are. We've heard from the experts with respect to the efficacy of best management practices, and we've also heard of the ineffectiveness of controlling it once it's been well established in an area. I think we need to have a program that recognizes that.

On a further note, I believe that as part of the recommendations on this thing we need to step up the testing and enforcement of seed that is produced with respect to the *Fusarium graminearum*. I think that people have to go into purchasing seed with their eyes wide open. I think that they're entitled to know whether or not they're planting infected seed in their crops. If they are in an area where there's intermediate prevalence of this thing, I think it's prudent for them to know and to have some reliance upon the fact that the seed has been tested. If they go into it with their eyes wide open and they choose to buy seed that has a certain level of infection, then they should know about that. I think testing and enforcement really needs to be stepped up, particularly for the northern part of the province. If we want to control this thing up there, we need our provincial regulators to step up to the plate and make sure that they do control the further spread of that head blight.

Those are my comments.

**The Chair:** Dr. Brown, thank you very much for those comments.

At this point is there anybody on the phone lines that would care to comment?

Okay. Hearing none, then, as stated, LAO research has prepared another document. At this point I'd like to ask Dr. Massolin and Ms Leonard to please guide us through the stakeholder views document that they've prepared for us.

**Dr. Massolin:** Mr. Chair, as you've indicated and Dr. Brown has also alluded, I think that the committee is at the stage where the deliberative process begins. What you have before you in this document, entitled Proposals from Stakeholders on Bill 201, is an encapsulation of the issues and the proposals put forward to this committee by stakeholders and experts both in oral and written form. It is organized according to the idea of what is necessary in terms of containing, reducing, and mitigating the spread of *Fusarium graminearum* in the province. It's organized according to that, and it's enumerated in terms of the proposals. They are listed in that second column.

**Mr. Goudreau:** Mr. Chair, if I may, I'm not aware that we've got that. What number would that be under the tabs here?

**Dr. Massolin:** We can get additional documents.

**Mr. Goudreau:** I don't have it.

**Ms Calahasen:** Just tell us which one it is.

**Dr. Massolin:** It's called Proposals from Stakeholders on Bill 201. It's a document that's basically a three-column chart.

**Ms Calahasen:** "Retain current legislation" is what it says?

**Dr. Massolin:** Yes. That is correct, yes.

Mr. Chair, as I was saying, it is up to the committee now to decide whether or not – I mean, I should back up a bit here and just indicate that this document attempts to summarize those issues and those proposals made to this committee during its review. Of course, the committee can go whatever way it wants in terms of following this direction, voting upon them or rejecting them, and coming up, of course, with its own recommendations. But this document is prepared in an attempt to guide the committee along in its deliberative process. We're at your will here in terms of leading the committee through the document, either in general terms or step by step if that's the committee's will. We'd like to hear what your direction is.

Thank you.

**The Chair:** You know, Dr. Massolin, I think at this point – again I want to compliment you and your staff on the quality of the document – that it would be most helpful for our committee to just have a general review of the proposal from stakeholders.

**Dr. Massolin:** We will do that. Thank you.

**The Chair:** Please. Thank you.

**Ms Leonard:** Okay. We've divided this up into five main issues and some associated proposals with each issue.

The first issue is to retain the current legislation. What this is is to maintain the zero tolerance approach that currently exists in the act. That's one proposal. The other proposal related to this is to ensure the success of zero tolerance by strict enforcement of the legislation. I won't go into too much detail about the comments from the stakeholders because this was all in the summary of submissions and presentations.

The next issue is to accept an increased tolerance limit. This includes stakeholders that proposed a .5 per cent limit, accepting Bill 201 as it is, but also those stakeholders that suggested that .5 per cent is too low and that perhaps a higher limit would be more appropriate. These were percentages ranging from 1 per cent – I think that some went up to even 10 per cent in areas where *Fusarium* is commonly found. In addition to those there were some sort of associated issues with raising the tolerance limit. There was one proposal to consider whether maybe different percentage levels were necessary depending on where *Fusarium* was found in the plant tissue, depending on whether it was in seeds or on the wheat heads, whether there should be a method of testing specified in the act to determine seed tolerance levels, and whether there should be a requirement introduced for mandatory seed testing.

Now, the third issue was the regional approach. This is the one that a number of stakeholders were in favour of, which was to introduce a regional approach to *Fusarium* management where tolerances vary according to *Fusarium* prevalence. There would be a different percentage for the north and then possibly for central or maybe for south depending on whether *Fusarium* was established or not. Related to that was proposal 10, which was to change the regulatory regime altogether to allow municipalities to determine their own approaches to dealing with *Fusarium* rather than having one imposed by the province.

