

Attract & Kill in the Field

Integrating local pest
migration with A&K
components

• Early-Season Intervention

- Low pest pressure at all field sites
- Inconclusive results
- No evidence of increased risk when using attractive stimuli

• Bait Spray Trials

- No apparent synergy with addition of feeding stimulant to various chemistries

“Attract”

Using vittatalactone to
manipulate pest insect behavior
& create aggregations

• Dose-Response Trials

- Positive linear dose-response for striped cucumber beetle, spotted cucumber beetle, and squash bug, with no signs of repellency in high concentrations

• Season-long Lure Trials

- Vittatalactone lure effectively manipulates local migration of SCB, SpCB, & SB in the early season, before crop flowers
- Stimuli from crop plants likely outcompete our lure mid-season

“Kill”

Using traps & baits to capture
or poison pest insect
aggregations

• Trap Design Trials

- Clear sticky & boll weevil trap best capture methods

• Roller Bait Station Experiment

- Lure, melon juice, cucurbitacin are all important components to A&K

• Cucurbitacin Content of Melon Juice

- Variability of feeding stimulant chemical in our raw product due to genetic variability in seed stock