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Agri-Food Canada

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Canada



PROCINORTE/NORGEN Task Force on Genetic Resources in 2017

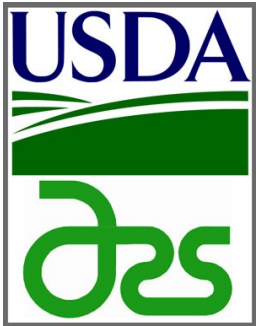


Axel Diederichsen

Plant Gene Resources of Canada, Saskatoon Research and Development Centre

Country Representatives

- Country Representatives are:
 - (1) **Mexico**: Dr. Jose Fernando De La Torre Sanchez, Director, Centro Nacional de Recursos 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, Agricultural Research Service, Beltsville, MD, USA
 - (3) **Canada**: Dr. Axel Diederichsen, Plant Genetic Resources of Canada, Agriculture and Agri-Food Canada, Saskatoon, Canada (Task Force Chair)



Task Force Meetings in 2017

- **February 23:** Virtual meeting of NORGEN
- **March 17:** Virtual meeting of all PROCINORTE Task Force leaders with Secretary
- **May 15:** Virtual meeting of NORGEN
- **September 22:** Virtual meeting of AAFC Taskforce Leaders and AAFC Science and Technology Branch International Engagement Group
- **September 27:** NORGEN in person meeting in Québec City, Canada (P. Bretting participated remotely); guests: A. Galvez (Mexico), S. Gariepy (AAFC), G. Parent and E. Buist (Laval University) and four graduate students from Mexico



- **October 4:** Virtual meeting of NORGEN

Activities in 2017

- The Task Force budget allocated for 2017 was US \$ 15,000.
- The budget was used to support participation of key representatives of the countries at relevant meetings with the objectives of exchanging information and experiences, and enhancing synergies between the genetic resources programmes in the three countries.

Activity 1: Participation in Symposium “Food Security and Nutrition in the Age of Climate Change” Québec City, September 24-27, 2017

- **Organizers:** Government of Québec and the Food and Agriculture Organization of the United Nations (FAO)
- **Participation facilitated by University of Laval** (Dr. Geneviève Parent, Legal Chair in Food Diversity and Security)
- **Two speakers in plenary session:** “The Preservation of Natural Resources and genetic material: A key element in the fight against climate change”
 - José Fernando De La Torre Sánchez (The Milpa System)
 - Axel Diederichsen (Genetic Diversity for Food Security)
- **Additional Speakers identified from prior NORGEN activities:**
 - Terrylynn Brant (First Nations Seed Keeper)
 - Stéphane Gariepy (The Three Sisters Project AAFC)
- **Results/impact:**
 - Complementarity of on-farm and ex situ conservation emphasized
 - Reaching an international audience of about 220 participants



Activity 2: 11^o SIRGEALC Symposium - Guadalajara, Mexico and Three Sisters/"La Milpa" side Event

- **Organizers:** Dr. Jose Fernando De La Torre Sanchez and colleagues at Centro Nacional de Recursos Geneticos, INIFAP
- **Participants:** About 400 participants, mostly Latin America and Caribbean
- **Side Event:** Included Local Farmers and First Nations from Canada and Mexico



Activity 3: Animal GRIN Database implemented at Centro Nacional de Recursos Genéticos, Mexico

- **Background:** Training at National Laboratory for Genetic Resource Preservation, USDA/ARS, Fort Collins, US, of three Mexican participants (October 24-28, 2016, H.D. Blackburn)
- **Participants:** Three attendees from Mexico supported by NORGEN
- **Impact:** Information systems for national animal genetic resources collections of USA, Canada, Brazil and Mexico will be compatible. The CNRG has placed animal genetic resources data online.

Activity 4: Molecular Characterization of Bean Germplasm Collected in 2006 in Mexico

- This activity is conducted as an in-kind contribution at the Centro Nacional de Recursos Geneticos, Instituto Nacional de Investigaciones Forestales, Agricolas y Pecuarias, Tepatitlan, Jalisco, Mexico.
- Results/Impact: Besides the material collected in 2006 with support by NORGEN other *Phaseolus* material repatriated to Mexico from the International Centre for Tropical Agriculture (CIAT) was included (total about 400 accessions). Results are expected to be available in November 2017.

