

UNIVERSITY OF RHODE ISLAND
Department of Chemistry
SEMINAR

Room 105, Beupre Center
3:00 PM, Monday, Oct. 24, 2022

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***“An Invasive Species, an Endemic Pest,
and an Organic Chemist or Three”***

HOST
Jason Dwyer
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An Invasive Species, an Endemic Pest, and an Organic Chemist or Three

Matt Kiesewetter
Associate Professor, URI Chemistry

Abstract

The varroa mite, *Varroa destructor*, is an endemic parasite of the honeybee, and if left unmanaged runaway varroa populations almost certainly lead to colony loss. Three synthetic pesticides have been the backbone of varroa management for the last 40 years, but the emergence of widespread resistance to two of these pesticides and suspected resistance to the last has placed varroa management on a precarious footing. Our group has partnered with a team of entomologists based at *URI East Farm* to develop new synthetic pesticides for the management of varroa. In this talk, we will discuss: beekeeping and the social physiology of honeybees as it pertains to pest management; the development of a new, highly selective miticide; and our efforts to control non-varroa species.