

Leveraging data management and synthesis to promote plant health

Lauren Quevillon, Jennifer Cook, Roslyn Noar, and
Colin Funaro



Center for Integrated Pest Management

What can we do for you with our skills?

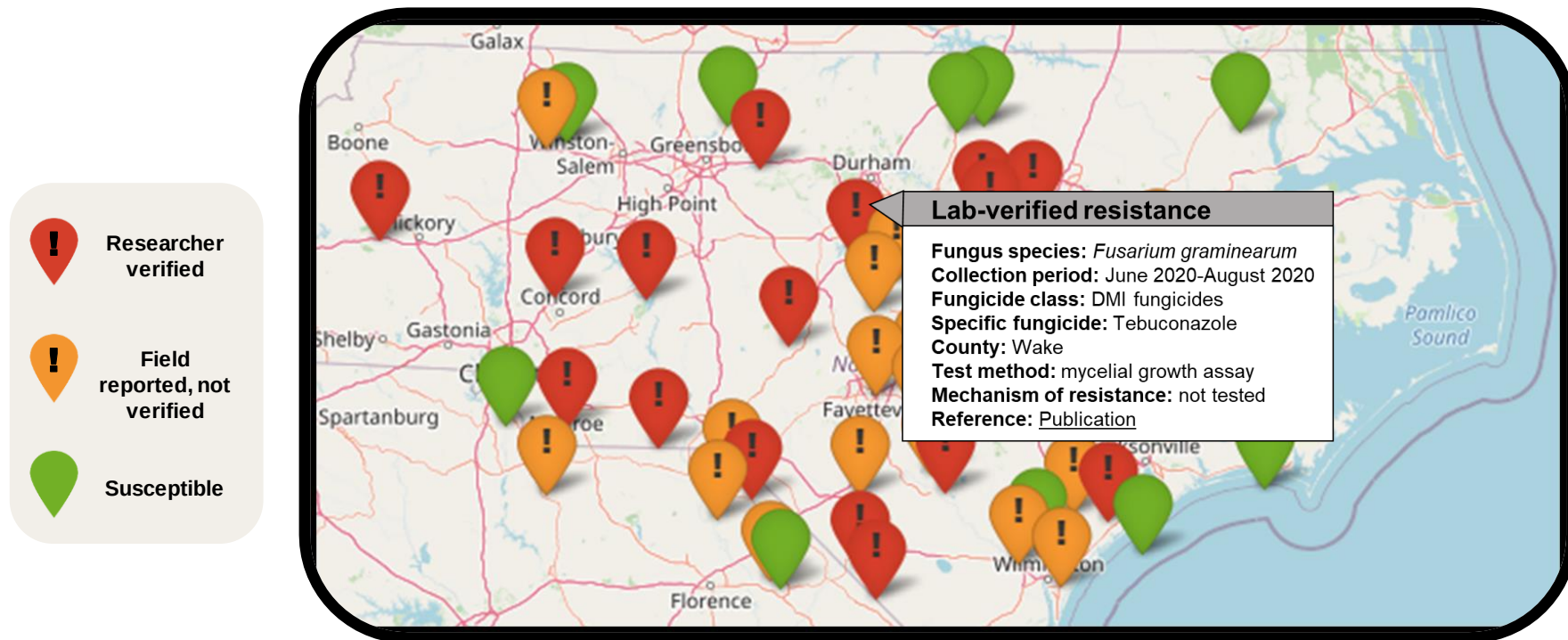
Data Gathering & Proactive Monitoring



Analysis & Outputs for Decision Makers



1. Fungicide resistance database





2. Pest and IPM data resources for new and existing commodities



3. Pollinator Health Database

CIPM Pollinator Database 

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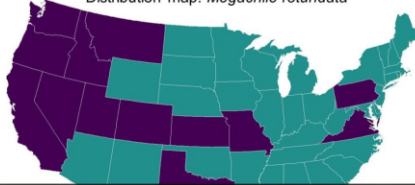
Megachile rotundata (Fabricius, 1793)
Alfalfa leafcutting bee



