



American Aronia Berry Association, Inc. | 533 S. Main St., Council Bluffs, IA 51503 | 1.712.579.4151 | info@americanaronia.org

E-Newsletter (01/2022)

Volume 2022 / Number 1



Message from Our President

Once again it is time to start the renewal process for membership in the American Aronia Berry Association {AABA}. Needless to say it has been another difficult year for the Aronia industry. With many producers not harvesting due to a lack of buyers, some grower groups disbanding and going out of business due to declarations of bankruptcy by their buyer, it is easy to get discouraged and lose hope in the future of the industry. I have visited with several fruit processors who at one time handled aronia products, { mostly juice and powders }, who no longer do, due to a lack of demand, despite their best efforts to promote it. The failure rate is often high for those attempting to make a market for a relatively new industry such as aronia. It leaves one scratching their head, as to why the aronia berry has had so much difficulty gaining traction in the marketplace. Yes there are issues with taste, but this can be overcome with harvesting a good quality berry, and using them properly as an ingredient with other food preparations. Also it is hard to get larger companies interested who have the resources to promote it, when adequate quantities are not available. For those companies who are currently using aronia, it is difficult for domestic producers to compete with much cheaper foreign imports, which are subsidized by their government. The AABA has made efforts to establish a tariff code for aronia berries with the



U.S. International Trade Commission to enable us to track the amount of imports coming into the country. It was not possible to get this done, due to the fact that the government does not keep track of aronia separately, but lumps it together with other berries. The industry is not large enough to justify it, also it would require private companies both foreign and domestic to report trade information which they are not willing to do.

Despite these difficulties the AABA board continues to work on improving public and industry awareness through social media and other outlets in a financially responsible way. We do not have the resources to implement phase 2 of the marketing plan developed by the marketing consultant company that was hired over a year ago. We continue to look for ways to raise the required funds that would enable us to do this on a consistent basis.

Enough of the bad news, as we near the end of the year there are indications that some companies are ready to begin buying berries in the coming year, and hopefully by the time of next year's harvest the market situation will be better. If more information is available at conference time we will share that with you. The board is currently in the planning stage for next year's conference in March with the goal of making it relevant for both small and large producers. We appreciate your past support and encourage you to renew your membership for the coming year. By working together we can accomplish more than we can alone. And remember, as has been said, "It is usually darkest before the dawn ".

Wishing you and yours a happy and joyous New Year!

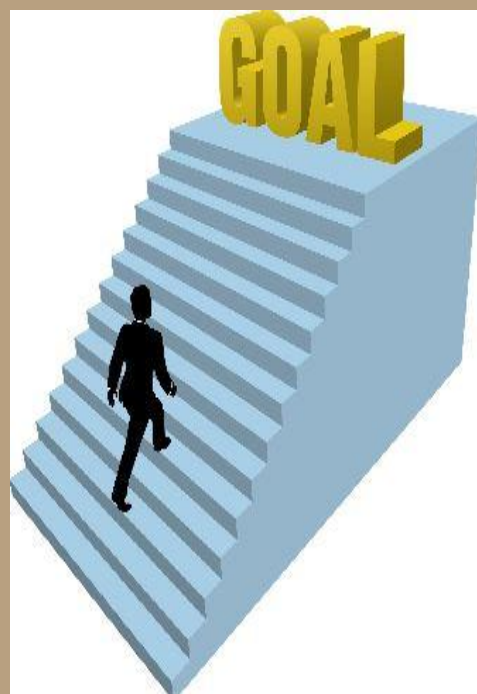
Dale Hilgenkamp, President

The Next Step in the Evolution of the AABA

During the last few months there have been many changes coming our way. The Board of Directors has worked hard to usher in a new direction for the Association in an effort to push forward the Aronia industry. The Board is excited to announce that even with the onset of COVID-19 the American Aronia Berry Association (formerly Midwest Aronia Association) took a bold step and launched its new direction. With that new direction a new name and a new vision were born.

We are now the American Aronia Berry Association (AABA)!

I have found few people who are fond of change. With change comes uncertainty and a certain amount of stress and anxiety. However, there are



those that thrive during change. Change signals a new direction and it is that new direction that you will see taking shape in the coming months.

Your Board of Directors is dedicated to taking the Association in a direction that is best not only for our membership, but for the Aronia industry. We envision that direction will result in

An increase in membership;

Greater outreach to the general public highlighting Aronia and it's health benefits;

Establishing a Committee to work with regulatory agencies to focus on Aronia and it's classification in agricultural, and

Working with other Aronia organizations and companies to establish a system for the industry to produce a consistent sellable Aronia berry for all.

