

## *Institution*

British Columbia Institute of  
Technology (BCIT)

## *Principal Researcher*

Paula Brown, Director, NRG

## *Research Field*

Economic and Resource  
Development, including  
Energy, Agriculture and Land  
use

## *Student Involvement*

6 student researchers  
2 employed students

## *Partners & Collaborators*

West Kootenay Herb Grower's  
Cooperative (WKHGC)

## *Funding Sources*

BC Innovation Council

Western Economic  
Diversification

Investment Agriculture  
Foundation of BC

Natural Sciences and  
Engineering Research Council  
of Canada (NSERC)

## *Project Location*

Edgewood, BC  
(West Kootenays)

## Food for Thought

### A Comparative Analysis Between Native BC and European Hawthorn Species

Working with the West Kootenay Herb Grower's Cooperative (WKHGC), BCIT's Natural Health and Food Projects Research Group (NRG) is assessing the economic viability of native BC hawthorn species as a medicinal herb and to determine the feasibility of growing them locally, as an alternative crop.

Hawthorn leaves, flowers and berries have a recognized medicinal value and are widely used in Europe. Although native BC Hawthorn grows in abundance in the West Kootenay area and throughout the central/southern interior regions, the majority of Hawthorn used by BC manufacturers is imported from Eastern Europe.

Hawthorn is ranked among the top 25 selling herbal dietary supplements in the United States, with annual sales estimated at \$29 million and a 7% annual growth rate over the last three years.

The West Kootenay Herb Grower's Cooperative (WKHGC) was founded in 2003 with the mission of growing medicinal herb crops, and made a decision to focus on hawthorn as their first crop. WKHGC partnership with NRG led to the Hawthorn Agro-Forestry Demonstration Farm Trials initiative.

"We hope to encourage, develop, recruit and mentor new members whose views and values are in line with our founding purpose of developing medicinal herb opportunities for cooperative members that balance economic, social and environmental concerns," says WKHGA executive director Jeanette Lee.

In order to identify the medicinal viability of native hawthorn varieties, NRG is comparing their chemical profiles to those of authenticated specimens and medicinal varieties currently on the market. In addition to this, the project is assessing the potential for hawthorn to be used as an ingredient in value added food products and monitoring it for in vivo activity against cardiovascular disease.



"We are establishing a model and framework on which future community production, applied research and industry partnership activities can be based for the greater good of supporting economic development in British Columbia, while simultaneously improving Canadian health," says Paula Brown, lead researcher, and Director of BCIT's Natural Health and Food Products Research Group.

<http://thenelsondaily.com/news/general/growing-forward-delivers-over-28m-agri-food-sectors-11725#.UbuJ-ZyE4fw>