Highland Organics®

"A taste of wild Maine in every blueberry."

"...their fruit will be for food and their leaves for healing." Ezekiel 47:12

On a visit to the farm in 2004, Dr. Kristi Michele Crowe, then doctoral student at the University of Maine, Orono, Food Science and Human Nutrition Department, shared with us that she was looking for a project to do for the National Science Foundation program at a local high school chemistry class, Hampden Academy High School, Hampden, Maine. We posed this question to her and she thought it would make a great hands-on science project for the students. This would in turn benefit our farm with the research we needed to answer this question. Dr. Crowe, teacher Bill Leathem, and students came to **Highland Blueberry Farm**, harvested the crimson-red blueberry leaves by hand and returned to their lab with their samples.

Together scientist, teacher & students, tested the blueberry leaves for anthocyanin levels. This is the first time that this type of research on low-bush wild Maine blueberry leaves had ever been done. To everyone's surprise, the anthocyanin count was higher in the blueberry leaves than they were in the organic blueberries that were tested from **Highland Blueberry Farm**!

What does this mean for you and me? Well, anthocyanins are also known as antioxidants. Antioxidants help to neutralize free radicals, which are unstable molecules that are linked to the development of a number of degenerative diseases and conditions including cancer, cardiovascular disease, cognitive impairment, immune dysfunction, cataracts and macular degeneration. Fruits and vegetables are sources of natural antioxidants and among them blueberries have one of the highest levels of antioxidant activity.

Highland Blueberry Farm has received 3 Maine Technology Institute Seed Grants for the research and development of our organic whole plant blueberry tea. These grants have helped us to develop equipment for harvesting and drying blueberry leaves. The first harvest begins in August with the harvest of the organic wild Maine blueberries and the second harvest takes place in September with the organic blueberry leaves, which is considered a waste by-product in the agricultural industry currently.

This second harvest has given us the potential to become a year-round farm business, benefiting Maine with this first ever value-added product.

The research phase of the grants allowed us the opportunity to work with many people and departments at the University of Maine, such as the Department of Food Science & Human Nutrition and the College of Engineers at the Advanced Manufacturing Center. Our product has undergone testing to determine optimum drying times for the blueberries and the blueberry leaves, while preserving antioxidants in both.

In the summer, young people from local communities work with our family to harvest blueberries. The second harvest of leaves begins in the fall when the women from Blessed Hope Ministry of Calvary Chapel Central Maine, (a residential discipleship opportunity for women seeking a way of escape from a life of drugs and alcohol through their relationship with Jesus Christ), come to the farm to work harvesting blueberry leaves and preparing them to be packaged with the dried blueberries into the first ever whole plant blueberry tea.

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