IR-4 Project Strategic Planning Session at Week of Workshop
September 25, 2019
1:15 PM to 5:00 PM

Agenda

Opening comments (Wise)

Culture of IR-4 / Status of existing strategic plan (Baron)

Importance of strategic planning (Bledsoe)

Purpose & Overview of Process (Horak)
  Vision, Mission and Value Statements
  Considerations and Limitations
  Gap Analysis process

Gap Analysis Session 1 (Areas 1 to 4)
  Discussion
  Report to group

Break

Gap Analysis Session 2 (Areas 5 to 8)
  Discussion
  Report to group

Gap Analysis Session 3 (Areas 9 to 12)
  Discussion
  Report to group

Final comments and consensus development
Background Information

Overview

Vision
A world where farmers/growers of specialty crops and specialty uses have legal access to safe and effective pest management technology that promote plant health

Mission
Facilitate the regulatory approval of pest management products for specialty crops and specialty uses to promote plant health and public wellbeing

Values
- Exceptional service to stakeholders
- Inclusiveness
- Effective collaboration
- Transparency, accountability and stewardship of use of resources
- Willingness to change

Considerations & Limitations

Considerations:
- New chemical pesticides
  - Will industry continue to invest significant resources to develop new pesticides in uncertain international regulatory environment?
  - Will new products fill key voids for specialty crops?
    - Broadleaf weed management in broadleaf vegetable crops
    - Bacteria pests
    - The “invasive species of the year”
  - Consumer demands for zero risk products
- Deregistration/Use limitations of existing chemical pesticides
  - EPA Registration Review
  - EU Hazard Assessment-elimination of MRLs
  - Class Action lawsuits
  - Consumer demands
- Biopesticides
  - Can they adequately fill all existing and future pest management voids?
  - Will international trading partners accept produce treated with biopesticides?
- Biostimulants
  - Uncertain regulatory scheme/data requirements
- Integrated Solutions (IS)
Because IS usually involves chemical pesticides, will this be a useful approach to find solutions for growers?

IS projects typically involve difficult pests/difficult situations—can we find “the needle in the haystack”?

- Agriculture Biotech (RNAi, Gene Editing, etc.)
  - What are the data requirements for this technology?
  - What is IR-4’s role?
    - Resources to develop necessary data

- Drones/ Precision Agriculture
  - Potential for higher residues—Will new residue studies be required to allow applications on specialty crops?

- New Crops
  - Hemp/Data requirements

- New Regulations/new data requirements

- Capacity building with potential international research partners

- Reducing technical trade barriers

- Tactical Sciences

- Regulatory Support for USDA-REE programs

- Climate change and impact on crops and pests

**Potential Limitations**

- Adequate funding
  - Expenses, including cost associated with salaries, employee benefits, materials/supplies, travel, etc., continue to rise
  - IR-4 will be facing an effective 10% budget reduction in 2021 associated with conversion of USDA grant to Specific Cooperative Agreement
  - Research equipment in need of replacement

- Erosion of the Land Grant University Partnership

- Significant number of retirements of experienced IR-4 staff and plant health scientists
Gap Analysis – Areas of Focus

Existing

1) Registrations of chemical pesticide products for specialty food crops and minor uses on major crops
   - Annual priority setting workshop to identify priorities/Priority Upgrade Proposals
   - Perform EPA “Magnitude of the Residue” studies
   - Perform product performance field trials when necessary

2) Propose crop extrapolation models (crop groups) to EPA and international regulatory authorities that extends data developed on a few representative crops to many similar crops
   - Almost done, now what?
   - Add additional new crops?
   - Food and Feed Crops (IR-4 Green Book)

3) Harmonize global regulations and registrations of pest management products to eliminate barriers and enhance trade of domestic grown specialty crops
   - Jointly develop data with Canada and other countries
   - Coordinate with USDA-Foreign Agriculture Service, World Trade Organization, UN Food and Agriculture Organization, Minor Use Foundation and other organizations in training international partners how to perform residue studies
   - Develop policy guidelines for consideration by Codex, OECD or other international authority

4) Develop data supporting new and expanded use directions on registrations of pest management products for environmental horticulture crops
   - Priority setting process/surveys
   - Perform product performance field trials

5) Facilitate registrations of pest management products that are approved for use on organic crops
   - Priority setting process
   - When required, perform EPA “Magnitude of the Residue” studies
   - Perform product performance field trials
   - Obtain organic certification approval through appropriate bodies

6) Regulatory Support/Assistance to facilitate approval of technology/products developed/discovered by the public sector and small business
   - Conventional chemical pesticides
   - Biopesticides
   - Biotechnology

7) Integrated Solutions - establish systems that utilize multiple products to manage pests, pesticide resistance and mitigate residues in food crops
   - Priority setting process
   - Areas of concentration
     - Residue Mitigation
       - Perform “Decline” study to determine when residues drop to acceptable level
- Perform product performance field trials to identify acceptable replacement chemical or bio-based pesticide to fill void
- If necessary, EPA “Magnitude of the Residue” studies
  - Resistance Management
    - Perform product performance field trials with conventional chemical and/or bio-based pesticides
    - If necessary, perform EPA “Magnitude of the Residue” studies
  - Difficult to manage pests
    - Perform product performance field trials with conventional chemical and/or bio-based pesticides
    - If necessary, perform EPA “Magnitude of the Residue” studies

**Opportunities**

8) Arthropod vectors of human health concerns—Public Health Pests
   - Perform EPA “Magnitude of the Residue” studies
   - Perform product performance field trials
   - Perform other required studies
   - Provide regulatory support for public sector/small business developed technology

9) Aquatic weed management in irrigation canals and water reservoirs
   - Perform EPA “Magnitude of the Residue” studies
   - Perform product performance field trials
   - Perform other required studies

10) Invasive Species
    - Perform EPA “Magnitude of the Residue” studies
    - Perform product performance field trials

11) Develop necessary data to support biostimulants for use approvals as regulated by EPA and/or USDA

12) Manage special projects that assist specialty crop growers/farmers to have plant health/pest management options (e.g. Invasive Species Research & Pollinator Protection)