NORGEN budget use 2017

EVENT / ACTIVITY	DATE	TOTAL SPENT	Total allocated	Unused
Symposium "Food Security and Nutrition in the Age of Climate Change" Québec City, September 24-27, 2017/Travel Audia Barnett	Sept.-24-27	\$ 3,132.10		
11 ^o SIRGEALC Symposium - Guadalajara, Mexico/ Travel Terylynn Brant from Canada/ Travel for three producers and three scientists to participate in "Milpa System" side event	Oct. 15-18, 2017	\$ 7,024.00		
PGOC Meeting USDA	Postponed to 2018	-		
Total		\$ 10,156.10	\$ 15,000.00	\$ 4,843.90

Estimated in-kind contributions to NORGEN Task Force 2017

ACTIVITY	Approx. in-kind contributions by AAFC, USDA , and University Laval
Symposium “Food Security and Nutrition in the Age of Climate Change” Québec City	AAFC: \$ 2,000 Travel (A. Diederichsen and S. Gariepy) Province of Quebec and FAO: \$ 10,000 Hosting meeting and travel costs for two Mexican and one Canadian participant
SIRGEAC Conference Mexico including parallel event “La Milpa”	Centro Nacional de Recursos Genéticos: \$ 15,000; Hosting conference \$ 7,000 AAFC: Travel (Y.-B. Fu and S. Gariepy)
Bean molecular characterisation	INIFAP: \$ 7,000 – Labour and laboratory
Total (USD)	\$ 41,000

Outreach of NORGEN 2017

- Report of Quebec Workshop on Indigenous Plant Genetic Resources in 2016 was published in April 2017
- Presentations by J.F. De La Torre and A. Diederichsen at Symposium at Quebec in September 2017
- Animal GRIN expanded to include Mexico, which made genetic resource data more accessible domestically and internationally

Outreach (M& E Activity)

Date (Month /2017)	Type of Intervention	Recipient	Impact/outcome of the intervention
May	Release of final report from Quebec Workshop 2016	Stakeholders nationally and internationally	Enhanced awareness for genetic diversity and cropping systems for food security ; enhanced interaction with FAO
Sept.	Symposium “Food Security and Nutrition in the Age of Climate Change” Québec City, September 24-27, 2017 Presenters: FF.J. De La Torre Sanches/Axel Diederichsen/T. Brant/S. Gariepy	International audience of about 250 people with emphasis on francophone countries	Enhanced awareness for genetic diversity and cropping systems for food security ; enhanced interaction with FAO
Oct.	11 ^o SIRGEALC Symposium - Guadalajara, Mexico/ Travel Terrylynn Brant from Canada/Travel for three producers and three scientists to participate in “Milpa System” side event	International audience of about 400 people with emphasis on Latin America and the Caribbean.	Knowledge transfer and contact among First Nations Seek Keepers Canada/Mexico

Self Assessment NORGEN for 2017

- **Relevance:** Facing continued genetic erosion and ongoing decline of some public and private sector breeding programmes, enhanced cooperation in genetic resources conservation is very relevant to food security. Scientific guidance in bioresource conservation and utilization has been provided.
- **Effectiveness:** The relatively small funding provided IICA/PROCINORTE “leveraged” much in-kind funding and allowed integration with other initiatives; it had a “priming effect” and was flexible.
- **Impact:** Short term impact is visible and contributes to goals of FAO 2nd Global Plan of Action for PGRFA.

NORGEN Work Plan and Budget for 2018

Activity	Expected result	Completion date	Responsible	Budget requested from PROCINORTE	Approx. budget (in-kind) from INIFAP, AAFC, ARS/USDA
April 2018: Workshop to develop curriculum to train future genebank managers hosted by the USDA/ARS National Laboratory for Genetic Resources Preservation and Colorado State University in Ft. Collins	Enhanced cooperation in the Americas[]	11/2018	P. Bretting/G. Volk/ Pat Burne, USDA	\$ 5,000: Travel costs for Mexican and Canadian participants	USDA \$ 10,000. For meeting and travel costs from hosting country
October or November 2018: National Plant Germplasm System, Plant Germplasm Operating Committee Meeting at Washington DC,	Enhanced cooperation among US, Mexico and Canada	11/2018	P. Bretting et al.	\$ 5,000: Travel costs for three Mexican participants	USDA/AAFC: \$ 12,500. For meeting in hosting country USA and travel costs for three Canadian participants.
[Study on maize germplasm flow among the countries and impact on cropping systems diversity] (needs more discussion in Task Force)	Case Study	12/18	J. Fernando de la Torre	\$\$5,000	USDA/AAFC: \$ 5,000 for supervising activity and meeting in agreed country.
Total (USD)				\$15,000	\$ 27,500

Thank you.