Photo: Peggy Greb (in the public domain)

Taxonomy
Hymenoptera: Megachilidae: Megachilini

Distribution
Distribution map: *Megachile rotundata*



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Citrullus lanatus (Thunb.) Matsum. & Nakai Watermelon



Source: Steve Evans, CC BY 2.0

Watermelon Pollinators

Apidae:

- *Apis mellifera* (1, 2, 3)
- *Melissodes bimaculatus* (3)
- *Melissodes communis* (3)
- *Melissodes* spp. (1)
- *Melissodes thelypodii* (2)
- *Nomada vegana* (3)
- *Peponapis pruinosa* (1)
- *Xylocopa micans* (3)
- *Xylocopa virginica* (3)

Bombini:

- *Bombus bimaculatus* (3)
- *Bombus griseocollis* (3)
- *Bombus impatiens* (2)

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Insecticides Neonicotinoids (4A)



Source: Franck Barske from Pixabay

Mode of Action

These insecticides bind to the nicotinic acetylcholine receptors (nAChR) in the central nervous system of the insect causing hyper-excitation to lethargy, paralysis, and death (1).

Pesticides in the Class

Toxic to pollinators:

- Acetamiprid (1, 2)
- Clothianidin (1, 2)
- Dinotefuran (1, 2)
- Imidacloprid (1, 2)
- Nitenpyram (1, 3)
- Thiacloprid (1, 3)
- Thiamethoxam (1, 4)

Our Goals:



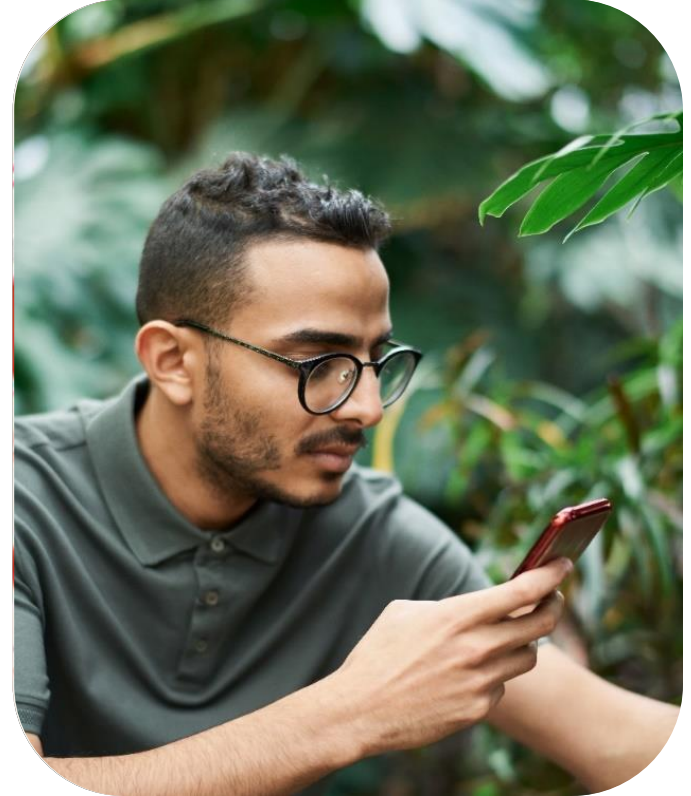
Keep you informed



Make you aware



Guide difficult decisions



Thank you!
**How can we use our skills to partner
with you?**



Center for Integrated Pest Management

Contact information:

Dr. Lauren Quevillon

lequevil@ncsu.edu

Dr. Jennifer Cook

jcook2@ncsu.edu

Dr. Roslyn Noar

rdnoar@ncsu.edu

Dr. Colin Funaro

cffunaro@ncsu.edu