

Crop Pest and Research Capabilities in British Columbia

ICMS operates out of two primary stations located within the Okanagan and Fraser Valleys' of British Columbia, Canada.

Our Fraser Valley station is located in Abbotsford, situated on a commercial blueberry production farm. Down the road from this station is our research field consisting of 10+ acres of cultivated land with irrigation capabilities. Heading West towards Langley is our greenhouse facility in Bradner, consisting of roughly ½ acre of nursery growing space and 10 polyhouses with climate and irrigation control capabilities. Our yard site is made up of an office, work shop, equipment storage, lab and chemical storage. From this base we can utilize the on-site blueberry field for trials, design our greenhouses to suit various crop and trial demands, set-up and maintain trials in the research field and in producer crops in the local area; as far West as Westham Island (near Tsawwassen ferry, South of Vancouver), and East into the Fraser Valley.

Our Okanagan Valley station is located in Okanagan Falls, situated on a research farm consisting of 7.5 acres of cultivated land and 8 acres of tree fruit crops including: Apples, Sweet Cherries, Plums and Pears.. This research farm utilizes both overhead and drip line irrigation and is also the location of our office and work shop. From this base we conduct trials on the research farm as well as in producer crops in the local area; as far South as Osoyoos and as far North as Enderby.

ICMS Research Services:

The climate surrounding the British Columbian landscape can be described in two words: wet and mild. The high annual rainfall, mild winters and humidity encourage a wide range of disease and crop pest issues, allowing ICMS the ability to produce pest-specific trials and maintain desired pest thresholds. Additionally, crops can be inoculated with the target disease, and weed and insect species introduced to increase pest incidence within the trials. ICMS has developed an understanding of the techniques required to carry out various types of studies in the most efficient, environmentally conscience manner with contamination avoidance being a key element in the process. Our services in British Columbia include, but are not limited to the following:



- Herbicide, Insecticide, Fungicide and Biological Control Trials (greenhouse and field) for the evaluation of product efficacy, crop tolerance and application rates/timing on a wide range of vegetable and high value crops (see list below)
- Fertilizer and Breeding Line Screening and Evaluation (greenhouse and field)
- **Variety Screening** (*greenhouse and field*) for agronomic performance, yield, disease/pest resistance, biological and herbicide tolerance across multiple varieties
- Magnitude of Residue (MOR) Trials (*greenhouse and field*) OECD Good Laboratory Practices (GLP) on many of the listed crops below; PMRA Zones 11 and 12
- Soil Dissipation and Foliar Dislodgeable Studies (greenhouse and field) under GLP

Insect and Disease Issues in British Columbia:

Listed below are the major insect and disease issues affecting a wide range of crops in British Columbia which ICMS has, or is capable of conducting trials on:

Insect and Disease Issues in British Columbia					
Crop	Insects	Disease	Other		
Apple	Leaf Roller, Coddling Moth, Aphids, Mites, Scale (European Fruit, San Jose), Leaf Curl Midge, Lygus	Apple Scab, Powdery Mildew, Fireblight, Storage Diseases	Growth Regulators (fruit drop, thinning)		
Asparagus	Asparagus Beetle				
Blueberries, High Bush	Aphids, Midge, SWD, Weevils, Bruce Spanworm, Cherry Fruitworm, Leaf Roller(oblique- banded)	Botrytis, Alternaria Fruit Rot, Mummy Berry, Bacterial Blight, Godronia			
Beans	Cabbage Looper, Leaf Miners	Anthracnose, Botrytis Grey Mold			
Cherry	Western Cherry Fruitfly, SWD, Aphids, Peach Tree & Twig Borer	Blossom Blight, Powdery Mildew, Brown Rot, Botrytis Fruit Rot			
Carrot	Carrot Rust Fly, Root-knot Nematode	Pythium/ Cavity Spot, Sclerotinia, Storage Diseases			
Corn	Aphids, Wireworms, Cutworms, Lygus, Grasshopper, Corn Earworm	Root diseases			



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Cole Crops	Root Maggots, Cabbage Loopers, Diamond Back Moth	Fusarium, Pythium, Club Root, Leaf Spot	
Cucurbits	Cabbage Looper, Whitefly, Spidermites, Wireworms	Powdery Mildew, Pythium, Gummy Stem Blight	
Currants/ Gooseberries	Fruit Fly, Sawfly, Leaf Roller, Currant Cane Borer	Powdery Mildew	
Cranberry	Blackheaded Fireworm, Tipworms, Weevil, Girdler, Scale, Sparganothus Fruit Worm	Fruit Rot, Upright Dieback	
Forestry	Pine Beetle, Western Conifer Seed bug, Fir Coneworm		Vegetation Control
Ginseng		Phytophora Root Rot	Vegetation Control
Grape	Thrips, Leaf Hoppers, Aphids, Blister Mites	Powdery Mildew, Botrytis Bunch Rot	
Greenhouse Crops	Whitefly, Psyllids, Lopper, Thrips, Aphids, Mites	Powdery Mildew, Downy Mildew, Fusarium, Late Blight, Botrytis, Bacterial Canker, Gummy Stem Blight	*ICMS BC has 3200 ft2 (300 m2) of greenhouse space with abilities to conduct multiple greenhouse studies on a wide range of crops (ornamental, flowering, vegetable, nursery), pests and diseases
Lettuce	Looper, Whitefly	Bottom Rot, Downey Mildew, Pythium, Fusarium, Sclerotina	
Onions	Onion Maggot, Thrips	Botrytis Leaf Blight, Botrytis Neck Rot	
Ornamentals	Weevil, Thrips, Mites, Looper	Powdery Mildew, Bacterial Spot	Plant Growth Regulators
Pear	Pear Psyllid, Leaf Roller, Coddling Moth	Scab, Fireblight, Storage Diseases	
Peach	Peach Tree and Twig Borers	Blossom Blight, Brown Rot, Storage Diseases	
Peas	Aphids, Weevil	Powdery Mildew, Downey Mildew	
Potato	Aphids, Tuber Flea Beetle, Wireworms, Mites, Colorado potato beetle	Late Blight, Black Scurf, Fusarium, Leak and Pink Rot, Storage Diseases	Vine Killing/ Dessication



Raspberry	SWD, Nematodes, Cane Borer, Fruitworms, Wireworms, Mites, Weevils	Botrytis Fruit Rot, Cane Blight, Phytophora, Anthracnose	
Strawberry	SWD, Mites, Weevil, Lygus	Botrytis Fruit Rot, Phytophora, Red Steele Root Rot, Anthracnose, Powdery Mildew	
Turf	Leather Jackets/ Crane Flies, Nematodes, Wireworms	Red Thread, Fusarium, Snow Mold, Anthracnose	Moss
Tomato	Whitefly, Nematodes	Late Blight, Pythium, Botrytis Canker, BacterialLeaf Spot	
Turnips	Cabbage Root Maggot		Seed Treatments

^{*}Please note that the majority of crops listed above can also be considered for Herbicide Screening and Efficacy Trials