Tizon Latino: present and future

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Euroblight Workshop, York, UK, May 12 to 15, 2019
Topics

• III Tizon Latino meeting
• Fontagro project
• Future work
Tizon Latino Network

- III Workshop was performed at Cuzco, Perú, on May 27, 2018. (Together with the World Potato Congress)

- The objective of this workshop was to share knowledge and advances on Late blight in Solanum in Latin America, to show the actions of the network and discuss how continue to strengthen our cooperation.

- One day work
- 12 oral presentations
- 46 registered participants
- 8 different countries
Presentations and abstract were published as proceeding:


- Revista ALAP
- Web page: https://tizonlatino.github.io/
Main topics

• Pathogen genotyping and phenotyping (Argentina, Brasil, Colombia, Chile, Peru)
  – 2_A1 : Seed trade?
• Breeding for late blight, heat resistance and dryness (Perú, Bolivia, Chile).
• IPM, forecasting and chemical management (Argentina, Bolivia, Chile, Perú, Colombia).
  – Wheather data information
  – Small stakeholder farmers
• Biocontrol (Chile)
• Plant resistance inductor (Perú).
Main agreements

• To publish the memories of the event in a separate document, on the website of the Latin blight network.

• To share the protocols used in each laboratory, to be published on the website of the Latin blight network.

• To share protocols for fungicide evaluation that are used in each country. At least two countries in Latinoamérica will use homogenized protocols.

• To submit a proposal to carry out monitoring and characterization of the pathogen populations.

• To share data bases of the pathogen in standardized protocolos between the members of the network of Latin blight.

• To update the list of participants in the network, unifying the data base of the 3 workshops.

• To have annual meetings for better coordination of actions to perform. It is proposed to do satellite meetings along with other associations (ALF, APS Caribe, FONTAGRO). (Chile 2019, México, 2020)
## Program - Workshop Session "I": Late Blight Global Challenge

**Chair:** Ph.D. Ivette Acuña. National Institute of Agricultural Research. INIA Chile. Tison Latino network.  
**Co-chair:** Ph.D. Jorge Andrade. International Potato Center. CIP.  
Wednesday, May 30th, 2018  
Cusco Convention Center: Ollantaytambo Room  

<table>
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<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
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<tr>
<td>08:20 - 09:00</td>
<td><em>Phytophthora infestans</em> populations and global database development</td>
<td>Dr. David Cooke. The James Hutton Institute, Scotland, UK.</td>
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<td>09:00 - 09:40</td>
<td>Best agricultural practices and management of Late Blight.</td>
<td>Dr. Huub Schepers. Wageningen University, The Netherlands.</td>
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<td>09:40 - 10:00</td>
<td><strong>Coffee Break</strong></td>
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<td>10:00 - 10:15</td>
<td><em>Phytophthora</em> characterization and new species</td>
<td>Dr. Florencia Lucca. National Institute of Agricultural Technology. INTA Argentina.</td>
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<td>10:15 - 10:30</td>
<td>Late blight management and host resistance</td>
<td>Dr. Jorge Andrade. International Potato Center. CIP.</td>
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<td>10:30 - 10:45</td>
<td>Implementation of early warning systems for Late Blight in Latin America</td>
<td>Dr. Ivette Acuña. National Institute of Agricultural Research. INIA-Chile.</td>
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<td>10:45 - 11:10</td>
<td>Discussion</td>
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Fontagro Project:
Late blight DSS as a tool to climate change adaptation
ATN/RF 16678-RG

- Main objective: To implement an early warning system as a decision support tool in small scale farming in the participating countries, for a preventive and sustainable management of the disease, as an adaptation to the variability of climate change.
- Oct 2018- dic 2021
- US$300.000
- Participants: Argentina, Chile, Ecuador, Panama.
Goals

- To form a network of specialists in potato late blight in Latin America.
- To validate and implement a system of early warning to LB in the countries members of the platform, according to the technology available, capable of reducing the losses caused by this disease.
- To develop an early warning system, based on weather and seasonal forecast at 3 months to support decision-makers (El Niño–Southern Oscillation (ENSO)).
- To implement a monitoring system of the causal agent in LA, to determine population dynamic and genetic flow.
- To train members of the potato productive chain, especially small stakeholders, in the implementation of IPM and BAP techniques, based on the use of early warning.
Progress of the project

- Survey to detect knowledge base line (advisers and farmers).
- Workshop in Chiloé Island, Chile (Researchers, advisers)
- Workshop: Monitoring of Pi and use FTA cards.
- Workshop: Fungicide application (farmers).
- Workshop: Use of Warning system DSS-HH
- Experimental plot to validate DSS: Phytoalert (Argentina), Tizon INIA (Chile), DSS-HH (Ecuador and Panamá).
Future work

• Seek funding to support Tizon latino, research and technology transfer in LA.

• Integrate others LA countries in Pi monitoring: Pi map (Today: Argentina, Brasil, Chile, Colombia, Ecuador, Mexico, Panama, Peru).

• New fungicide evaluation in LA: standarized protocols, define base line (EC50), have an early detection of polulation dynamic (ex: oxathiapiproline).

• DSS and ENSO phenomena: Lower the risk of climate viariability.

• Resistance varieties: Landraces and wild solanaceas.

• Transfer technology: New techniques to disseminate knowledge.
¡¡¡¡Thank you!!!!

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