

Canadian Bee Research Fund Projects

The Canadian Bee Research Fund announces three projects funded for the current year.

Current Research Projects

2015

Rob Currie "Impact and Control of Viruses Associated with Honey Bee Comb."

Dr. Stephen Pernal "Assessment of Factors that Affect Sperm Viability in Queens."

Elemir Simko "Sub-lethal Effects of Neonicotinoids on Embryogenesis, hygienic behavior and grooming of worker honey bees."

Dr. Carlos Castillo "Diagnosis of Nosema ceranae and Deformed Wing Virus (DWV) in overwintering honey bee colonies using qPCR and Fluorescence in-situ Hybridization."

2014

Dr. Shelley Hoover "Pollinator Management in Canola".

Dr. Dave Shutler "Chemical attractants and repellents for Varroa destructor mites".

Dr. Peter Tyedmers "What is the honey bee colony carrying capacity of Nova Scotia and Prince Edward Island?".

Previously funded Research Projects

2013 Prof Amro Zayad, "Developing a diagnostic assay for Africanized bees and establishing a baseline dataset on the genetics of Canadian Honey Bees."

2013 Dr. Medhat Nasr, "Screening alternate novel miticides for varroa control in an integrated pest management system"

2013 Dr. Shelley Hoover, "Maximising the value of bee pollination services delivered to canola."

2012 Dr. Dave Shutler, "Nutrition and pesticides in pollen collected by commercial honeybees"

2012 Dr. Medhat Nasr, "Screening alternate novel miticides for varroa control in an integrated pest management system"

2011 Prof. Amro Zayad, "Tradeoffs between social and innate immunity and its implication for honey bee breeding and stock improvement" - \$9900

2011 Dr. Stephen Pernal "Integrated Management of Nosema & Detection of Antibiotic Residues". - \$8000.

2010 Dr. Steve Pernal, Adony Melathopoulos, Jeff Pettis, T. Thompson; Integrated Management of Nosema & Detection of Antibiotic Residues - \$8,636.64

2010 Dr. Dave Shutler, E.H. Frost, K. Hillier, D. MacKinnon; Effects of a Miticide on Honeybee Memory - \$6,400.00

2010 Dr. Rob. Currie; Cultural and chemical treatments to synergize honey bee resistance mechanisms against the parasitic mite, *Varroa destructor*, and the diseases it vectors -\$6,000

2009 Dr. Steve Pernal, Adony Melathopoulos, Dr. Jeff Pettis, T. Thompson; Integrated Management of Nosema & Detection of Antibiotic Residues \$6,957

2009 Albert J. Robertson, John Gruszka, Tim Wendell, John Pederson; The Saskatraz Project: Selection of Productive Honey Bee Genotypes with Tolerance to Varroa and Tracheal Mites and Development of Molecular Markers - \$5,143

2009 Dr. Rob Currie; Cultural and chemical treatments to synergize honey bee resistance mechanisms against the parasitic mite, *Varroa destructor*, and the diseases it vectors- \$6,000.

2008 Dr. Rob Currie, University of Manitoba, \$3,000
"Cultural and chemical treatments to synergize honey bee resistance mechanisms against the parasitic mite, *Varroa destructor*, and the diseases it vectors."

2008 Dr. Steve Pernal, Agriculture Agri-Food Canada, \$8,000
"Integrated Management of Nosema & Detection of Antibiotic Residues"

2008 Albert J Robertson, Saskatchewan Beekeepers Association, \$3,000
"Mite Tolerance in Selected Honeybee Lines and Attempted Correlation of Tolerance or Sensitivity with DNA and Viral Markers associated with CCD"

2008 Dr. Leonard Foster, CHIBI, University British Columbia, \$3,000

"Apis mellifera Proteomics of Innate Resistance (APIS)"

2008 Dr. Karen Burgher-MacLellan, AAFC Kentville, \$3,000

"The use of real time PCR to identify the microsporidian *Nosema* spp. and other pathogens in honey bee (*Apis mellifera*) colonies in Nova Scotia."

2007 Dr. Rob Currie, University of Manitoba, \$6,000
"Integrating Chemical Control and Host Resistance to Increase Treatment Thresholds for *Varroa destructor*."

2007 Dr. Steve Pernal, Agriculture Agri-Food Canada, \$5,000
"Management of Honeybee Diseases Using Lysozyme."

2007 Albert J Robertson, Saskatchewan Beekeepers Association, \$6,500
"Evaluation of *Varroa* and Tracheal Mite Tolerance in Selected Honeybee Lines and Attempted Correlation of Tolerance with DNA Markers."

2007 Dr. Katrina Brudzynski, Brock University, \$7,500
"Canadian Therapeutic Honey TM Development of production process"

2006 Dr. Rob Currie, University of Manitoba, \$5,000
"Integrating Chemical Control and Host Resistance to Increase Treatment Thresholds for *Varroa destructor*."

