

Dr. Ian Scott Biography

Since joining the London Research and Development Centre (LoRDC), Agriculture and Agri-Food Canada (AAFC), Dr. Ian Scott has been involved in several related research projects that developed novel testing protocols to assess the insecticidal activity of plant-derived compounds. Dr. Scott has been an adjunct researcher with the University of Western Ontario's Department of Chemical and Biochemical Engineering and the Department of Biology. He has served as a co-supervisor for five graduate students, and an advisor for five graduate and five undergraduate students. Over the past 5 years Dr. Scott has published over 20 peer-reviewed articles and reports that relate to the discovery and development of plant-derived compounds as biopesticides and the extent to which insecticide resistance in selected pest populations is a growing concern.

As a lead and co-lead of 4 AAFC-funded projects (2011-present), Dr. Scott has developed alternative strategies for repelling insect pests from crops by using novel transgenic plants as trap crops. In addition, he investigated how the feeding and oviposition habits of insect pests are affected by volatiles produced by the over-expression of genes in the transgenic plants (*Arabidopsis thaliana* and tomato *Solanum lycopersicum*) and tested the concept of how the transgenic plants could be used in a "push pull" strategy to manage greenhouse insect pests.

Dr. Scott has also been the lead and co-lead in several projects to monitor insecticide resistance in field populations of insects and acaricide resistance in greenhouse spider mite populations. This research is important as failure to address the potential for resistance and understanding the underlying resistance mechanisms could impact successful development and incorporation of novel chemistries (including the use of biopesticides) in future Integrated Pest Management.