

# SES Guest Seminar

**Guest Speaker: Dr. Boyd Mori**

(Saskatoon Research and Development Centre, Agriculture and Agri-food Canada, Saskatoon, SK)

*“Investigating insect ecology to enhance integrated pest management programs.”*

Insect ecology is the foundation for integrated pest management programs. By enhancing our understanding of various aspects of insect ecology, the information garnered can be used to develop sustainable, integrated pest management programs. To this end, Dr. Boyd Mori (Research Scientist, Agriculture and Agri-Food Canada, Saskatoon) melds basic and applied research incorporating behavioural, chemical, and molecular ecology to understand and exploit the biology of insect pests, and their host plants and natural enemies. Dr. Mori's research program has three major focal areas: 1) chemical ecology – to develop insect monitoring and management tools; 2) population genetics – to track insect invasions and dispersal/migration of insect pests; 3) insect-plant interactions – to identify key interactions that may lead to the development of alternative management strategies. During this seminar, Dr. Mori will discuss a case of mistaken identity and how chemical ecology led to the discovery of a new-to-science midge species infesting canola (*Brassica napus* L.) across the Canadian prairies. Canola flower galls have been observed on the Prairies since 2012 and were attributed to the swede midge, *Contarinia nasturtii* Kieffer. Our subsequent investigations revealed that the causative agent was in fact *Contarinia brassicola* Sinclair, a species new to science. Dr. Mori will present behavioural, morphological, and genetic evidence that clearly indicates differences between *C. brassicola* collected in Saskatchewan and Alberta and the swede midge. In addition, highlights of research on the congeneric, *C. nasturtii*, including bioassays, transcriptomics and genomics, will be discussed in the context of enhanced integrated pest management.

April 3, 2019– 10:30am–11:30am  
Alexander Hall Rm 265

All are welcome to attend!

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