

BERRY TALK

Aronia & Berries of the Prairie



My recent inquiries have led me to a great opportunity for aronia fruit research: CREC is joining a collaborative effort between Dr. Andrew Ristvey, University of Maryland Extension; Dr. Mark Brand, University of Connecticut-Storrs; and Dr. Brad Bolling, University of Wisconsin-Madison. They are jointly applying for a USDA-Specialty Crop Research Initiative (SCRI) grant. The study will last five years and North Dakota will participate when I contribute fruit from CREC aronia varieties. Fruit will be collected before, during and after optimum harvest conditions so that a picture of changing antioxidant content can be formed. The project will allow us to compare antioxidants in aronia varieties and determine whether growing location changes those results.

This is great news! I want to thank everyone who saved aronia fruit for me last fall. If you still have it in your freezer, you can eat it now.

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The antioxidant content of various aronia cultivars such as 'Viking', 'Nero', 'Galicjanka' or 'McKenzie' should be very similar when grown under similar conditions. One cultivar should not significantly outperform another. A simple explanation is that aronia propagates itself through 'asexual reproduction by seed.' The seeds of each fruit hold the same genetic potential as the plant that produced them. In thousands and thousands of seeds, there will be some variation but it is very small.

Sorry for the typo:Waye Ruzicka of the Painted Woods Aronia at Wilton, should be Wayne. I have talked to the editing staff to be more diligent.

“The way I see it”
 Commentary by Collin Evenson
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Blake Johnson submitted this information on the use of fabric and crop insurance. I have spoken with multiple sources on fabric. First it was we could not use any fabric, then it was we could use a special organic fabric made out of coconut fibers (which were fairly expensive). As of now you can use the traditional fabric that "NRCS" (actually the county soil conservation districts) use, however when the fabric starts to break down it needs to be removed. "Break down" will be determined by the organic certifier. They also have the choice to make you wait 3 years until the fabric is removed to be considered organic. Ripping out fabric is an exhausting task and expensive to only keep on for the first three years. If something changed where they wouldn't make you rip it up I would say go for it. Currently, I think it would be a mistake. I currently have 21 acres and my uncle has 17 acres down in Lamoure County I didn't use fabric but I sure would have liked too. A couple other things for your next publication that may be helpful is the insurance that can be provided by your local FSA office. You can get the insurance your fourth growing year. The insurance is called "NAP Insurance". The insurance prices have dropped 72% of the guarantee from last year. Last year the rate was based off of a yield per acres of 7,500lbs per acre (need a density of 620trees/acre) at a rate of \$2.00/lb. This year the rate went down to 5,500lbs per acre with a price of \$1.00/lb also with a 25% reduction on the 5,500lbs on the fourth year and would increase back to 5,500lbs on the 5th year.

Claudette's Corner

Jolene's Aronia Smoothie

From Dakota Rural Action's
[South Dakota Local Foods Directory, 2013-2014](#)

Jolene encourages smoothie creativity. When her two sons were growing up, the daily family breakfast game was “What’s in the smoothie today?” She’s tried dates, pecans, walnut milk, zucchini and carrots with this basic recipe, with good results.

- 1 cup aronia berries
- 1 banana
- 1 apple, chopped
- 1/2 cup vanilla yogurt
- 1 cup peaches (canned or fresh)
- 1/2 cup juice (apple, peach, orange, etc.)
- 3/4 cup water with ice cubes

Place ingredients into a blender and blend until smooth. Adjust liquid/ice amounts to your personal preference and enjoy.

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The Stewarts' new berry picker shakes the bushes, catching the berries, which then fall on a conveyor belt. After a fan blows out leaves and other debris, the berries are collected into a 30 lb. lug. Photo by Jolene Stewart

"Berries make better bodies," according to Jeff & Jolene Stewart. Since 2008, they've been growing the aronia berry, a tart, dark purple superfruit loaded with antioxidants, on their ranch near Wagner South Dakota. Their healthy journey began in the bermed flower beds of their home in Idaho, where Jeff was employed with the Department of Agriculture. "Jeff noticed that on the top there were all these bushes that had these dark, deep purple berries," Jolene said. A tag on one bush identified the fruits. "As we moved to South Dakota and Jeff worked more with specialty crops, we got interested in them. The more we learned about the health benefits, the more we decided that this was something we wanted to raise," Jolene said.