The next issue was best management practices. This was really just sort of a general proposal to encourage the use of best management practices among producers as part of an integrated management strategy.

Finally, there were a few other sort of general issues. There was one to reclassify Fusarium as a nuisance rather than as a pest, to amend the definition of Fusarium head blight in the act and the regulation to include the other species of Fusarium, to develop an initiative to propagate resistant varieties so that there would be a Fusarium-free source of seed for such varieties, and to continue monitoring of the relationship between Fusarium and DON levels in grain just to ensure public safety. Oh, and one last one: any amendments to the act should be based on comprehensive economic and scientific research.

2:50

**The Chair:** Ms Leonard, thank you very much for that summary. I know that we had Dr. Brown make some comments that, I think, spoke very precisely to these recommendations.

At this point in time any further comments or questions in regard to this document? Ms Calahasen.

**Ms Calahasen:** Mr. Chair, thank you very much, first of all, for all the work that was done. I really appreciate that and the information that you've provided as well as the recommendations.

I come from northern Alberta, and I'm a chair of NADC. I know how strongly northern Alberta feels about any kind of Fusarium that could be coming into the north, and I know that they feel that just because it occurs somewhere else doesn't mean that we have to accept what other people do, that we should always look at the best possible. In northern Alberta we still have that ability to be able to say: we have no Fusarium there or as little as possible.

I don't know if you're wanting to go to the recommendations, but I really like recommendation 1, retain current legislation and make sure that the zero tolerance approach is going to be successful through enforcement of legislation and better enforcement, I would suggest. I also look at: best management practices still have to be done no matter what you do, whether or not you have agreed with whatever recommendation. Best management practices also have to be in there.

I would even suggest that we look at the last recommendation, which is 16 – amendments to the act “should be based on comprehensive economic and scientific research” – and look at what we have and what is going to be the Alberta approach in terms of those that do not have it and those that have it.

I'm a strong supporter of making sure that northern Alberta remains as Fusarium graminearum-free as possible.

**The Chair:** Ms Calahasen, thank you so much for those comments.

Any further comments from the floor? Any comments from the phone lines?

**Mr. Casey:** Just in relation to this, I'm not sure that we have something here where one size fits all for the province of Alberta, and I think that we heard that from a number of stakeholders. So zero per cent may in fact be a laudable goal for northern Alberta, and in fact with better enforcement and so on that may be achievable although many of the experts didn't feel that it would be in the long term; nevertheless, it seems possible there. But the truth is that in southern Alberta that's just not the case. I think that there needs to be some recognition of the reality of the situation that we have here today and that where we have Fusarium it's not going to be easily eradicated if ever, possibly. So to allow those producers to compete with their counterparts in Manitoba and Saskatchewan and other parts of North America, I think that we need to be able to work with those producers.

Zero per cent obviously hasn't worked. It obviously has not been enforced. We heard that over and over again, that it doesn't matter what the legislation is. Unless we have proper enforcement out there, it's not going to make any difference. But I think that if we have a number, whether .5 is the right number or not for those areas that already have Fusarium present, well, that's something that we can certainly debate or look to the experts for.

I think that we need to recognize the reality of the situation, and that's that parts of the province do have this disease; therefore, we need to be able to work with those producers. But in those areas of the province and in those areas in southern Alberta where it's not prevalent, we need to do absolutely everything possible to make sure that it's not introduced. I'm cautious about a one-size-fits-all, leaving-it-the-way-it-is kind of approach simply because leaving it the way it is hasn't worked. If this shows up in northern Alberta, leaving it at zero isn't going to make any difference because we've already found out that regardless of the legislation it's not going to be enforced.

I guess those are my comments.

**The Chair:** Mr. Casey, thank you very much for those comments.

If I'm not mistaken, I believe – Ms Johnson, do you have some questions, comments that you'd care to offer the committee?

**Ms L. Johnson:** No. I'm good, Mr. Chair. Thank you.

**The Chair:** Okay. Thank you.

**Dr. Brown:** Just to follow up on Mr. Casey's comments, he's quite rightly said that a number of the presenters said that there was no enforcement. One of the things that I suggested in my comments – and I agree with him that one size probably doesn't fit all for all parts of the province. I think that we ought to have some deference for the local authorities in recognizing, you know, what is appropriate for their area.

I think that in order to make sure, if we do go with a regional approach, that it does work, we have to step up the enforcement. By that I mean transporting seed grains that are not properly tested or that are going into a contraband area. There ought to be very, very high sanctions for somebody that does that. We heard how seeds are coming across from Saskatchewan. It's not compliant with the law as it is now, and if we do go with a regional approach, I think that we need to make sure that we step up the penalties and we have some random checks of people that are pulling seed into areas where there is no prevalence of this disease.

