Concept Paper:
International Research Collaboration to Tackle Transboundary Plant Pests causing serious damage globally

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Damage caused by plant pests is responsible for loss of 20 - 40 % of global food production.

**Introduction**

- Climate change
- Global warming
- Globalized movement of people and goods

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**Increasing threat of transboundary plant pests**

- Fall armyworm
- *Schistocerca gregaria*
- Wheat blast
- *Xylella fastidiosa*

**The latest information**

**Early detection**

**Prompt actions for control**
Collecting and sharing information on pest occurrence

Once pests are established, their eradication is difficult and it requires a significant effort to control them.

Necessary to collect timely information on pest occurrence, spread or outbreaks to take prompt and early actions to prevent.

IPPC put Global Phytosanitary Research Coordination and establishment of network of diagnostic laboratory services among its priority areas under new IPPC Strategic Framework.
Monitoring technologies in the countries of pest occurrence

Occurrence → Outbreak → Spread → Monitoring → Control

Developing countries have insufficient monitoring technologies.

G20 member countries have useful technologies and valuable information for monitoring pests:
- e.g. to forecast migration of flying pests,
- to monitor insecticide resistance,
- databases of pests.

Beneficial for all countries to increase their collaboration to reduce costs and increase response capacities.
Prompt actions to prevent the spread of pests and promote appropriate measures for their control

Newly emerging pests
- e.g. break down of resistant varieties, resistant to previously effective agrochemicals

Necessary to promote research cooperation with countries of pest prevalence
Proposed actions for international research collaboration at G20 MACS 2019

• Hold a workshop to share experience and the latest information, and to facilitate research collaboration in Japan in 2019.

• Encourage core diagnostic laboratories and research institutes to establish networks, and other voluntary interactions.

• Promote research cooperation among interested members on some targeted transboundary plant pests.

• Strengthen collaboration with relevant international organizations and networks.