Valent U.S.A. LLC - IR-4 Project
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Products

• Herbicides
  – Flumioxazin – Chateau® Herbicide
  – Flumioxazin + Pyroxasulfone – Fierce® Herbicide
  – Lactofen – Cobra® Herbicide
  – Clethodim – Select Max ® Herbicide

• Fungicides
  – Fluopicolide – Presidio® Fungicide
  – Mandestrobin – Intuity™ Fungicide
  – Ethaboxam – Elumin™ Fungicide
  – Inpyrfluxam – Indiflin™ Fungicide
Chateau® Herbicide

- Active ingredient: flumioxazin
- Target: small seeded broadleaf weeds
- Timing: preemergence, preplant burndown
- Mode of action: PPO inhibitor
- HRAC group: 14
- IR-4 activity
  - Citrus and caneberry
    - Approved December 2016
    - Sold as Chateau® Herbicide
    - Thank you!
Fierce® Herbicide

- Active ingredients: flumioxazin + pyroxasulfone
- Target: small seeded broadleaf and grass
- Mode of action: PPO inhibitor + Fatty Acid Inhibitor
- HRAC group: 14 + 15
- IR-4 activity:
  - PCR’s submitted for tomato, pepper and strawberry
  - Weed control in row middles
  - Dr. Nathan Boyd, University of Florida
  - Grasses grown for seed: Pending with EPA
    - Delayed due to consolidation with other submissions
Cobra® Herbicide

- Active ingredient: lactofen
- Target: broadleaf weeds
- Timing: postemergence
- Mode of action: PPO inhibitor
- IR-4 activity
  - PCR submitted
    - Strawberry
    - Dr. Nathan Boyd, University of Florida
  - Interest – Tropical Fruit
    - Parthenium ragweed control
    - Avocado, Dragon Fruit, Lychee
    - Brooks Botanicals
• Active ingredient: clethodim
• Target: grass weeds
• Timing: postemergence
• Mode of action: ACCase inhibitor
• HRAC group: 1
• IR-4 activity
  – Many crops added over the last several years
  – Thank you!
Indiflin™ Fungicide

• Proprietary chemistry from SCC
  – Code = S-2399
• ISO common name: inpyrfluxam
• Group: pyrazole-4-carboxamide
• Mode of action: SDHI (FRAC group 7)
• AI “nickname”: Indiflin™
• Formulation: 2.84SC
• Strengths
  – *Rhizoctonia*, *Sclerotium*, rusts
  – *Venturia*
  – Powdery mildew
• First petition – submitted Oct 2017
  – Row crops
  – Seed treatment
  – Apple
• Use pattern note:
  – 9 month plant back to non-labeled crops
• Introduced to IR-4 HQ
  – July 11th

• Potential IR-4 projects
  – Grape (powdery mildew)
  – Ornamentals (R. solani, rusts)
  – Hops (powdery mildew)
  – Fruiting veg (S. rolfsii)
  – Cucurbitas (powdery mildew)
  – Brassicas (R. solani)
Intuity® Fungicide

• Active ingredient: mandestrobin
• Valent code: S-2200
• FRAC group: 11
  – Quinone outside inhibitor (QoI) - strobilurin
• Formulation: 4SC
• Labeled crops
  – Grapes, strawberries, turf
• Strengths
  – Botrytis
  – Sclerotinia
• Current IR-4 projects
  – Lettuce (Sclerotinia)
• Potential IR-4 projects
  – Sweetpotato (black rot)
  – Legume veg (Sclerotinia, Botrytis)
  – Tomato (Sclerotinia, Botrytis)
Elumin® Fungicide

• Active ingredient: ethaboxam
• Spectrum: oomycetes
  – Downy mildews, Phytophthora and Pythium species
• Group: thiazole carboxamide
• Formulation: 4SC
• FRAC group: 22
  – Zoxamide only other member

• Current IR-4 projects
  – Broccoli (downy mildew)
  – Cabbage (downy)
  – Mustard greens (downy)
Presidio® Fungicide

- Active ingredient: fluopicolide
- Pest spectrum: oomycetes
  - Downy mildews, Phytophthora and Pythium species
- Chemistry: benzamide
- FRAC Group: 43
- Contact, locally systemic, translaminar
- Formulation: 4SC

- Recent IR-4 projects
  - Citrus
  - Succulent legumes
  - Hops
  - Registered 4/2018
  - Thank you!
Insecticides

- Etoxazole
- Pyriproxyfen
- Dinotefuran
- Clothianidin
- Fenpropathrin
- Esfenvalerate
Questions?