Yes, the Board has lofty goals! This will not occur overnight, but your Board is committed to accomplishing those goals!

As we look at our membership we see a variety of talented and resourceful people.

Some grow Aronia for the health benefits and others envision an opportunity to make money from the sale of berries on a commercial scale. The reasons to grow Aronia are as numerous as our membership. Regardless of your reasons, the advancement of Aronia in the marketplace, Aronia being recognized as an agricultural crop in political arenas, and ultimately seeing Aronia on the kitchen table, is beneficial to everyone.

This is where the paddles meet the water . . . the Board cannot steer this boat alone. A journey such as the Association has undertaken cannot be accomplished by just nine people. It will take the efforts of the entire membership.

Please consider what you have to offer?



[NEW BOARD MEMBER POSITIONS OPEN](#)

As many of you may know, positions on the AABA Board of Director are three year terms with the option to stay on the Board for an additional three year term. There will be Board Member positions opening in March of 2022. During the next Annual Meeting we will be seeking 3 to 4 new Members to serve on the Board. We would ask that you consider donating your time and efforts to further the Association. Serving on the Board is a non-paid position that does require a commitment of your time each month. You would be part of a Team. Our Team! Each member of our Team is different. The Board is composed of different views and opinions yet together we

complement each other and together we become a strong circle of change. You might think that you have nothing to offer to the Association. You are wrong. Everyone has a talent. It might just take others to compliment your talent for it to shine.

Please meet your current Board and consider serving an upcoming term.

President. Dale Hilgenkamp, from Arlington, NE, is our current President. Dale has done an exceptional job as President this last year. Dale is in his third year on the Board. Dale has indicated his desire to continue to serve on the Board for an additional term. Dale and his family have approximately 7,500 Aronia plants. Dale also has a farming operation which takes a great deal of his time. Peggy and her family have approximately 1,400 Aronia plants. In addition to serving on the Board, Peggy ha.

Vice President. Our Vice President, Lynn Jenson, is in his third year of service to the Association. Lynn has also indicated his desire to continue to serve on the Board for an additional term. Lynn lives and farms, with his son, near Lake Preston, South Dakota. He grows corn, soybeans, alfalfa, Italian ryegrass, and of course . . Aronia berries. Lynn has approximately 25,000 plants in their third year of growing and expects to have his first berry harvest next year. As Vice-President of the American Aronia Berry Association Lynn fills in where necessary on the board and committees. Lynn is very excited about the health benefits of aronia and is always anxious to tell others about the benefits. He also loves to hear stories from others that showcase the health benefits that they have had from the berry.

Secretary. Dennise Bowyer from Marshall, Missouri, has served as the Board Secretary this past year. In addition, she has assisted with the Public Relations aspect of the Board.

Treasurer. Our current Treasurer is Danette Schmacher. Danette and her husband, Matthew, reside in Sioux Falls, SD. Danette holds a Bachelor of Accounting degree from Moorhead State University, Moorhead, MN. She has worked for various companies as an Internal Auditor and a Certified Internal Auditor. In addition to her work on the AABA Board, Danette is currently the office manager for two businesses in Sioux Falls – First Dakota Horticulture and Nursery Wholesalers. In 2011, Danette and her husband discovered Aronia. Along with 2 partners, Matthew started Aronia Unlimited which propagates and sells aronia liners. In addition, Danette and Matthew have about 4,000 Aronia plants of our own which they harvest. Danette stated, “I am a true believer in the health benefits of aronia and have personal positive health results due to my daily consumption.” Danette and Matthew have 2 children, a daughter, Morgan, who is in her third year of college at Augustana University in Sioux Falls, SD and a son, Justin, who is in his first year of college at Dakota Wesleyan University in Mitchell, SD.

Membership Team. Steve Crites, who resides in Colorado, heads up our Membership Team. Steve Crites is responsible for Membership processing and tracking along with any potential outreach to the membership. That being said, Steve is always open to any ideas on where we take membership and how to provide additional value of the AABA back to the members. Ideas being social media outreach, email touches and anything we need to drive interest in membership and annual meeting attendance. Steve and his wife, Shirley, have 3,800 Aronia plants which are grown in Paxton, NE. Steve is in medical device sales in Denver and a new farmer. The Crites’ have taken their Aronia to the next level this year by developing their own Aronia business featuring an Aronia based product line.

