

Inhibiting the Reproductive Potential of grain moth pests as control measure

The understanding of chemical communication in Lepidoptera, particularly in moths, has advanced greatly over the last half-century including sex-pheromone identification and synthesis, but the application of this knowledge in pest management has had only marginal success. Sexual encounters in moths are initiated by the release of a unique blend of volatile organic compounds, the sex pheromones, by one sex, to attract conspecifics and signal receptivity for mating. After mating, pheromone biosynthetic activity in females is reduced, calling behavior ceases and oviposition is enhanced. In this presentation I review the possibilities of targeting post-mating responses to the advantage for pest management.