**The Chair:** Dr. Brown, thank you very much for those comments. Mr. Goudreau.

**Mr. Goudreau:** Well, thank you, Mr. Chair. I really appreciate all the comments. My involvement with the ag industry started in – well, I was born and raised on a farm. I became a professional agronomist in the early '70s. Over the years we've attempted to use provincial approaches and regional approaches. Using a regional approach certainly helps, but it only delays it. I can use cleavers as an example, you know, certainly a strong pest, a weed, that was in southern Alberta. We had regional approaches. We tried to inspect things. We tried to move it. It did delay it by a number of years, but eventually the whole Peace got infected with cleavers. Somehow somebody snuck it in, whether it came through whatever means. In one particular case it certainly came by a seed producer, who brought it up and couldn't care less about that.

I'm sensing that the regional approach is being supported by those who actually have it and by those who actually have no

dollars to lose by going to a regional approach. The people near the region that is infected are terribly afraid of a regional approach. The more you have it around you, the greater the chance of getting it. You know, we sort of say: okay; well, the line is going to be in Edmonton. But the higher the concentration, the more likely that it's going to breach that line.

I cannot support situations that – you know, Dr. Brown talks about enforcement, inspections, increased penalties. Municipalities really don't have a lot of resources – and we heard that a number of times – to be able to do that. It's a matter of time. Those levels are going to be breached unless as a province we are prepared as well to say to a municipality: if you don't enforce it municipally, it's going to cost you a pretty penny imposed by the province. I'm not sure that we're ready to go that way. I don't sense that will as a province either.

I'm very concerned about this whole thing. I still think that we're a little bit ahead of science.

You know, certainly the opportunity is there to develop not only resistant varieties but tolerant varieties. There is the ability maybe to invest in more fungicides, you know, those kinds of things.

3:00

I'm not sure how to deal with the situation. I really don't have the confidence that if we move it one step up to .5 per cent, five years from now we won't be in the same position, saying: please help us move it one more step higher.

**The Chair:** Well, Mr. Goudreau, again, thank you so very much for those comments.

To all our committee members who have made very pertinent comments today and who have listened to our expert stakeholders and have spent countless hours poring over the documentation and reports before us, I think, here we are, and herein lies our challenge in regard to our review of Bill 201.

You know, from our expert stakeholders, who have provided us testimony, to just even the four members of this committee who have provided comment on this issue, there is no apparent, clear, concise, absolute direction in terms of where we move, which is very much our challenge in looking at this bill. Nobody told us that this was going to be easy. That's why I'm very proud of this committee and the due diligence that we paid to this issue and grateful to our research staff for their outstanding work in providing us this information.

So, folks, here we are. You know, at this point I would like to suggest that we have a meeting of our working group, this committee's working group, later this week. The working group would build on all of the discussion and the comments that have been discussed here today and then would come back to the committee with a draft report and recommendations for discussion. I want to be very clear here. I'd like to remind members that any recommendations created at the working group level are absolutely subject to approval by this committee and all members of this committee.

**Dr. Brown:** The working group is . . .

**The Chair:** The working group is the chair, the deputy chair, and one representative from each of the parties. The PC representative is Mr. Young, Mr. Bilous represents NDP, and Ms Blakeman represents the Liberal Party.

**Dr. Brown:** Is Mr. Young on the line?

**The Chair:** Mr. Young initiated the conference.

Mr. Young, are you still with us?

**Dr. Brown:** Can I suggest that I participate in that working group? I can make a motion to that effect.

**The Chair:** Now, I'm going to defer here to our experts on such matters. I know that we had some discussion earlier about including some very key members of this committee in said discussions.

Dr. Massolin, I loathe to put you on the spot, but how would this transpire moving forward in terms of adding interested parties to our working group?

**Dr. Brown:** Well, I'm suggesting that if you want to make it balance between the parties, it's fine with me, but perhaps Mr. Young is less interested in the subject matter than I am. So I'm just suggesting that I would take his place.

**The Chair:** Protocol was that Mr. Young volunteered and was approved by our committee to be the representative of our party at an earlier meeting.

**Dr. Brown:** Well, I'm making a motion, so stick that in your hat.

**The Chair:** Well, I'd love to stick that in my hat, Dr. Brown.

I'm going to seek some advice from Dr. Massolin on this issue.

**Dr. Massolin:** Well, all I was going to say is what you said, and that is that the committee has already accepted Mr. Young on the working group, but I suppose the committee can make further decisions.

**Mr. Goudreau:** Can the committee expand?

**The Chair:** Dr. Massolin, if it's the will of the committee to – how would that work? Is there precedent for adding members to the working group?

