

IR-4 Pollinator Workshop:

Risk Characterization Summary for Production Ornamentals



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Nursery Production



Planting in Landscape



Risk Factor Characterization



- Insecticide
- Plant
- Pollinator

How innately toxic is A.I. to pollinators?



- Contributing factor
 - Pollinator species

- Measurement
 - Lab assays

How much residue is in the nectar/pollen?



Contributing factors

- Application rate, timing and method
- Time between treatment and flower
- Insecticide physiochemical properties
- Soil characteristics
- Plant characteristics
- Environmental conditions

Measurement

- Sampling and analytical chemistry
 - Nectar and pollen

How likely will pollinators be exposed?



Contributing factor

- Plant attractiveness
 - Nectar and pollen production
 - Length of bloom

- Measurement
 - Surveys
 - Horticulturists
 - Growers
 - Master gardeners
 - Literature review
 - Foraging studies

How likely will pollinators be exposed?



Contributing factor

- Likelihood of treatment

- Measurement
 - Surveys
 - Growers
 - Entomologists

How likely will pollinators be exposed?



Contributing factor

- Abundance of treated plants

- Measurement
 - Surveys
 - Growers
 - Retailers
 - Ex. Home depot, garden centers

How likely will pollinators be exposed?



Contributing factor

- Abundance of nontreated, bee attractive plants
 - i.e. Landscape diversity
 - “Dilution effect”

- Measurement
 - Surveys
 - Landscapes

Pollinator Protection Goal



- What is reasonable in an urban landscape?
 - Workers vs colonies
 - Neonicotinoid benefits
 - Risk of alternatives