Research and Technology Team. Leroy Godfrey, from Long island, KS, and Dean DuVal from Western, Iowa, are our Research and Technology Team. Leroy is in his third year of service to the Board and will be leaving the Board in March 2022. Leroy has approximately 650 Aronia plants. In addition to serving on the Board, Leroy and his wife have a farming operation in North Central Kansas which takes a lot of his time. Leroy has an awesome personal testimony. I encourage you to get to know Leroy as he shares his passion for Aronia in the Testimony section of this issue of the Newsletter.

Dean DuVal is in his second year of service to the Board and is featured in the Spotlight section of the Newsletter that follows. Dean is now retired, but was previously employed for over 30 years as a scientist in the consumer product product development field. Dean shares that he did not commercially harvest this year due to low yields associated with a late spring frost and severe drought in his area. With the crops out, he is now focused on understanding flavonoid chemistry in general, metabolic pathways for phenolics, anthocyanins, and condensed tannins to get into the body, and have been doing searches on the health benefit studies associated with these molecules in a variety of fruits and berries. Separately, he has been doing formulation work to make more tolerable the astringent aftertaste associated with the condensed tannins in aronia berries. So far, Dean has developed three formulas that everyone in his family loves, and based on Dean's learnings, plans to develop two to three more formulas within the next few months.

Events Team. Peggy Hobza and Randy Sarvis head up our Events Team. Peggy has a growing young family and works long hours in her profession as a dental hygienist. Peggy is in her third year of service on the Board. Peggy has indicated she will be leaving the Board in March 2022.

Randy Sarvis is from Pierre, SD. Randy has been involved with Aronia for several years. He has expertise in a wide range of areas and has been an asset to the Board this past year. Randy has indicated he will be leaving the Board in March 2022 to pursue other commitments.

Peggy and Randy are collectively in charge of the AABA Annual Conference and they have done a great job this year given the repeated obstacles that have been faced.

Public Relations Team. Dennise Bowyer along with Caryne Gordon serve as the Board's Public Relations Team. Dennise and her husband, Justin, have approximately 2,015 Aronia plants located in Marshall, Missouri, Dennise is in her second term on the Board. Caryne resides in Fulton, Missouri, and joined the Board in 2021. Caryne is very active with her own bee business and is hands-on in her family's Aronia business. Caryne and her husband, Shane, are expecting an addition to their growing family in 2022 and Caryne has indicated she will leave the Board in March 2022 to devote additional time to her family.

At this time Caryne is actively working with the Technology Team to update certain areas of the website. Her talents are many and she will be missed. Your Public Relations Team works together to publish the Newsletter, post on social media, and develop printed media/publications, among other duties. Lately the push has been to seek out and develop an affordable ad campaign for the AABA on social media platforms.

Technology Team. Rich Voyek is our Technology Team. Rich's main task is to take care of the AABA website and all things associated with it. Rich Voyek and his wife, Cheryl, live North of Des Moines in a rural area called White Oak. Rich shared that he has lost track of how long he's been the Technology Chair, but it's been a few years. He is always looking for someone to carry on the work he has done so far. Rich and Cheryl got involved with Aronia a few years back after talking to a friend (Bob Pertzborn) about the berries. The Voyek's have around 900 plants and for the most part they are the primary consumers of their berries, but have sold berries to other interested parties.

As you can see, your Board comes from all across the U.S., holds down regular jobs, and comes from a variety of backgrounds. Each Board member is here for you, *the membership*. Each member is serving voluntarily as we each have our own day jobs, but we each take our Board responsibilities very seriously. It takes each of us to collectively work together in furtherance of a common goal . . . the Aronia Industry.

We would encourage you to become an active part of your Association. You . . . along with others . . . can make a difference!

If you have questions about serving on the Board, please feel free to contact any member of the Board. We would be more than happy to answer any questions you may have.

If you would rather not serve as a member of the Board, your talents are still needed. We would greatly appreciate receiving periodic contributions to the Newsletter in the way of articles, new recipes, etc., or let us know what interests you. Simply contact publicrelations@americanaronia.com

Mark Your Calendars and Save the Date!

The 2022 AABA Conference is fast approaching! Are you ready? Due to a world hard hit by the COVID virus in 2021 our Annual Conference was held virtually. But we are on track for an *IN PERSON* Conference on March 18 and 19, 2022. That's right - *IN PERSON*!



