

WHAT IS AGROECOLOGY?

The academic field that bridges agriculture, nature and society.

Agroecology is the field that links theory and practice using social and natural sciences to describe, analyze and manage complex agroecosystems. The program focuses on integrating ecology, organic and conventional agriculture, socio-economics and culture with the ultimate goal of sustaining agricultural production, food security, community and environmental health.

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AGROECOLOGY RESEARCH AND FUTURE PROSPECTS

This month we continue to highlight some of the research completed by Agroecology graduates in June. We feature Ana Marunic, who provides some advice for the incoming students, describes her present job and gives a summary of her thesis work with sourdough bread production. Also included is the abstract of Andrea Lawseth, who looks at improving local food systems in Langley, Canada to increase food self-reliance.

ADVICE FROM AN AGROECOLOGY GRADUATE

Hello to all the agroecology people!

My name is Ana Marunic, I am from Serbia and I was a UMB student in the class of 2005. My thesis work focused on food production and was titled: Isolation and identification of the *Lacid Acid Bacteria* from organically and conventionally produced grains and possibilities for sourdough production. The degree took some time, I know, but working on the thesis was quite an experience.

To all of you that are about to enter the world of Agroecology:

Two things that I learned during the master programme were to be open-minded and patient. The Agroecology programme gives you the freedom to choose courses and create a syllabus that suits you best. However, be careful not to wander too far from the main subject.

Nowadays, I am in Oslo working at my dream job. It gives me the chance to improve food systems with a special interest in food safety. I work as a food safety inspector, and part of my work is consulting with clients on how to produce and handle food in order to ensure that the consumers get a final product that is safe to use.

Kind regards to all of you, and best of luck to the new students!

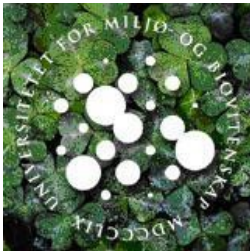


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Andrea at her thesis defense

ISOLATION AND IDENTIFICATION OF THE LACTIC ACID BACTERIA FROM ORGANICALLY & CONVENTIONALLY PRODUCED GRAINS & POSSIBILITIES FOR APPLICATION IN SOURDOUGH BREAD PRODUCTION

Thesis abstract by Ana Marunic

As always food is a hot topic worldwide. Much research has tried to reveal advantages of organically produced food compared to food produced using conventional technology. In my work, I experimented with the effects on the final product (sourdough bread) caused by *Lactic acid bacteria* (LAB) isolated from organically and conventionally produced grains. Identification and characterization of the microflora naturally present on various grain types was conducted at the Matforsk [now called Nofima] research institute. The aim was to determine if the indigenous microflora could, via specific activities, produce sourdough bread with unique characteristics. Health aspects of both cereals and LAB were included, and the possibility to positively influence human health by production of some antioxidants was also considered.

The influence of sourdough made from different strains of LAB on the quality of bread was tested. The final experiment, facilitated by a bakery in Oslo, showed that using strains with varied characteristics resulted in sourdough bread with different properties.

URBAN AGRICULTURE AND LOCAL FOOD SYSTEMS: THE PATH TO FOOD SELF-RELIANCE IN LANGLEY, BRITISH COLUMBIA, CANADA

Thesis abstract by Andrea Lawseth

The globalization of the Canadian food system has resulted in a number of detrimental consequences such as farmland fragmentation, agribusiness control, compromised food safety and security and a lack of knowledge about where food originates or how it is produced. Urban agriculture and regionalized food economies are ways that Canadians can reclaim their food self-reliance and reduce their dependency on other countries and other regions for their food. This thesis uses soft systems methodology to examine the current food system in Langley, British Columbia, Canada as perceived by the local community in order to create a future wanted situation and develop an action plan to achieve the community's goals.

Through a rich picture analysis and exploration of the current food system in Langley, it was determined that there are a variety of food security initiatives in place, but there is a lack of cohesion among the efforts. Also, these programs only address emergency food relief without providing capacity-building opportunities for those who are food insecure. To gain further insight into the Langley community a self-completion questionnaire was distributed on food purchasing behaviours. Results indicated that the majority of respondents purchased their food from the grocery store and that price, taste and nutritional value were the most important factors guiding purchasing decisions. Respondents also found it important to know how their food was produced, whether it was produced in BC and whether it was free of genetically modified organisms.

Interviews were conducted with food producers, urban planners, municipal employees and representatives from non-profit organizations throughout the Lower Mainland and the City of Victoria. Common themes emerged and included: local food, direct farm marketing, urban agriculture, food security, availability of food, health concerns and the contribution of urban agriculture to food self-reliance.

A visioning seminar was held in June 2008 to identify the future wanted situation for the Langley food system and to develop the necessary action steps. The following recommendations were established to be presented and taken under advisement by the City and Township of Langley municipal governments: 1) conduct a food system assessment of Langley; 2) establish a Langley Food Policy Council; 3) create a Langley Food Charter; 4) develop a Municipal Food Action Plan; 5) implement new food security measures; 6) establish a local food economy; 7) construct a local food processing facility; and 8) create incentives for succession planning and new farmer engagement.