CURRICULUM VITAE

for

ROBERTSON, ALBERT J.

1. ACADEMIC CREDENTIALS:

B.Sc., University of Saskatchewan, 1971, Department of Biology, Chemistry-Biology-Biochemistry

M.Sc., University of Saskatchewan, 1976, Department of Biology, Molecular Genetics Ph.D., University of Saskatchewan, 1983, Department of Biology, and University of Alberta, Department of Biochemistry, Molecular Biology

2. OTHER CREDENTIALS:

Commercial truck driver for Alcan, Kitamat, BC (Steel workers Union member) with air ticket (1968). Drove fuel and fire trucks in northern BC. Received training in firefighting, and several first aid courses. Assisted Okanogan Helicopter rescue team in recovering bodies from plane crash in mountains.

Licenced through several radiation safety courses at the U. of S. to use radioisotopes (Iodine 125, 131; P32, Carbon and tritium labelled amino acids

Commercial Apiculturist 1975 Honey bee breeder since 1992 (Saskatraz Project, www.saskatraz.com) Pedigreed seed grower (select status) Gas and Arc Welding Diploma, 1977 Pre-Nuclear and Elite Potato Seed Grower

3. APPOINTMENT(S) AND PROMOTIONS:

President, CEO, and Senior Research Scientist at Meadow Ridge Enterprises LTD. A corporation (1996) and family run business. This corporation is involved in grain, elite seed potato production, pure bred Black angus cattle breeding, honey production and honey bee breeding and research (www.saskatraz.com). Meadow Ridge Enterprises Ltd. owns 3300 acres of Farm land and leases approximately 5000 acres for pasture and hay production.

Research Scientist, 1989-2002, Crop Development Centre, University of Saskatchewan Professional Research Associate, 1984-1989, Crop Development Centre, University of Saskatchewan

Professional Research Associate, 1976-79, Department of Biology, University of Saskatchewan

Teaching Assistant (Laboratory demonstrator), 1971-74, Department of Biology, University of Saskatchewan

Research Assistant, 1971-75, Department of Biology, University of Saskatchewan

4. THESES SUPERVISED:

Jin Wang. 2016. Potential biomarker genes for selecting varroa tolerant honey bee (*Apis mellifera*) and biochemical characterization of a differentially expressed carboxylesterase gene in response to mite infestation. Food and Bio products, Master of Science Thesis University of Saskatchewan.

Sanjie Jiang. 2013. Differential Gene Expression of Varroa-Tolerant and Varroa-Susceptible Honey Bees (*Apis mellifera*) In Response to *Varroa destructor* Infestation. Food and Bio products, Master of Science Thesis University of Saskatchewan.

5. BOOKS, CHAPTERS IN BOOKS, EXPOSITORY AND REVIEW ARTICLES:

A.J. Robertson. 2010. The Saskatraz Project: A Review 2004-2009. 50 page booklet.

6. PAPERS IN REFEREED JOURNALS: 56

PUBLISHED:

- A.J. Robertson, E. Scruten, M. Mostajeran, T. Robertson, C. Denomy, D. Hogan, A. Roesler, C. Rutherford, A. Kusalik, P. Griebel, S. Napper. 2020. Kinome Analysis of Honeybee (Apis mellifera L.) Dark-eyed Pupae Identifies Biomarkers and Mechanisms of Tolerance to Varroa Mite Infestation. Scientific Reports, Feb 7 (10): 1-12
- G. Codling, Y. Al Naggar, J.P. Giesy, A.J. Robertson. 2018. Neonicotinoid Insecticides in Pollen, Honey and Adult Bees in Colonies of the European Honey Bee (*Apis mellifera L.*) in Egypt. <u>Ecotoxicology</u>, <u>Mar 27 (2)</u>: 122-131 doi: 10.1007/s10646-017-1876-2
- S. Jiang, T. Robertson, M. Mostajeran, A.J. Robertson, X. Qiu. 2016. Differential Gene Expression of Two Extreme Honey bee (*Apis mellifera*) Colonies Showing Varroa Tolerance and Susceptibility. <u>Insect Molecular Biology</u>, 25(3): 272-282
- G. Codling, Y. Al Naggar, J.P. Giesy, A.J. Robertson. 2016. Concentrations of Neonicotinoid Insecticides in Honey, Pollen and Honey Bees (*Apis mellifera L.*) in Central Saskatchewan, Canada. <u>Chemosphere</u>, 144: 2321-2328. doi: 10.1016/j.chemosphere.2015.10.135.
- Y. Al Naggar, A. Vogt, G. Codling, E. Najem, M. Mona, A. Seif, A.J. Robertson, J.P. Giesy. 2015. Exposure of Honeybees (*Apis mellifera*) in Saskatchewan, Canada to Organophosphorus Insecticides. <u>Apidologie</u>, <u>46</u>: 667-678 doi: 10.1007/s13592-015-0357-y.
- Y. Naggar, Y. Tan, C. Rutherford, W. Connor, P. Griebel, J.P. Giesy, A.J. Robertson. 2015. Effects of Treatments with Apivar® and Thymovar® on V. destructor populations, Virus Infections and Indoor Winter Survival of Canadian Honey Bee Colonies (*Apis mellifera L.*). <u>Journal of apiculture Research</u>, <u>54</u>: 548-554. doi: 10.1080/00218839.2016.1186917
- A.J. Robertson, B. Trost, E. Scruten, T. Robertson, M. Mostajeran, W. Connor, A. Kusalik, P. Griebel, S. Napper. 2014. Identification of Developmentally-Specific Kinotypes and Mechanisms of Varroa Mite Resistance through Whole-Organism, Kinome Analysis of Honeybee. <u>Frontiers in Genetics</u>, doi: 10.3389/fgene.2014.00139.
- T. Nakamura, J. Yazaki, N. Kishimoto, S. Kikuchi, A.J. Robertson, L.V. Gusta, M. Ishikawa. 2013. Comparison of Long-Term Up-Regulated Genes During Induction of Freezing Tolerance by Cold and ABA in Bromegrass Cell Cultures Revealed by Microarray Analyses. <u>Plant Growth Regulation</u>, 71: 113:136

