WORKSHOP
AGRICULTURAL GREENHOUSE GAS EMISSIONS

Gallery B, TCU Place
35, 22nd Street East, Saskatoon, SK S7K OC8

August 13, 2018; 1:30-4:35pm

Session Chair: Chandra Madramootoo, President Hon. ICID, and Professor, McGill University

1:30pm Opening Remarks, Felix Reinders, President, ICID

1:35pm: The AAFC Agricultural Greenhouse Gases Program and the Global Research Alliance
Steve Lovshin, Curtis Snell, Agriculture and Agri-Food Canada

1:45pm Greenhouse gas emissions from horticultural production systems in Eastern Canada
Kaitlin Lloyd, Kerri Edwards, Angela Grant and Chandra A. Madramootoo
Department of Bioresource Engineering, Macdonald Campus, McGill University, 21,111 Lakeshore Road, Sainte-Anne-de-Bellevue, Québec, H9X 3V9, Canada.

2:05pm Adoption of water table management practices by fruit and vegetable farms in Eastern Canada
Ana-Maria Bogdan and Suren Kulshreshtha
Department of Agricultural and Resource Economics, University of Saskatchewan, Saskatoon, SK, S7N 5A8, Canada
2:25pm Effect of irrigation practices on soil nitrogen cycling microbial populations and nitrous oxide emissions in a Merlot vineyard in the Okanagan Valley of British Columbia
Louise Nelson¹, Tanja Voegel¹, Mesfin Fentabil², Craig Nichol² and Melanie Jones¹
¹Biology Department and ²Earth, Environmental and Geographic Sciences, University of British Columbia, Okanagan Campus, Kelowna BC, Canada

2:45pm Farmer-oriented Management Support Toolbox for Shelterbelt Systems in Saskatchewan
Suren N. Kulshreshtha, Beyhan Y. Amichev, Colin P. Laroque, Kenneth W. Belcher, Murray J. Bentham, and Ken C.J. Van Rees
Department of Agricultural and Resource Economics, University of Saskatchewan, Saskatoon, SK, S7N 5A8, Canada

3:05 Health Break

3:30pm Subsurface recycling irrigation of grazed perennial forage in Atlantic Canada and baseline greenhouse gas fluxes
Fredeen A.¹, Havard P.², Papadopoulos Y.³, Bouman, T⁴, Astatkie, T.²; Madramootoo C.⁵
¹Dept. Animal Sci. and Aqua, Dalhousie Faculty of Agric., Truro, NS; ²Dept. of Eng., Dalhousie Faculty of Agr., Truro, NS; ³Agric and Agri-Food Canada, Truro, NS; ⁴Dept. ³Biologie, Cape Breton Univ., NS; ⁵Dept. Biore. Eng., Univ. McGill, Ste. Anne de-Bellevue, QC.

3:55pm GHG emissions as affected by fertilizer and water table management
⁶N.A. Abbasi, c T.Q. Zhang, ⁶C. A. Madramootoo, b J. K. Whalen, c C.S. Tan
⁶Department of Bioresource Engineering, b Department of Natural Resource Sciences, McGill University, Sainte-Anne-de-Bellevue, Quebec H9X 3V9, Canada, c Harrow Research and Development Center, Agriculture and Agri-Food Canada, Harrow, Ontario N0R1G0, Canada

4:15pm Current inventory approach overestimates the effect of irrigated crop management on soil-derived greenhouse gas emissions in the semi-arid Canadian Prairies
Cody David², Reynald Lemke³, Warren Helgason⁴, and Richard E Farrell⁴, ⁵
²University of Saskatchewan, Department of Soil Science, 51 Campus Dr., Saskatoon, Saskatchewan, Canada, S7N 5A8
³University of Saskatchewan, Department of Civil and Geological Engineering, 57 Campus Dr., Saskatoon, Saskatchewan, Canada, S7N 5A9
⁴Agriculture and Agri-Food Canada, Saskatoon Research Centre, 107 Science Place, Saskatoon, Saskatchewan, Canada, S7N 0X2

4:35pm Discussion and Closing Comments