



Hop Research Council Research Priorities – 2018
(Prioritization per weighted survey results)

GENERAL RESEARCH CATEGORIES

1. Disease Research
2. Agronomic Research
3. Breeding Research
4. Insect Pest Research
- (two topics tied for 5th place)
5. Harvest research & hop chemistry/Farm Practices

Disease Research

1. Management of Hop Powdery Mildew (early detection, efficacy of new fungicides, resistance management, etc.)
2. Management of Hop Downy Mildew (early detection, efficacy of new fungicides, resistance management, etc.)
3. Hop Viruses and Viroids (preventing spread, replanting, impact on vine health, etc.)
4. Verticillium Wilt
5. Cone Tip Blight
6. Black Root Rot

Agronomic Research

1. Nutrient management (i.e., yield optimization; influences on aroma)
2. Irrigation
3. Soil Health – causes of yield decline and strategies to improve overall soil health
4. Testing hop tolerances and efficiencies of new herbicides
5. Perennial weeds in hop yards (i.e., Canadian Thistle)
6. Heat stress impacts on yield

Hop Breeding Research

1. Breeding for more effective genetic resistance to major diseases
2. Breeding for higher yield
3. Breeding for more effective genetic resistance to major insect pests
4. Breeding for unique aroma and flavor compounds
5. Development of genetic markers to maximize efficiency of the breeding process
6. Production of propagation materials free of pathogens (viruses/viroids)

Insect Pest Research

1. Two-Spotted Spider Mite (develop/refine control strategies)
2. Hop Aphid (develop/refine control strategies)
3. Research on beneficial insects for successful biological control of pests listed here
4. Root Weevils
5. Bertha Army Worm
6. Black Vine Weevil

Harvest Research

1. Improved methodologies for determining cone ripeness
2. Improved technology to manage moisture content of dried cones in hop bales
3. Managing the harvest process for consistent HSI values

Farm Practices Research

1. Interactions between fertilizer/irrigation applications and diseases or insect pests
2. Interactions between fungicide programs and insect populations
3. Farm practices that affect essential oil content
4. Economically feasible mechanization in the hop yard and during harvest events
5. Precision technology (i.e., spray technology; improved mechanical pruning systems)
6. Farm practices that influence harvest alpha content