Agriculture and Agri-Food Canada | Agriculture et Agroalimentaire Canada

Canada

NORGEN Taskforce on Genetic Resources in 2015

PROCINORTE

Axel Diederichsen

Plant Gene Resources of Canada, Saskatoon Research Centre

Country Representatives

- Country Representatives are:
  - (1) Mexico: Dr. Jose Fernando De La Torre Sanchez, Director, Centro Nacional de Resources Geneticos, Instituto Nacional de Investigaciones Forestales, Agricolas y Pecuarias, Tepatitlan, Jalisco, Mexico
  - (2) USA: Dr. Peter Bretting, National Program Leader, United States Department of Agriculture, Washington DC, USA; and
  - (3) Canada: Dr. Axel Diederichsen, Plant Genetic Resources of Canada, Agriculture and Agri-Food Canada, Saskatoon, Canada

Activities in 2015

- The 2015 budget was used to ensure participation of key representatives of the countries at important meetings with the objective to enhance synergies between the genetics resources programmes in the three countries.

Genebank Manager Meeting in Mexico in September

- The Genebank Manager Meeting for North America, Central America and Caribbean countries at Tepatitlán de Morelos, Jalisco, México on 7-10 September 2015, was attended for Canada by Dr. Brad Fraleigh. AAFC Funding was used for this travel. Funding from IICA was used for supporting the meeting.
- 63 participants from 13 countries attended.

10º SIRGEALC Meeting, Brazil

- October 26-29, 10º Simpósio de Recursos Genéticos para a América Latina e o Caribe
- PROCINOTRE supported attendance of:
  - Dr. Harvey Blackburn, USA
  - Dr. C. Davidson, Canada
  - Dr. F. De La Torre Sanchez, Mexico

The integration of genetic resources activities in all of the Americas may need more attention.

Teleconferences of NORGEN Taskforce in 2015

- May 14: Review and planning for 2015
- September 15: Report from Meeting in Mexico
- November 19: First nations and agrobiodiversity (2 hour video-conference and discussion)

Photo:
Maize, garden bean and squash – In Ukraine, 2005)

Objectives of the Three Sisters Project

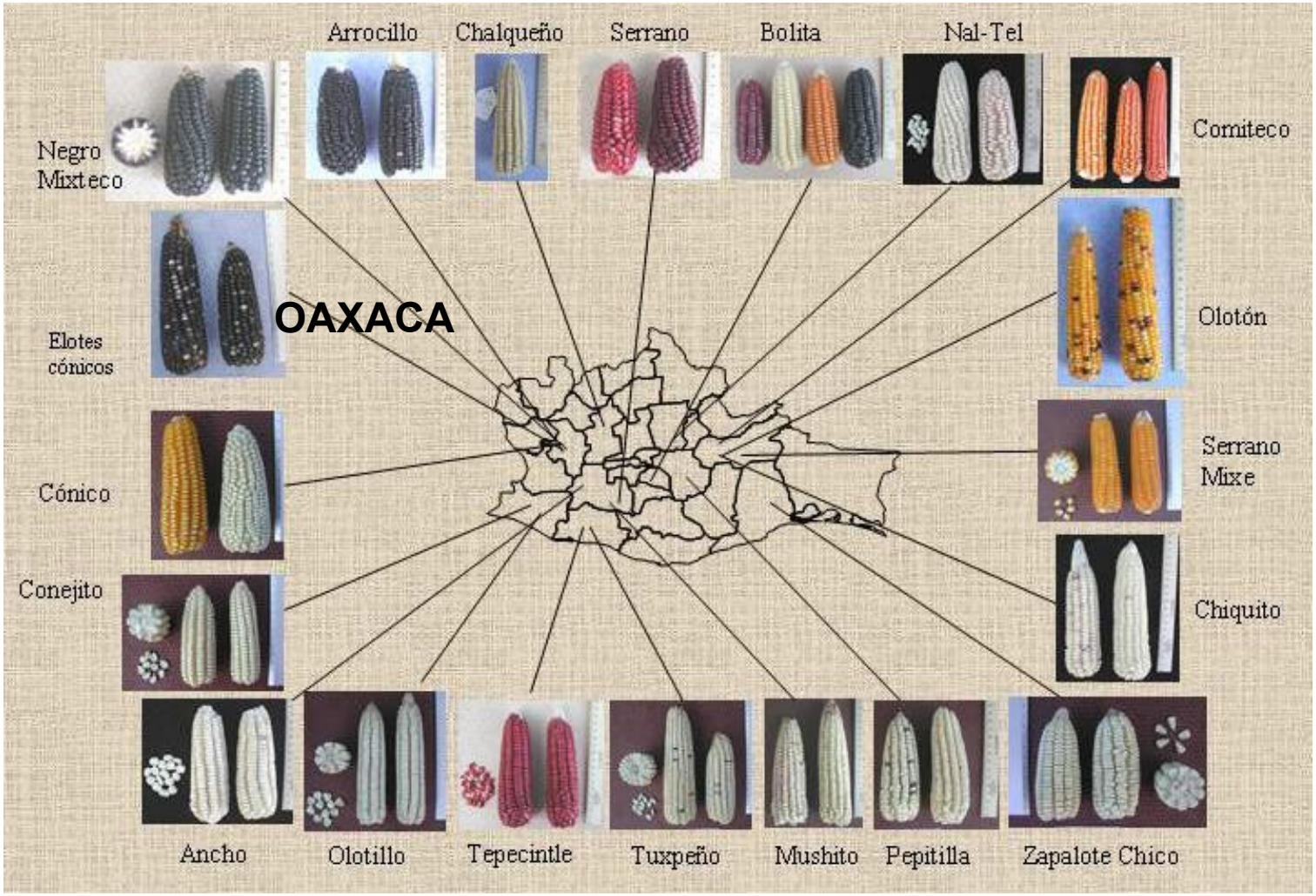
- Long-term objective: Development of a value chain based on the Three Sisters.

