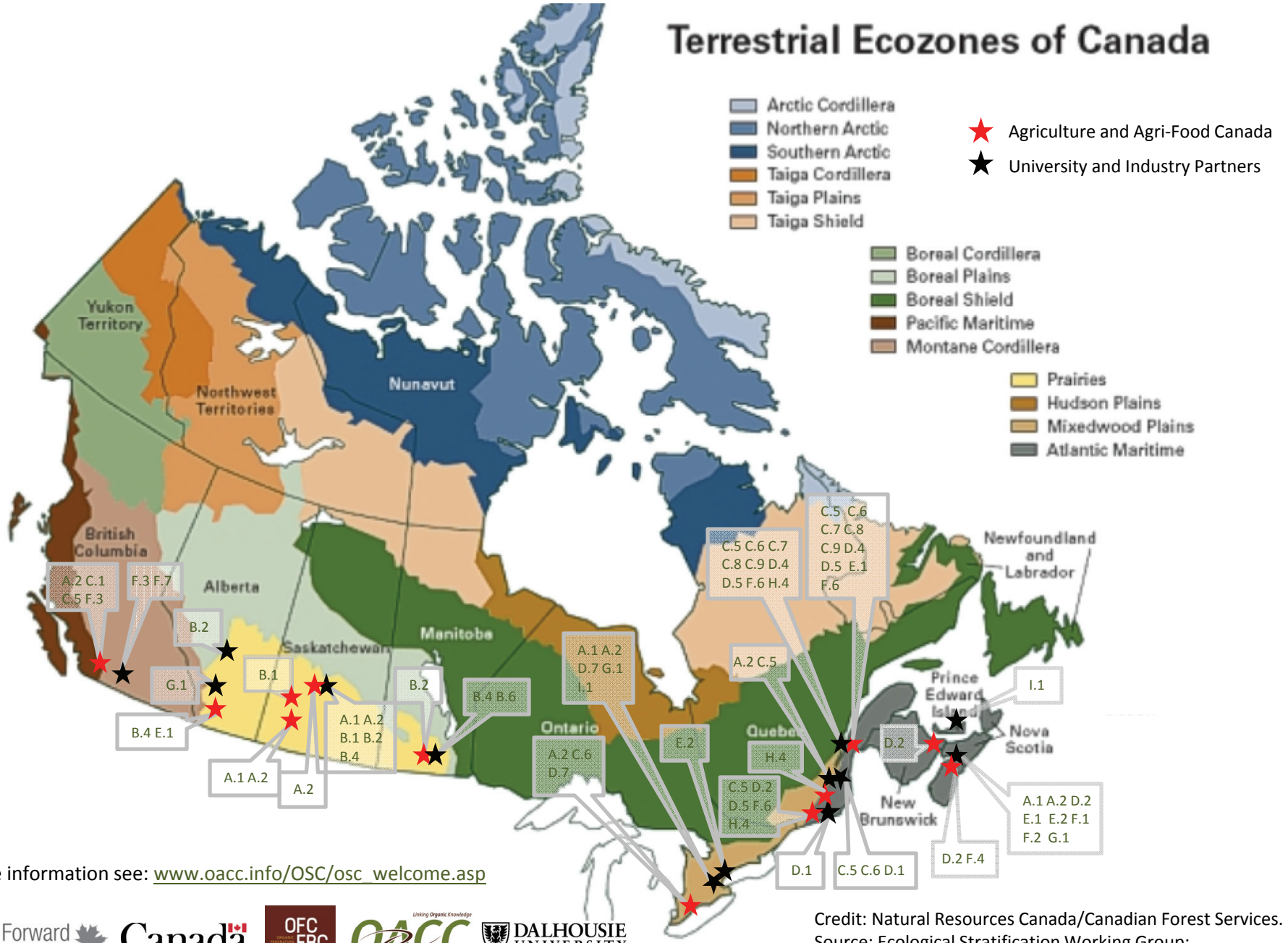
Organic Science Cluster Researcher and Activity Locations Across Canada – 2009-2013



