

2020 Apple Crop Protection Request for Proposals

The research priorities are listed alphabetically under each category and do not signify order of priority within the category. We are interested in having organic practices considered in all proposed work when appropriate.

Research Priorities

HIGH PRIORITY

Codling Moth: most important insect pest

- control mechanisms to continue staying abreast (retain efficacy of currently used chemicals)
- efficacy of pheromones
- refinement of organic control
- product efficacy testing of current and new materials

Fire blight:

- product efficacy testing of new materials and development of SOP's for optimized efficacy (i.e., some new products from Simplot)
- product resistance testing
- testing efficacy of new materials

Postharvest decay:

- resistance management for blue and grey mold
- reasons for new decay organisms (life cycle vs. commercial practices)
- Organic preharvest products to manage postharvest decay

Secondary and rare insect pest management (extension project):

- Develop effective communication strategies between meteorologists, entomologists and extension to inform grower community/crop consultants in a timely manner of necessary seasonal adjustments to spray programs

Soil health improvement:

- efficacy testing of entire slate of new products of biological inoculants to increase soil fertility (example: mycorrhizal fungi like MycoUp)

Technology projects in apple crop protection or across several different crops are encouraged. Those projects may be moved into the technology committee. Specific interest:

- Automated insect monitoring
- Adoption of precision crop protection application methods

Novel ideas in areas not listed as high priority are encouraged. It is suggested to contact Ines Hanrahan before submitting a preproposal to discuss any ideas outside of the priorities identified by the RFP.

MEDIUM PRIORITY

Apple replant:

- Develop an SOP for mustard seed program

Beneficial insects:

- Determine timing, rates, release techniques of beneficial release
- Rearing techniques that are more economically feasible to growers

Brown Marmorated Stink Bug:

- Pesticides to control populations

Mealybugs:

- Organic and conventional control strategies

Mouse and rodent control:

- Organic control methods

OBLR (organic & conventional):

- New products or good tank mix beyond Bt
- Develop a detailed spray program (extension activity)

Oriental fruit moth:

- determine location and distribution of the insect populations
- efficacy of commercially available pheromones (application method, type of pheromone)

Pesticide residue management:

- Continuing WTFRC work (include new fungicides)
- Get new materials on list to test ASAP

San Jose scale (organic):

- Develop an effective spray program
- Determine which beneficials to use

Woolly Apple Aphid:

- Determine which beneficials to use
- Organic materials, increase options

LOW PRIORITY

Apple leafcurling midge:

- How to manage it in newer plantings/young trees

Honeybees:

- Refugia for increasing pollinators low priority

Spider mites, leafrollers, powdery mildew (organic), apple maggot