

## Pesticide interactions with multiple stress factors

Among the greatest challenges in evaluating impacts of pesticides on beneficial insects has been determining how co-occurring environmental stress factors influence toxicity, particularly as the number of active ingredients and adjuvants available for crop protection has increased. In this seminar, each student will sign up as discussion leader for one of the weekly topics; discussion leaders, in consultation with the instructor, will select one or two recent publications as the focus for the class discussion and will prepare a series of questions around which the class discussion will be structured. An objective of this class is to provide students with a better understanding of experimental approaches to testing for synergistic or antagonistic interactions among stressors and with a greater awareness of policy changes needed for long-term post-release monitoring and assessment of risks of unanticipated interactions accompanying pesticide use..

Associated Term: Spring 2022 - Urbana-Champaign

Registration Dates: Nov 01, 2021 to Jan 31, 2022

- 1 History of insecticide toxicity testing
- 2 Insecticides and diet nutritional quality
- 3 Insecticides and phytochemicals
- 4 Insecticides and pathogens
- 5 Insecticides and parasites
- 6 Synergistic interactions between insecticides
- 7 Synergistic interactions between insecticides and other pesticides
- 8 Synergistic interactions between insecticides and adjuvants
- 9 Measuring sublethal effects of insecticides
- 10 Measuring colony-level effects of insecticides on eusocial insects
- 11 Abiotic environmental effects on insecticide toxicity (temperature, moisture, soil) (climate change)
- 12 Antagonistic interactions between insecticides and other pest management methods
- 13 Assessing risks, predicting interactions, long-term post-approval monitoring
- 14 Summary