7. INVITED LECTURES OUTSIDE AND INVITED CONFERENCE PRESENTATIONS:

- A.J. Robertson 2019. The Saskatraz Project. Saskatchewan Beekeepers Association Conference and Trade Show. Saskatoon, SK. November 28
- A.J. Robertson, 2019. The Saskatraz Project. 46th Apimondia. Montreal, CA. November 7-12.
- A.J. Robertson, 2019. The Saskatraz Project. LCBA Field Day. Lorraine County, OH. June 1.
- A.J. Robertson, 2018. The Saskatraz Project. Global Forum for Innovations in Agriculture, ApiArab Expo. Abu Dhabi, UAE. February 5.
- A.J. Robertson. 2016. The Saskatraz Project. Saskatchewan Beekeepers Association Conference and Trade Show. Saskatoon, SK. December 3.
- A.J. Robertson, 2015. The Saskatraz Project Update. SBA Field Day. Tisdale, Saskatchewan, Canada. June 15.
- A.J. Robertson. 2014. The Saskatraz Project. Saskatchewan Beekeepers Association Conference and Trade Show. Saskatoon, SK. November 22
- A.J. Robertson. 2012. The Saskatraz Project. SBA Convention and Trade Show. Saskatoon, SK. November 28-30.
- A.J. Robertson. 2012. The Saskatraz Project: Saskatchewan Honey Bee Breeding and Selection Program. Apimondia Symposium 2012. Hotel Chateau Laurier, Quebec City. November 16-18.
- A.J. Robertson. 2012. The Saskatraz Project. Maritime Bee Tour. Charlottetown, PEI. August 10-12.
- A.J. Robertson. 2012. The Saskatraz Project. SBA Field Day. Saskatchewan. June 25.
- A.J. Robertson. 2011. The Saskatraz Project. Saskatchewan Beekeepers Association Annual Convention. Saskatoon, SK. December 2.
- Meetings with California queen producers, Cabazon, CA November 13-15, 2011 at California State Beekeepers Association, including to set up Saskatraz hybrid project.
- A.J. Robertson. 2011. The Saskatraz Breeding Program. North American Beekeeping Conference. Galveston, Texas, USA. January 4-8.

8. PATENTS GRANTED OR PENDING:

1. Pending: Application of Plant stress Proteins in the Culture and Cryopreservation of Animal Cells

Inventors: Dr. A. J. Robertson, Dr. A. Palasz, Dr. L. V. Gusta, Dr. R. Mapletoft. File reference: 46237-PT

2. Production of Plants with Enhanced Tolerance to Abiotic Stresses, Increased Vigour and Yield by Expressing a Novel Gene (Rob-5) in Transgenic Plants.

Inventors: Robertson, Albert J., Guohai Wu, Gusta, L.V.

File Reference: 60426012

3. Meadow Ridge brand named (patented) Saskatraz breeding stock – filing date 25 June 2010 – service Steve Seiferling (McKercher LLP) Saskatoon, Saskatchewan. Registration date July 14, 2011; Trade Mark No.1486509. Please visit www.saskatraz.com for trade mark and registration information. Saskatraz breeding stock is trademarked in Canada, the USA and Australia.