**Ms Dean:** The principle of the working group is to have caucus representation, one rep per caucus, but it's certainly open to this committee to look at revising its representative for a particular caucus. So if Dr. Brown wants to make a motion, he can.

**The Chair:** Okay. Well, that being, if there are particular parties that wish to recalibrate, as it were, their members of the working group, I think we have an opportunity to do that right now. It's unfortunate that we've lost Mr. Young, but we have a motion before us from Dr. Brown.

**Dr. Brown:** Well, maybe we could have a brief adjournment, and we can get in touch with Mr. Young and see whether he still wants to do it.

**The Chair:** You know what? That is some sage advice.

If it's the will of the committee – and I think it's more than appropriate; we've been working hard for a little while here – we could take a quick five-minute break, a little recess, as it were. We can get in touch with Mr. Young, and I would encourage the other parties that are on the line to take this opportunity to review whom they have as representatives in the working group and also, if they so desire, recalibrate their members of our working group.

Mr. Young is back? Well, you know, we'll take a quick break. We'll have a recess. At the request of Mr. Goudreau, our recess will be a six-minute break, and we will resume this meeting promptly.

Those on the phone, if you care to hang up and rejoin us in six minutes, that would be greatly appreciated.

Thank you.

[The committee adjourned from 3:07 p.m. to 3:15 p.m.]

**The Chair:** Okay. Thank you all very much. I believe we have everybody back from our quick recess.

Mr. Young, do we have you on the phone? We'll give Mr. Young – it's the challenges of unmuting.

**Mr. Young:** Yes, you do. I'm on the phone.

**The Chair:** There you go. I bought you some time. Thank you very much.

We've been able to connect with Mr. Young. Given Dr. Brown's extreme interest and strong desire to partake in the working group . . .

**Mr. Young:** Unprecedented.

**The Chair:** Dare I say a gold standard, Dr. Brown with his enthusiasm.

Mr. Young, all jocularity aside, are you giving Dr. Brown permission to take your spot as the PC representative on our working group?

**Mr. Young:** I am. We had a conversation, and I would hate to hold back his enthusiasm.

**The Chair:** Well, we thank you very much for that. We thank also Dr. Brown for joining our working group.

I think that at this time it would also be prudent to just touch base with our members from the Wildrose caucus. Mr. Hale, our deputy chair, is the representative. Jason, are you still wishing to be the working group member for your caucus?

**Mr. Hale:** Yes, I can. I have talked to Ian Donovan, who also has an interest in it, depending on the date of the next meeting. That would be the biggest challenge.

**The Chair:** Okay. Well, with Mr. Hale as our deputy chair I think we'll – and I'm getting a little bit ahead of myself – have a working group meeting, hopefully, sometime this week, so perhaps we can work out those details, and we do look forward to working with you on our working group committee.

**Mr. Hale:** Yeah. I don't know if you want to discuss that after, but that's too short notice to book a meeting at the end of this week.

**The Chair:** Sure. Jason, we shall work out those details just once this meeting is over. We'll make sure it's convenient for all the working group members to participate.

**Mr. Hale:** Sure.

**The Chair:** Any of the other members of this committee representing their caucuses wish to change up their committee? I'm not certain we – it's an option at this time to have that discussion. We'll certainly let them know that that option is available to them.

Okay. Coming back to where we were before Dr. Brown presented us with that particular curveball, that I think we were able to make some contact with, we would need a draft motion to delegate the working group to work on those recommendations, that will be presented to this committee. Could I see somebody present that motion? Thank you very much.

Show that it be moved by Hector Goudreau that the working group of the Standing Committee on Resource Stewardship be delegated to prepare a draft committee report with recommendations for further review by the committee as a whole.

All in favour? Any objections? Hearing none, that motion is carried.

Moving along with our agenda items, that moves us to other business. Folks, is there anybody that has any items for discussion under other business? Okay.

Well, hearing no other business, we can move on, then, to the date of our next meeting. The committee clerk will contact committee members regarding a follow-up meeting, hopefully sometime next week. As discussed, we'll be contacting all members of the working group to have that follow-up meeting with the working group.

**Dr. Brown:** Motion to adjourn?

**The Chair:** Dr. Brown, in anticipation.

Would somebody like to move a motion to adjourn?

**Dr. Brown:** I will move that we adjourn.

**Ms L. Johnson:** I want to move.

**The Chair:** Oh. We have a contest. I believe that was Linda Johnson. We'll defer to our colleague. Show it moved by Linda Johnson that this meeting is adjourned. Thank you all so much.

Oh. I'm sorry. We need to vote on that. All in favour of adjourning the meeting? Any objections to adjourning this meeting? This meeting is adjourned. Thank you all so very much.

[The committee adjourned at 3:20 p.m.]







