

## East Lansing Day 1 – November 11, 2024

8 MDARD credits in Core (Priv. & Comm.), 2, 3A, 3B, 5, 6, 7A and 7F

*\*\*No 7A or 7D credits on this day\*\**

- 7:45 – 8:00am** Registration
- 8:00 – 9:00am** Herbicide Injury and What It Means – *Dr. Emma Beaver*
- Relevance: Private and Commercial Core, 2, 3A, 3B, 6
  - Description: Herbicide injury is considered to be any adverse effect on a plant from exposure to a pesticide. It can occur for many reasons, such as drift or improper calibration. Participants will learn how to distinguish herbicide damage from disease or abiotic factors.
- 9:00– 10:00am** Time for Alternatives to Glyphosate – *Dr. Hannah Mathers*
- Relevance: Private and Commercial Core, 2, 3A, 3B, 5, 6
  - Description: To be discussed are the different kinds of glyphosate products, both terrestrial and aquatic, commonly used in the Green Industry. Dr. Mathers will then suggest effective substitutes for each of these products.
- 10:00 – 10:15am** Break
- 10:15 – 11:15am** MDARD Updates and Regulations
- Relevance: Private and Commercial Core
  - Update from the MI Dept. of Agriculture on regulations relevant to the Green Industry.
- 11:15am – 12:15pm** Keys to Improve Your Herbicide Program – *Dr. Debalina Saha*
- Relevance: 3B
  - Description: This presentation will focus on important herbicides that are commonly used in nurseries and landscapes and uses of adjuvant and surfactants to improve herbicide efficacies. In addition to that the presenter will also discuss why and how herbicide resistance can develop, and how to manage or avoid herbicide resistance development. Overall, the audience can learn and understand the key points on how to improve the herbicide program and manage herbicide resistance development in nursery and landscape settings.
- 12:15 – 12:45pm** Lunch

- 12:45 – 1:45pm**      What is Involved with Starting a Perimeter Pest Control Service? – *Dana Davis*
- Relevance: 7A
  - Description: Participants will learn about pesticide licensing requirements, necessary equipment and materials, cultural practices, and customer expectations.
- 1:45 – 2:45pm**      Aquatic Equipment and Calibration – *Dana Davis*
- Relevance: 5
  - Description: Participants will learn about available equipment for aquatic applications. They will be taught calibration methods as well as PPE and safety.
- 2:45 – 3:00pm**      Break
- 3:00 – 4:00pm**      Mosquito Biology and Behavior – *Maria Sorrentino*
- Relevance: 7F
  - Description: An interactive presentation on the biology of mosquitos in Michigan and the most effective treatment methods.
- 4:00 – 5:00pm**      *Ficaria verna* – A Newly added Invasive Species in Michigan – *Rachel Cuschieri-Murray*
- Relevance: 3A
  - Description: *Ficaria verna* (Lesser celandine) is a perennial ground-covering plant native to northern Europe, newly found to be invasive in the Great Lakes region. *F. verna* forms a dense mat in the early spring, outcompeting native ephemeral species, many of which are already threatened. It can be identified by its small (1-4 cm), lobed leaves growing in clusters with 7-12 petaled, glossy, yellow inflorescences (2-5 cm). After blooming, *F. verna* forms clusters of small bulblets and tubers which spread and easily propagate if disturbed. These two distribution methods make it an ideal species to spread along moving water (rivers, creeks) that pass through urban areas. There's been a noticeable increase in finding *Ficaria verna* in residential lawns, and the question has been asked "how it got there, and what the best management practices for control?". This session will discuss methods of control and how we can prevent it from spreading even further.