Registration for the 2022 Conference will begin shortly. Please join us. Keep your eyes open for upcoming emails.

How do I reserve a room at the Omaha Marriott?

The Board is asking that you contact the Omaha Marriott directly at (402) 399-9000 and reserve your room. When you call, be sure to mention the AABA room block.

Please join us for the 2022 AABA Annual Conference. We are excited to share with you many of the changes that have taken place in the last year and are excited to share many changes the Board sees for the future. With your help these changes will become a reality.

The Aronia industry is changing and so is the Association. Please join us at the 2022 Annual Conference and become a part of our new direction.

Please check our website (americanaronia.org) for further details as they become available and follow us on Facebook ([AmericanAroniaBerryAssociation](https://www.facebook.com/AmericanAroniaBerryAssociation)) and on Twitter ([@AmericanAronia](https://twitter.com/@AmericanAronia))!

Mark Your Calendars! The next in-person Annual Conference will be held:

WHEN: March 18-19, 2022

WHERE: Omaha Merriott, 10220 Regency Circle, Omaha, Nebraska

Don't forget to add the 2022 Conference to your calendar. You won't want to miss it!

DEAN and JO DuVAL

Western Iowa

Dean and Jo DuVal are Iowa Aronia growers. Dean is now retired, but was previously employed for over 30 years as a scientist in the consumer product development field. The DuVal's are from western Iowa, but also spend significant time each year in Ohio and Florida to be with their children and grandchildren. Dean has a background in chemistry and disruptive product innovation. Dean's hobbies include woodworking, traveling, and growing Aronia.

Dean and Jo grew up in Onawa, IA, and co-own approximately 530 acres of farmland about 3 miles southeast of Castana, IA. On that land, they have about 4,300 Aronia

berries which include 2,300 five year old plants, 500 three year old plants, and 1,500 two year old plants grown on about four acres of land. Dean planted those plants due to his curiosity in the berries, as an excuse to have to come back to Iowa during the summers, and as a reason to continue to engage in the scientific literature and academia related to their health benefits. Dean also funded a Capstone research project last year at Iowa State with the Ag Engineering Department at ISU specifically to develop a low-cost, 3-point hitch mounted tiller that could be used to till around the bushes without damaging them (a vertical tine tiller). That project was completed just over one year ago.

Dean joined the Board of the AABA in 2021 and his focus is to work with the Board in the area of Research and Development. We gratefully welcome Dean's contribution.



Inflammation and Aronia

The following article was provided by Mr. Sonny Weathersby for use by the American Aronia Berry Association. We would like to gratefully acknowledge Mr. Weathersby's contribution to this issue of the Newsletter.

Sonny Weathersby is a health and wellness ambassador and the owner of Wellness on Wheels International, a cold-pressed juicing company based in Georgia. Sonny obtained his Bachelor's degree in Public Policy and Master's degree in Public Administration, and is currently pursuing his doctorate in Health Psychology from Walden University.

What is Inflammation?

Inflammation is a major part of the human immune system. Inflammation is a process that allows the body to protect and heal itself from harm or infection (Spritzler, 2018). For example, when bacteria or viruses invade the body (i.e. a scraped knee), the immune system works to fight the damaged area, creating an environment to protect and repair tissues and ultimately heal the body (Anft, 2016).

Inflammation can be a help to the immune system, but it can also be harmful if it becomes chronic. Chronic inflammation may last for weeks, months, or years can lead to multiple health problems such as obesity, heart disease, stress, cancer, and/or diabetes (Spritzler, 2018). Short-term inflammation occurs in the likes of swelling, pain, heat, and redness.

The immune system goes through multiple steps in order to complete its purpose. It is first alerted by the sentinel cells when invaders are present. Then, other cells relinquish chemicals that send a signal to the capillaries to release blood plasma, which causes the invaders to yield. Next, another cluster of sentinels send cytokines to fight the germs the invaders might leave behind. With the combination of the B-cells and T-cells merging into the destruction, a final wave of cytokines is released to let the immune system that the coast is clear (Anft, 2016).

Reducing Inflammation

There are foods that cause inflammation such as carbohydrates, fried foods, sugary drinks, red meat, and shortening. However, in order to reduce inflammation, one could consider eating a diet that includes foods high in antioxidants. Antioxidants are man-made or natural substances that can prevent cell damage. Diets that are high in vegetables, fruits, nuts, fatty fish, and olive oil have been found to be good sources of an anti-inflammatory diet and antioxidants. Other sources of antioxidants include vitamins C and E, lutein, selenium, and zeaxanthin (National Center for Complementary and integrative Health, 2016).