- To do so:
  - Acquire knowledge about the ancestral species and varieties preserved in Aboriginal communities
  - Study their characteristics in relation to the processing methods and end products desired
  - Study the feasibility of developing modern crop models for the Three Sisters

Text by Dr. T. Burelli, AAFC, Project lead: Dr. S. Villeneuve, AAFC

On farm conservation and utilization of genetic resources still very active in Mexico

Landraces of maize from State Oxaca, SW Mexico (source: F. Aragon, INIFAP, presentation Nov. 19, 2015)



From presentation by P. Bretting and K. Williams, Nov. 19, 2015:

Native American Traditional Crops

- As Native American cultures change, traditional crop varieties may be lost.
- Likewise, key information about the use and properties of these traditional materials may disappear. Once lost, cultural and genetic information may be irretrievable.

Areas for cooperation

The situation regarding genetic resources and national memberships in international agreements treaties

	USA	Mexico	Canada
CBD	no	yes	yes
International Treaty	no	no	yes
CBD Nagoya Protocol	no	yes	no

Communication is important to make things work.

Common interests include:
-Agrobiodiversity and First Nations
-GRIN Global
-Efficiency and effectiveness of *ex situ* germplasm conservation

NORGEN Workplan and Budget for 2016

ACTIVITY	EXCEPTED RESULT	DATE COMPLETED	RESPONSIBLE	Budget requested from PROCINORTE	Approx. Budget requested from INIFAP, AAFC, ARS/USDA (In-Kind)
Attending USDA Plant Germplasm Operating Committee Meeting at Fort Collins, CO, June 13-17, 2016	Enhanced cooperation among Mexico, US and Canada in ex situ conservation	July, 2016	P. Bretting, A. Diederichsen	$ 6,000: Two participants from Mexico	AAFC: $ 6,000, two participants from AAFC, Canada. USDA: $ 6000, Hosting meeting (in kind contribution for travel of US participant and meeting costs)
Proposed: Two day Workshop on First Nations and Agrobiodiversity, November 2016	Enhanced complementarity between ex situ and in situ/on farm conservation	November, 2016	A. Diederichsen	$ 10,000: Travel costs for three participants	AAFC/USDA/INIFAP: $ 6000. kind contribution for meeting and travel costs from hosting country.
Molecular characterization of bean germplasm collected in 2006 in Mexico	Diversity assessment	November 2016	F. De La Torre Sanchez	$ 2,000 for material	INIFAP: $ 5,000 in kind for laboratory costs AAFC : Advice by Dr. Y.-B. Fu
Total				**18,000**	**17,000**

Flexibility required

- We discussed travel to Mexico. This is presently very restricted for USDA employees
- An activity on GRIN Global which will be implemented by the USDA shortly might be considered also for the Taskforce.