

Evolution of Nematode Resistance to Environmental Stress Symposium.

Sponsored by the SON Resistance Committee

Both parasitic and free-living nematodes are subject to a range of chemical stressors in their environment; from anti-helminthic compounds in a host intestine to nematicides in the soil. All these nematodes must adapt to survive, and their ability to adapt can have far reaching consequences for human and animal health, ecosystems, and food security. Despite their importance, our understanding of the mechanisms that nematodes use to adapt and gain resistance to environmental stressors is still in its infancy. In this symposium, we aim to highlight research into how nematodes from disparate taxonomic groups and lifestyles adapt to a variety of environmental stressors.



IS RESISTANCE IN PLANT-PARASITIC NEMATODES A CONCERN WITH NEW GENERATION NEMATICIDES? **Crow, William T.** University of Florida, Entomology and Nematology Dept., Gainesville, FL 32611.

SELECTIVELY KILLING PARASITIC NEMATODES VIA P450 BIOACTIVATION OF SMALL MOLECULES. **Knox, Jessica**^{1,2}, **A. R. Burns**^{1,2}, **B. Cooke**^{1,2}, **S. R. Cammalleri**^{1,2}, **M. Kitner**³, **J. M. P. Castelli**^{1,2}, **E. Puumala**¹, **J. Snider**², **I. Stagljar**^{1,2}, **L. E. Cowen**¹, **I. A. Zasada**³, and **P. J. Roy**^{1,2,4}. ¹Department of Molecular Genetics, University of Toronto, Toronto, ON, ²Terrence Donnelly Centre for Cellular and Biomolecular Research, University of Toronto, Toronto, ON, ³United States Department of Agriculture – Agricultural Research Service (USDA-ARS) Horticultural Crops Research Laboratory, Corvallis, OR, ⁴Department of Pharmacology and Toxicology, University of Toronto, Toronto, ON.

HOMEOSTATIC PLASTICITY: ONE OF THE MECHANISMS NEMATODES USE TO ADAPT TO ANTHELMINTIC STRESS. **Martin, Richard J.** Department of Biomedical Sciences, Iowa State University, Ames, IA 50011.