Aronia Berries

One other food source that is high in antioxidants is the Aronia berry. The Aronia berry, also known as the chokeberry, was originally grown in North America, Europe, and Poland, but has now spread throughout the world (Ghosh et al 2018). "Aronia contains many health-promoting substances such as anthocyanins, proanthocyanins, vitamin C, pectins, tannins, flavonoids, and phenolic acids." (Thi & Hwang, 2018) Many believe the Aronia berry is the healthiest fruit in the world, as it offers more health benefits than other superfoods such as blueberries, grapes, cranberries, sweet potatoes, beans, nuts, and salmon (Borowska & Brzoska, 2016 & Aronia Berry Services of Northeast Iowa, 2013). The Aronia fruit has also been determined to have antibacterial, anti-inflammatory, and antioxidant properties (Thi & Hwang, 2018).

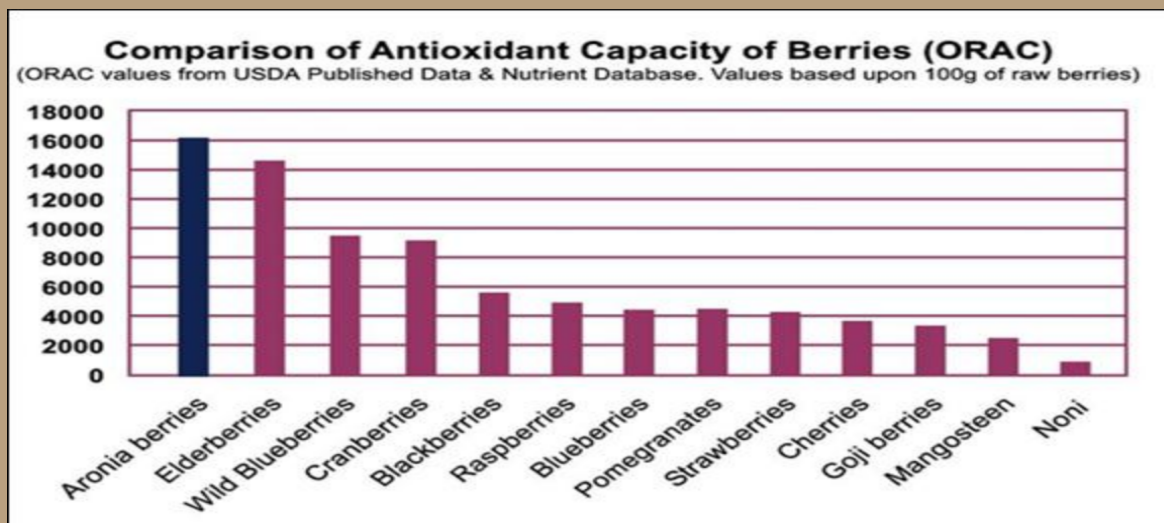


Figure 1. Comparison of Antioxidant Capacity of Berries (ORAC) Graph from Aronia Berry Services of Northwest Iowa, *Aronia Berry Health Benefits*, 2013.

Antioxidant levels are measured by the Oxygen Radical Absorbance Capacity, and the USDA shows that the Aronia berries contain the highest antioxidants of all the fruits including goji berries, noni, elderberries, raspberries, pomegranates, etc. (Aronia Berry Services of Northeast Iowa, 2013). As seen in Figure 1, the Aronia berry holds an antioxidant capacity of more than twice the antioxidant capacity of the other berries such as blueberries, strawberries, and mangosteen.

Researchers in Poland conducted a study to determine whether foods such as Aronia have a significant effect on inflammation, oxidative stress, and iron depletion. The researchers implemented a placebo-controlled trial with 19 participants who were training for the Olympics at an Olympic Games Training Center. The participants drank either 50 mL of Aronia juice or they drank 50 mL of a placebo three times per day over a period of eight weeks. After the 8-week period, the researchers recorded the intensity, duration of training, caloric intake, and blood of the participants collected one minute and 24 hours after rowing tirelessly (Rutberg, 2015).