2006 Dr. Ernesto Guzman, University of Guelph, \$5,000
"*Varroa* mite resistance to current chemical treatments, alternative control products applied with different delivery methods, and chemical residues in honey."

2006 Dr. Steve Pernal, Agriculture Agri-Food Canada, \$5,000
"Management of Honeybee Diseases Using Lysozyme."

2006 Albert J Robertson, Saskatchewan Beekeepers Association, \$5,000
"Evaluation of Varroa and Tracheal Mite Tolerance in Selected Honeybee Lines and Attempted Correlation of Tolerance with DNA Markers"

2006 Dr. Medhat Nasr, Alberta Agriculture Food and Rural Development, \$5,000
"Study of Environmental Sources for Antibiotic Residues in Honey"

2005 Dr. Rob Currie, University of Manitoba, \$6,000
"Integrating Chemical Control and Host Resistance to Increase Treatment Thresholds for Varroa destructor."

2005 Dr. Ernesto Guzman, University of Guelph, \$6,000
"Varroa mite resistance to current chemical treatments, alternative control products applied with different delivery methods, and chemical residues in honey."

2005 Dr. Steve Pernal, Agriculture Agri-Food Canada, \$6,000
"Management of Honeybee Diseases Using Lysozyme."

2005 Albert J Robertson, Saskatchewan Beekeepers Association, \$7,000
"Evaluation of Varroa and Tracheal Mite Tolerance in Selected Honeybee Lines and Attempted Correlation of Tolerance with DNA Markers"

2004 Dr Steve Pernal, Agriculture & Agri-Food Canada. \$10,000
"Management of oxytetracycline resistant American Foulbrood disease in honeybees"

2004 Dr. Rob Currie, University of Manitoba, \$10,000
"Environmental and chemical control of varroa and tracheal mites in indoor wintering facilities."

2004 Albert Robertson, Saskatchewan Beekeepers Association, Saskatoon, \$7,500
"Evaluation of Varroa and Tracheal Mite Tolerance in Selected Honeybee Lines and Attempted Correlation of Tolerance with DNA Markers."

2003 Dr. Steve Pernal, Agriculture & Agri-Food Canada. \$9,000
"Mangement of oxytetracycline resistant American Foulbrood disease in honeybees"

2003 Dr. Rob Currie, University of Manitoba, \$9,000
"Environmental and chemical control of varroa and tracheal mites in indoor wintering facilities."

2003 Dr. Cynthia Scott Dupree, University of Guelph, \$4,000
"Evaluation of new insecticides and alternative strategies for effective control of insect pests of sweet corn with minimal impact on foraging honeybees."

2003 Dr. Gard Otis, University of Guelph, \$3,000
"Evaluating the effects of fall and spring pollen supplements on honey bee colonies and individual worker bees."

2002 Dr. Don Nelson, Agriculture & Agri-Food Canada. \$10,000
Developing new tools to manage oxytetracycline resistant American Foulbrood disease"

2002 Dr. Rob Currie, University of Manitoba, \$6,000
"Environmental and chemical control of varroa and tracheal mites in indoor wintering facilities."

2002 Dr. Medhat Nasr, OBA, Guelph, \$4,000
"Evaluation of Russian honeybee stocks for varroa resistance and economic traits in Canada."

2001 Dr. Don Nelson, Agriculture & Agri-Food Canada. \$10,000
Developing new tools to manage oxytetracycline resistant American Foulbrood disease"

2001 Dr. Rob Currie, University of Manitoba, \$6,000
"Environmental and chemical control of varroa and tracheal mites in indoor wintering facilities."

2001 Dr. Medhat Nasr, OBA, Guelph, \$4,000
"Evaluation of Russian honeybee stocks for varroa resistance and economic traits in Canada."

2000 Adony Melathopoulos, John Gates, Bill Ruzicka (BC) \$10,000 "Field evaluation of the microbial acaricide Hirsutella thompsonii for the control of the honey bee mite parasite Varroa jacobsoni."

2000 Dr. Mark Winston, Simon Fraser University, \$10,000
"Integrated pest management for varroa mites."

2000 Dr. Scott Daniels, University of Regina, \$9,200
"Membrane-gel delivery of Formic Acid vapours and a new alternate treatment for honey bee mites with an environmentally friendly approach using menthyl formate."

1999 Dr. Gard Otis, University of Guelph, \$12,000
"Evaluation of the efficacy and residues of Apiguard, a potential product for the control of parasitic mites of honey bees."

1999 Dr. Peter Kevan, University of Guelph, \$8,800
"Botanicals for mite control and novel means of administering them for greater efficiency and safety."

1998 Dr. Don Nelson, Agriculture & Agri-Food Canada, \$7,000
"Preliminary tests of indoor treatments on wintering colonies."

1998 Dr. Mark Winston, Simon Fraser University, \$15,000
"A semiochemical trapping system for the parasitic mite Varroa jacobsoni. "

1998 Kerry Clark, BCMAFF (not completed)
" Evaluation of mesh bottom boards for the management of varroa"