The Stewarts grow three varieties of pesticide and herbicide-free aronia berries at their ranch: Viking, McKenzie and Galicjanka, a new Polish cultivar, as well as Boer/Spanish cross goats. Harvest time usually falls over a three-week period in late August and early September. At first, they tried to harvest by hand, but with over 11 acres of berry bushes, that proved impractical. This year, a new berry harvester should make the task easier. Article published in the Aug 1, 2013 addition of South Dakota Nagazine.com by Laura Andrews.

I asked Jeff Stewart if they use fabric. "The fabric we use here in SD is the same kind the SD Conservation District use for landowners when they plant shelterbelt and windbreak seedlings. In fact they installed it for us. It is a 25 year life span woven landscape fabric that lets the rainfall in and keeps the weeds out. We are certified organic by the Minnesota Crop Improvement Association (MCIA) and have been for the past two years. They don't have a problem with this fabric. Both the National Organic Program NOP rules and MCIA say that when it starts to degrade it has to be removed. Our experience with it is that it will not have to be removed in our lifetime. We have had fabric on trees here for 10 years with no signs of deterioration.

I asked Jeff Stewart about his fertility program. "I use organic fish emulsion/fertilizer at the rate of 0.6 oz. per 1/2 gallon of water per plant. It converts to 9.4 gallons of fertilizer in a 1000 gallon water tank and I foliar apply it to the leaves. The analysis of the fish fertilizer is N-P-K (2-4-0.5) and 1 Calcium. I have my 1000 gallon tank on a flat bed with a pump and 2 spray guns mounted on the sides of the flat bed so I drive slowly and do 2 rows at a time. My wife is usually in the back directing the spray as needed. I hope this helps. Now that we are harvesting over 30,000 lbs of berries we will be fertilizer probably once per year. We have not fertilized every year in the past.

Investigating the health benefits of berries

NIFA funding enables researchers to examine berries's health impacts

PUBLISHED ON MARCH 30TH, 2016

WASHINGTON — In recent years [studies have shown](#) that blueberries can produce many health benefits, from preventing dementia, combatting high blood pressure, to promoting better digestion. NIFA's support to agricultural and food researchers is enabling them to look closer at the nutritional value and health impacts of these and other berries.

United Tribes Technical College's "[On the Fringe of Survival: How the Wild Environment Gives Native Berries the Edge for Protection of Tribal People's Health Project](#)" stimulated increased demand for wild berries within tribal communities and in outside markets, for long-term health improvement and economic development. Wild berries, such as chokecherries, cranberries, juneberries, wild grapes, and wild raspberries, traditionally play an important role in the lives of Native Americans. Researchers are screening the berries for naturally occurring compounds that may confer health benefits, such as Type 2 diabetes and chronic diseases in tribal communities.

[Aronia berries](#) are rich in polyphenols, a type of micronutrient that may prevent cancer and cardiovascular disease. Pre-clinical and clinical evidence suggest that consuming aronia berries may mitigate inflammation associated with chronic disease. Researchers at the [University of Wisconsin-Madison](#) are working to provide a comprehensive understanding of the anti-inflammatory potential of aronia consumption and provide new knowledge about how diet can stimulate the body's immune function.

Article published in the Morning Ag Clips.

<https://www.morningagclips.com/investigating-the-health-benefits-of-berries/>

If you're considering growing Aronia berries, we would like to hear from you about your plans. Not only are we building a database of growers in the North Dakota to help farmers connect with buyers, but we want to help new growers get into this emerging crop. And we have Aronia experts who can help you with questions you may have getting started or along the way.

Regardless of the acreage, number of plants, or your experience in this endeavor, we hope to be an asset to you and your future in the Aronia berry market.

Prairie Goodness

Aronia and other berries of the Northern Plains