The researchers found that the Aronia juice had a significant effect on the inflammation, oxidative stress, and iron depletion, which suggests that it would be beneficial to athletes as they undergo extensive training. The researchers concluded that the Aronia juice was significant due to their high number of anthocyanins (Rutberg, 2015). Anthocyanins are a type of flavonoid, with antioxidants. Not only do anthocyanins act as antioxidants, but they also offer anti-inflammatory, anti-cancer, and antiviral benefits. Anthocyanins give plants their red, purple, and blue colors.

Benefits of the Aronia Berry

The Aronia berry has multiple health benefits.

1. The Aronia berry is known for having the most powerful antioxidants, such as Vitamin E and C, which protect the body from oxidation.
2. The Aronia berry contains high levels of anthocyanins (the dark color of the berry) and proanthocyanins (plant-based antioxidants).
3. The Aronia berry contains low levels of sugar (Superberries, 2019).
4. The Aronia berry contains a wide variety of minerals and vitamins, such as zinc, iron, and magnesium (Wessels, 2018).
5. The Aronia berry reduces inflammation levels (Superberries, 2019 & Aronia Berry Services of Northeast Iowa, 2013).
6. The Aronia berry combats cancers.
7. The Aronia berry improves immune function (Wessels, 2018).

In conclusion, inflammation is a vital part of the immune system that helps the body heal itself from infections. Inflammation can become harmful if it becomes chronic, but there are ways to minimize inflammation. One could remove diets high in carbohydrates, fried foods, and sugary foods. In addition, one could implement foods that are high in antioxidants, specifically Aronia berries. Aronia berries are one of the foods that is high in antioxidants. Also, known as chokeberries, Aronia berries have been shown to have anti-bacterial, anti-inflammatory, and antioxidant properties (Thi & Hwang, 2018).

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Do you have a Testimonial to share? Please let others know how the Aronia has affected you or if you know of anyone that would be interested in sharing a testimonial please contact:

publicrelations@americanaronia.org

Welcome to the American Aronia Berry Association

My name is Leroy Godfrey and I have served as a Board member for approximately 3 years.

I would like to share a little about myself and how I became interested in Aronia.

In 2011, my mother passed away from a second round of Cancer, which had been in remission for seven years. In 2012, I had a brother die prematurely of heart disease at a young age. When I was a teenager, my father was diagnosed with Cancer, and 4 years



later, passed away from that battle. Cancer and disease has had a profound impact on me and my life. These life events that I witnessed encouraged me to start looking at things that I could do to change my lifestyle to a healthier one. I started researching, and in doing so, I came across the Aronia Berry. This "Aronia" thing was very interesting to me and showed promise as one thing that I could do to promote a healthier lifestyle for myself. I thought the best way to know more about it was to plant some and make myself a case study. So that was what I did.

We have a dryland farm in North Central Kansas. Currently we have 600 Aronia plants on our farm. I had approximately 1.5 acres of ground which was a pain to get machinery into. So I set this piece of ground aside to do my research and live study project. It started with 50 plants in 2014, and they grew well. After a couple more years, I purchased 150 more plants.

I retired from my day job after 30 years in July of 2017. There was still room on the 1.5 acres for more Aronia's. I made plans for the following spring to finish planting this field. October 2017 came along, something wasn't right with me. I went to the Dr. I was bleeding internally! After several tests and being taken to Omaha by ambulance, they discovered I had a large mass in my pelvic area. They had to do surgery to remove the mass, and after testing it was determined to be Cancer. Wow, what a blow to me! I had never felt bad up to that point. The surgeon told me the tumor I had in me probably had been growing for years. My surgeon and Oncologist told me also due to the size and the genetic makeup of my tumor, this type of cancer had a high rate of coming back. They recommended I start on daily oral chemo, which I have done. I have been taking oral chemo now for almost 3 years, and my Cancer is still in remission. Aronia juice and berries had been a part of my daily routine for a couple of years prior to my surgery. My Doctors were surprised at how fast I recovered from my surgery, also they are encouraged by how well my body has tolerated the daily chemo. I am not stating that Aronia is a miracle cure or has healed me or my Cancer, but I am saying I am a believer in the benefits of making Aronia a part of my daily lifestyle. Finally in 2018, I finished planting the field to Aronia's. When I was asked to serve on the Board in 2019, I was hesitant as I did not know what all it entailed or what would be required of me. There wasn't anyone I knew of in my area of Kansas that was growing Aronia. To make sure I could be involved with likeminded people and to see if I could be a part of the solution to make Aronia a household name, I said yes.

