20\_TC-RPPO\_2016\_IYPH proposal on transboundary pests-EN

Agenda item 6.9

**PROPOSAL FOR PARTNERSHIPS WITH CGIAR CENTERS IN SUPPORT OF THE IPPC’S INITIATIVE ON THE INTERNATIONAL YEAR OF PLANT HEALTH**

**BACKGROUND**

Transboundary pests threaten food and economic security in virtually every region of the world. The International Plant Protection Convention’s primary mission is to prevent the introduction and spread of pests – as such, transboundary pests that threaten global production of food staple crops and economic stability are a key issue that require unified global action.

The International Year of Plant Health is a prime opportunity to call attention to the global threat of transboundary pests. Further, it is an opportunity to have a call for action at all levels – nationally, regionally and globally to prevent introduction and spread of key pests that have the potential to devastate vulnerable populations through loss of food and income.

This proposal focuses on activities that can be undertaken to promote and support the IPPC’s International Year of Plant Health. The approach of this proposal is to work at a regional level through the RPPOs whose actions taken together will have global impacts.

**ORGANIZATIONS – RPPOs and CGIAR Centers**

We note that the Regional Plant Protection Organizations (RPPOs) are positioned to liaise within their regions with the NPPOs of their member countries – but they are also in the position to liaise with other regional and international organizations to achieve common goals. Within each region there are other organizations involved in promoting food security through the production of food staple crops. For instance, the Consultative Group on International Agriculture Research (CGIAR) includes 15 centers that address production of major crops. These crops include rice, maize, potato, cassava, banana and plantain, wheat and other crops that are produced throughout the world. Examples of centers that deal with major food staple crops include International Potato Center (CIP), International Maize and Wheat Improvement Center (CIMMYT), International Rice Research Institute (IRRI), Bioversity International and others.

Like the IPPC, one of the main goals of the CGIAR system and CGIAR centers is to promote food security. One of the key missions of the CGIAR centers is the improvement of major food staple crops “to increase productivity, resilience to stress, nutritional value and efficiency of resource use” (CGIAR website). Activities related to crop improvement include plant breeding for certain characteristics and the preservation and movement of germplasm.

The work of these centers clearly intersects with the aims of the IPPC in at least two major areas of work: promoting options for preventing the introduction and spread of pests through crop improvement and promoting the safe movement of germplasm so as not to spread pests. Further, both the IPPC and CGIAR centers are presented with similar challenges from the impacts of major transboundary pests.

Potato blight, Panama disease, Wheat stem rust “Ug99” and other transboundary pests present major challenges – for crop improvement and breeding resistance, as well as for preventing their introduction and spread to new places. Partnership between the CGIAR centers working on key crops and the IPPC (and RPPOs) would benefit countries, producers, consumers and the organizations themselves.

**PROPOSAL:**

The International Year of Plant Health being planned by the IPPC is an opportunity to promote the importance of protecting plant health, particularly with regard to food and economic security. We propose that RPPOs could take the lead in liaising with relevant CGIAR centers in their regions, or that are working on crops that are of importance to their region. The purpose of forming such liaisons would be to:

* Establish closer ties with key researchers working on a food staple crop important to their region
* Promote IPPC principles, including preventing the entry and spread of pests among institutions involved in crop improvement and the movement of germplasm
* Promote the development of crop varieties important to their region that are resistant to major transboundary pests
* Exchange information for the major crop related to protecting plant health
* Promoting retention and safe movement of germplasm where appropriate
* Jointly communicate on the importance of crop improvement and plant protection in relation to major transboundary diseases and their impacts on food and economic security.

**A CASE STUDY – THE DEVASTATION OF PANAMA DISEASE OF BANANA**

According to Bioversity International (Bioversityinternational.org) banana is one of the most important staple food crops throughout the developing countries of the tropics and subtropics, providing a source of income, food and nutrition for more than 400 million people. Panama disease, caused by *Fusarium oxysporum* f. sp. *cubense* is one of the most important transboundary pests that affects banana production globally. Until recently, the Cavendish variety of banana was the most widely grown variety because it was resistant to the disease. 17 million tons of bananas are exported globally and almost half of all bananas grown worldwide are the Cavendish variety. However, the pathogen has evolved over time and the Cavendish variety is now susceptible to Panama disease.

The potential loss of the Cavendish variety, with no replacement on hand, has a double impact – through loss of food and loss of income for vulnerable populations. Over 10,000 hectares of banana have already been lost to the new strain of Fusarium.

Countries within the [Organismo Internacional Regional de Sanidad Agropecuaria](http://www.icdf.org.tw/ct.asp?xItem=12478&ctNode=29883&mp=2) (OIRSA) region (the Central American RPPO) do not have the strain of Fusarium that attacks the Cavendish variety of banana. Timely and comprehensive action is needed in the region, and by the region’s neighbors the North American Plant Protection Organization (NAPPO), Comunidad Andina (CAN) and [Comite Regional de Sanidad Vegetal del Cono Sur](https://www.ippc.int/en/partners/regional-plant-protection-organizations/cosave/) (COSAVE) to prevent introduction of the deadly strain of Fusarium. At the same time, efforts are needed to conserve, develop and promote varieties of banana that are able to withstand the disease.

**A CALL TO ACTION – WORKING IN PARTNERSHIP TO RAISE AWARENESS AND MITIGATE THE DAMAGE**

We propose that the RPPO OIRSA, in partnership with the RPPOs of the Americas NAPPO, COSAVE and CAN establish linkages with Bioversity International, the International Network for the Improvement of Banana and Plantain (INIBAP) and the Banana Research and Development Network for Latin America and the Caribbean (MUSALAC) with a goal of working in partnership on Panama Disease of banana. The purpose of partnering these organizations would be to promote the timely exchange of information between researchers, scientists and regulators within the region on measures to prevent the spread of Panama disease, as well as options for mitigating the damage through the development of tolerant crop varieties. We believe that urgent and cohesive action is needed between all of these organizations to stop the devastation that will occur if Panama disease is introduced into the OIRSA region. Furthermore, the neighboring RPPOs (COSAVE, NAPPO, CAN) must join in this partnership to ensure success.

**SPECIFIC ACTIONS – ROADMAP FOR PARTNERSHIPS**

We propose the following specific actions to initiate cooperation on Panama Disease of banana working through the RPPOs:

1. The RPPOs OIRSA, NAPPO, CAN and COSAVE work together to jointly contact Bioversity International, INIBAP and MUSALAC to inform these three organizations of the International Year of Plant Health Initiative
2. The four RPPOs inform the CGIAR organizations of our mutual concerns regarding Panama Disease of banana
3. The four RPPOs discuss areas of mutual interest with the CGIAR with regard to Panama Disease, specifically:
   1. Concerns about the introduction and spread of Panama Disease in the OIRSA region
   2. Actions being taken to prevent the entry and spread of Panama Disease by OIRSA countries, as well as actions being taken by NAPPO, CAN and COSAVE countries for prevention or control
   3. Actions being taken by the CGIAR centers involved with banana work to develop banana varieties tolerant to Panama disease
   4. Actions being taken by the CGIAR centers for the safe movement of banana germplasm, as well as conservation and promotion of banana germplasm for the purpose of developing banana varieties that are tolerant to Panama disease
   5. Identify areas of mutual action going forward in support of promoting awareness of this important transboundary disease
4. The RPPOs report back through the TC of RPPOs and to IPPC on this initiative to determine if it can be expanded to other food staple crops, RPPOs and CGIAR centers.