CABI's regional consultations for Americas and Caribbean member countries

Delta Hotel - Ottawa, Ontario

September 12, 2018 (8:30 – 8:45)

Welcome Address

TALKING POINTS

- Good morning, bonjour à tous. I am Dr. Michèle Marcotte, Director of the Ottawa Research and Development Centre, Science and Technology Branch with the department of Agriculture and Agri-Food Canada. I am delighted to welcome you to Ottawa, the national capital of Canada, and open and host the 2018 CABI's regional consultation for Americas and Caribbean member countries.
- Early in January 2018, CABI contacted me to explore possibilities of Canada co-organizing the regional consultation here in Ottawa. It was a logical request to me, as:
 - o Canada has over 70 years of partnership with CABI, providing access to overseas infrastructure, scientific expertise and networks (e.g. China, Switzerland, and the UK) to AAFC and Canadian researchers.
 - o Participation in international science bodies like CABI allows member countries to work together to generate new science and to facilitate the exchange of bio-control organisms in order for each member country to more effectively combat pests, diseases and invasive alien species like weeds.

- I would like to especially highlight CABI's role in Canadian efforts targeting invasive insect pests and weeds, such as:
 - assessing feasibility of biological control agents through field and literature surveys to explore for possible biological control agents;
 - o discovering potential biological control agents through field collections, setting up rearing colonies, determining the biology/life history of agents; and,
 - o selecting and assessing suitable agents (host-specificity testing for safety) and evaluate potential for damage.
- AAFC and CABI have also joined their efforts to improve protocols for regulation of exotic biological control with a major focus on risk assessment for classical biological control agents.
- Such contribution from CABI is essential to Canada's agricultural sector. Invasive alien species are a real threat to Canadian agriculture as:
 - o Increasing global trade facilitates the movement of organisms to regions where they may establish and exponentially increase in numbers; and,
 - o Fewer new pesticides are being registered and older products are being removed from markets.
- Invasive alien species are estimated to cost the Canadian agriculture \$6.7 billion (estimates range from \$5.3-\$13.9 billion) per year and that the eastern Palaearctic region, mainly China and Japan, is the origin of 15% of invasive plants to Canada. Two major agricultural pests arrived in Canada from this region: Spotted Wing Drosophila in 2009 and Brown Marmorated Stink Bug in 2010.

- There is a high potential for an increasing amount of problematic pests to arrive in Canada, especially under climate change, reinforcing the need for the type of collaboration between countries that CABI is enabling, notably in the area of biological control.
- Biological Control is key to protecting the food supply. Introduction
 of natural enemies from the area of origin provides a reduced risk
 solution to manage pest populations. Just recently (June 2018), a
 committee of Deputy Ministers of each science-based departments
 and agencies identified the issue of Invasive Alien Species and their
 control as a priority, and the need for more research.
- Developing biological control agents for invasive alien species is a long term investment, greatly benefiting from information sharing between country of origin and the country of introduction.
- CABI and AAFC scientists made a major contribution to development of new testing methodology/international guidelines and there is ongoing testing to validate guidelines through practice.
 I believe that you will hear about some of this work in the next several days.

National and International Collaboration

- Canada is active in a number of national and international forum in order to tackle the threat caused by invasive species and Climate Change to agriculture.
- AAFC values such opportunities in order to: 1) enable efficient development of new biological control agents for new invasive

alien species problems; 2) improve understanding of biodiversity; and 3) strengthen scientific and ultimately trade partnerships.

- Some examples at the national level include:
 - o Canada's interactions with Mexico and the United States through the North American Plant Protection Biological Control Expert Group, consulting with them on the potential benefits and risks of a biological control agent;
 - AAFC's engagement in the National Invasive Alien Species
 Strategy for Canada with other federal partners (CFIA,
 ECCC, NRCan CFS, Invasive Species Councils);
 - Collaboration to support CFIA's plant health strategy (under the Plant Protection Act).
 - O Collaboration under the NRCan-CFS newly released forest pest management strategy. (It is worth pointing out that in the early days, CABI's work with Canada involved studying forest pests. The emphasis has gradually shifted and CABI is now studying agricultural pests and weeds almost exclusively.)
- Internally at AAFC, we have a long standing and strong capacity to develop new biological control agents. We are also preparing for the future, with a number of researchers newly hired at AAFC with training and experience in biological control, and a number of projects developed and implemented in collaborations with universities and provincial agriculture departments.
- Maintaining such a capacity enables AAFC-STB to support a large national science program on the development of biological control

agents (BCA) as mitigation strategies to control invasive alien species (plants, insects, fungi, bacteria, and viruses). AAFC supports proper planning and implementation of biological control programs and provides substantial initial investment for exploration, risk analysis and quarantine facilities as well as sustainable long-term funding to support mass rearing and redistribution of biological agents and post-release monitoring and surveillance.

- AAFC also led an interdepartmental shared priority project on Quarantine and Invasive Alien Species through the Genomic Research and Development Initiative from 2011-2016. This project involved 29 scientists and their teams departments/agencies and 285 collaborators. It developed faster and more accurate ways to detect, identify and trace the origin of quarantine and invasive species. These species have the potential to cause millions of dollars in economic losses and irreversible environmental damage. The project's innovative DNA extraction protocols and extensive reference database of DNA barcodes improve regulatory/policy decisions to secure access to global markets and ease the regulatory burden for Canadian producers.
- This type of work supports a number of international policy drivers, such as:
 - Convention on Biological Diversity: recently (December 2017),
 Canada participated to the Expert Workshop on Invasive Alien
 Species. Progress was made during that event on the North
 American Plant Protection Organization's Regional Standards
 for Phytosanitary Measures;
 - The Food and Agriculture Organization (FAO): The FAO promotes IPM as the preferred approach to crop protection,

- considering it as a "pillar of both sustainable intensification of crop production and pesticide risk reduction".
- O The FAO's Commission on Genetic Resources for Food and Agriculture recently adopted the Intergovernmental Working Group on micro-organisms and invertebrates (biological control agents, pollinators, etc.)
- Overall, Canada's and the international science and policy communities are engaged in tackling environmental issues of priority to the agricultural sector, such as invasive alien species. This is good.
- However, while progress is being made, there are a number of remaining and/or emerging challenges impeding Canada and other countries' ability to more fully address invasive alien species, such as:
 - o Increasing regulatory requirements, including asynchronous policies (risk assessment) between countries, delays in obtaining export/import permissions for living specimens, lack of available taxonomic information from some source regions, access and benefit sharing requirements.
- CABI has a key role to play in finding solutions to such challenges, notably as it relates to Access and Benefit Sharing dealing with the BCA and IAS. In that context, AAFC will continue to work closely with CABI in order to connect the players internationally so that this specific issue can be dealt in a comprehensive manner and in harmonization with current existing systems of material exchange such as the Nagoya Protocol and the Multilateral System of the

International Treaty on Plant Genetic Resources for Food and Agriculture.

- It is my expectation that this forum will be able to provide a forum of discussion but also allow for exploring solutions with respect to exchange of material.
- Thank you very much in advance for your contribution throughout the next few days. I am looking forward to the outcomes of the regional consultation.