I have enjoyed my time on the board so far and have made several new friends. Two of the biggest challenges I see for Aronia is: making it a household daily use routine, and finding markets to sell the berries. So I ask you as well, "How do we do this?" I believe that all members should be actively looking for ways to remedy this.

I have suggested to the Board, when we have a conference in the future we have a free open house, in front of the conference. My thoughts are that we need to contact as many people in the healthcare industry, in the wellness sector, in law enforcement, in EMS and EMT's , chiropractors, gym and fitness centers in the city where the conference is being held, and surrounding towns to introduce them to the Aronia Industry. Perhaps we could have short presentations about the Aronia berry and our industry. We could have vendors present to tell us about their products. This may help to spread the word about Aronia, and the benefits of using it. Hopefully it would raise awareness of the beneficial use of Aronia on a daily basis.

In my opinion, the more people that are aware of something, the more likelihood of people using the product or services are to tell others about it. I really do not have an answer to how we find large markets for the berries but I do believe that it is going to take a diversity of people, all working

together to get this done. To learn to walk, we started with baby steps, and I believe that is how we need to approach the Aronia markets. First we need to create awareness to the masses by education on what Aronia is and the potential benefits of consuming it.

I truly believe that we need input and volunteers from our membership to accomplish this.

God Bless!!!

Leroy Godfrey

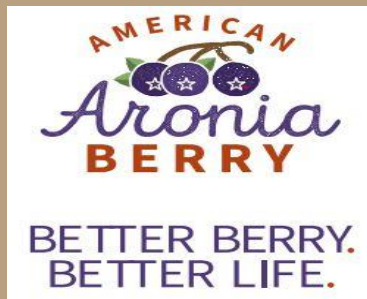
Research and Development Team



We Are Changing - Try to Keep Up

AABA has been working hard to develop and update the AABA Partner Page section of the AABA website. We presented these changes at the Annual Conference in March 2021.

If you wish to become a Partner with the AABA please contact us. Below is a Q&A that may answer many of your questions.



THE NEW AABA PARTNER PAGE

American Aronia Berry Association (AABA) has implemented new standards for the AABA Partner Page located on the americanaronia.org website. We would like you, as a valued Aronia producer or business, to be aware of a new opportunity to promote Aronia and direct business traffic back to your business or organization through digital advertising.

The purpose of the AABA Partner Page is an effort by the American Aronia Berry Association (AABA) to give Aronia producers, businesses, and products a broader platform for promotion and building relationships with processors and consumers. In today's digital world it is important to utilize every avenue available to promote Aronia and our hardworking Aronia producers and their businesses.

Who can Advertise on the AABA Partner Page?

Effective March 1, 2021, an annual charge of \$50.00 was implemented for Members to advertise on the AABA Partner page. Keep in mind this is less than \$0.15 per day to promote your business for an entire year. As a Member, you only have to complete the profile under the “Our Partners” - “Become a Partner” tab on the americanaronia.org website and submit the application and payment to the AABA.

Can I Advertise on the AABA website if I'm not a Member?

Yes. If you are not an AABA member we encourage you to advertise your business on the AABA Partner Page. The annual cost is \$200.00 for a non-member to advertise on the AABA Partner Page. You only have to complete the profile under the “Our Partners” - “Become a Partner” tab on the americanaronia.org website and submit the application and payment to the AABA.

Where do my Advertising Dollars go?

The AABA is aggressively working toward the promotion of Aronia on all fronts. The income from membership fees alone is not sufficient for the AABA to promote Aronia in an ever growing and competitive consumer's market. The cost of marketing has become an obstacle in the promotion of Aronia in the marketplace. Your advertising dollars will go toward those costs.

What's the Duration of my ad?

Your ad will remain on the Partner Page for a period of one (1) year with a paid fee as outlined above. Ads will run from March 1st through February 28th each year. Ads will be reviewed annually and if not renewed will be deleted promptly.

Can I have a Featured Ad? What would the cost be?

The AABA will offer a featured ad position that will scroll at the top of the Partner Page. The cost of a featured ad for a Member will be \$100.00 annually. A featured ad for a non-member will be \$250.00 annually. Ads will run from March 1st through February 28th each year. Ads will be reviewed annually and if not renewed will be deleted promptly.

The American Aronia Berry Association (AABA) is working hard to bring Aronia into the mainstream. We encourage you to work alongside us to pursue ways to grow the Aronia industry through promotion of your Aronia business, your Aronia products, and Aronia services.