For more information see: www.oacc.info/OSC/osc_welcome.asp

Growing Forward Canada

OFC FBC

OACC Organic Agriculture Centre of Canada

DALHOUSIE UNIVERSITY Inspiring Minds

Credit: Natural Resources Canada/Canadian Forest Services.
Source: Ecological Stratification Working Group;

Canada's Organic Science Cluster

Canada's Organic Science Cluster (OSC) is a collaborative effort led jointly by the Organic Agriculture Centre of Canada (OACC) at Dalhousie University's Agricultural Campus and the Organic Federation of Canada (OFC). The Organic Science Cluster is part of the Canadian Agri-Science Clusters Initiative of Agriculture and Agri-Food Canada's Growing Forward Policy Framework and is supported by contributions from industry partners. The goals of the Organic Science Cluster are to facilitate a national strategic approach to organic science in Canada, link scientists across the country and disseminate the knowledge generated to organic stakeholders. The Organic Science Cluster has identified 10 sub-projects including 29 research activities that will be conducted by over 50 researchers plus 30 collaborators in approximately 36 research institutions. This research comes at a time when there is renewed emphasis on innovation, efficiency (energy, labour, economics), and capturing value-added markets. Most of this research directed toward organic agriculture can also be applied to conventional production systems, drawing interest to this cluster from producers across Canada. See http://www.oacc.info/osc/osc_welcome.asp for more information.

Research activities in the Organic Science Cluster Include:

Subproject A: Biologically-Based Fertility Management

Activity A.1: Characterizing soil phosphorus dynamics and availability under organic crop production

Activity A.2: Predictive tools for characterizing mycorrhizal contributions to phosphorus uptake by organic crops

Subproject B: Integrated Grain-Based Cropping Systems

Activity B.1: Changing weed populations under long-term organic crop production

Activity B.2: Organic cereal crop breeding

Activity B.4: Low-tillage grain production systems that suppress weeds and minimize tillage

Activity B.6: Integrated grain-based cropping systems for biological and economic sustainability

Subproject C: Organic Greenhouse Production

Activity C.1: Crop nutrition for vegetable plant propagation

Activity C.5: Development of an organic greenhouse growing system for tomato that improves energy use efficiency and reuses the crop effluent as nutrient solution

Activity C.6: Development of an organic greenhouse system for intercrop tomato and extended sweet pepper crop grown under supplemental lighting for year-round locally-grown fruit production

Activity C.7: Feasibility of using geothermal energy as heat and humidity control for an organic greenhouse tomato crop

Activity C.8: Optimizing fertilization and irrigation management for a closed greenhouse organic tomato growing system

Activity C.9: Production of organic cuttings and pot plants

Subproject D: Integrated Management of Horticultural Field Crops

Activity D.1: Agroecosystem management for pest control in organic vegetable production

Activity D.2: System productivity and N flows in two organic vegetable long term rotations: High intensity stocked rotation versus a low intensity stockless rotation

Activity D.4: Organic production of vegetable transplants for gardeners

Activity D.5: Organic production of peat blocks for vegetable seedlings and detection of abiotic and biotic stresses

Activity D.7: Development of a weed management system for pumpkins grown for seed in Ontario

Subproject E: Environmental Stewardship and Product Branding

Activity E.1: Modeling farm scale energy and nutrient efficiency, and Global Warming Potential, as affected by management

Activity E.2: Modeling Global Warming Potential (GWP) reductions associated with sub-watershed wide transition to organic farming

Subproject F: High Value Fruit Production

Activity F.1: Organic management of black currant during early establishment and production for an export market

Activity F.2: Weed management for organic wild blueberry production

Activity F.3: Ecologically sound soil management in perennial fruit plantings

Activity F.4: Innovative herbicide and fungicide replacement strategies for organic apple production

Activity F.6: Organic production of strawberries and raspberries under tunnels

Activity F.7: Control of Rosy Apple Aphid (RAA) in organic apple orchards

Subproject G: Benchmarking the Organic Dairy Production System

Activity G.1: Assessment of health, welfare and milk composition on organic and conventional dairy farms

Subproject H: Organic Food Processing

Activity H.4: Alternative approaches to direct addition of nitrite/nitrate for organic cured meats

Subproject I: Sheep Parasite Control

Activity I.1: Over-wintering of gastrointestinal parasites in organic sheep production