If you have questions concerning advertising with the AABA, please contact: info@americanaronia.org or aroniamaasteve@gmail.com



TREND WATCH: Growth Predicted for Aronia Berry Market ...

Antiviral activity of plant juices and green tea ...

<https://www.biorxiv.org/content/10.1101/2020.10.30.360545v1.full>

Nov 03, 2020 · Respiratory viruses initially infect the naso and oropharyngeal regions, where they amplify, cause symptoms and may also be transmitted to new hosts. Preventing initial infection or reducing viral loads upon infection might soothe symptoms, prevent dissemination into the lower airways, or transmission to the next individual. We here analyzed the potential of plant derived products to ...

Who doesn't love a new recipe? After the year we have all endured what better time to kick back and partake of some new year's cheer!

I am always trying new recipes and adapting Aronia in new ways. For those of you who have used Aronia you know that the distinctive purple color stains almost anything. Did you know that Aronia has actually been used as a dye and paint for years?

Check out the next Newsletter for an article on Aronia over the ages and hopefully some show and tell photos!

Try one (or all) of the following Recipes and let us know what you think.



Skillet Cake - Aronia Style

2 cups Aronia Berries
1 cup Pecans (finely chopped)
2 tsp. Lemon Zest (freshly grated)
1 cup All-Purpose Flour
1 cup Sugar
1 tsp Baking Powder
½ tsp Salt
½ Cup Unsalted butter, melted and cooled to room temperature
2 Lrg. Eggs
2 tsp. Vanilla Extract
Powdered Sugar (to dust)

Preheat the oven to 350 degrees. Set aside a well-seasoned 9-inch cast-iron skillet. Go ahead break out Grandma's old cast-iron skillet. The memories alone will make this recipe worth the effort.

Combine Aronia, Pecans and Lemon Zest in a small bowl. Combine flour, sugar, baking powder and salt in a large bowl. Toss 3 Tbsp of this mixture with the Aronia and Pecan mixture.

In another small bowl, lightly beat together the butter, eggs and vanilla. Pour over the flour mixture and mix quickly with a wooden spatula just until combined. Fold in the Aronia mixture, then scrape the batter into the skillet (no need to grease since it's already seasoned).

Bake for 40 minutes, until the cake is cooked through. Let cool for 10 minutes. Dust with powdered sugar. Hot foot it to the table while still warm. Spoon it out and enjoy! It serves about 6 give or take.

Aronia Turtle Dump Cake

1 box (3.4 oz) Jell-O™ chocolate-flavor instant pudding & pie filling mix
1 ½ cups Milk
¾ cup Caramel Sauce
1 box Betty Crocker™ Super Moist™ chocolate fudge cake mix
1 ½ cups Dark Chocolate Chips
½ cup Frozen Aronia Berries (Yummm!)
½ cup Chopped pecans (If you like nuts.)
¼ cup Betty Crocker™ Rich & Creamy Chocolate Frosting (from 16 oz container)

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- 1. Heat oven to 350°F. Spray 13x9-inch pan with cooking spray.**
 - 2. In a large bowl, beat dry pudding mix and milk with a whisk for 2 minutes. Stir in ½ cup of the caramel sauce. Stir in cake mix and 1 cup of the chocolate chips until well blended. Spread batter evenly in pan. Sprinkle pecans and remaining ½ cup chocolate chips over top.**
 - 3. Bake for 33 to 38 minutes or until a toothpick inserted in the center of the cake comes out almost clean. Cool at least 15 minutes before serving.**
 - 4. When your creation is ready to serve . . . in a small microwavable bowl, microwave frosting uncovered on High for 10 to 15 seconds or until thin enough to drizzle. Using a fork, drizzle warmed frosting and remaining ¼ cup caramel sauce over cake. Use a large spoon for serving. Stored covered in an airtight container at room temperature.**

Aronia Berry Crisp

A Great Standby

Ingredients:

3 cups Frozen Aronia Berries
1/4 cup Honey
2/3 cup All-Purpose Flour
2/3 cup Light brown sugar (Pack firmly)
1/2 cup Quick-Cooking Oats
1/2 tsp. Ground Cinnamon
1/2 cup Hellmann's Real Mayonnaise (Yep - - Mayonnaise)

Instructions:

Preheat the oven to 375°. In a shallow 8 x 8-inch baking dish, arrange Aronia Berries. Drizzle with honey; set aside.

In a medium bowl, combine flour, brown sugar, oats and cinnamon. Stir in Hellmann's® Real Mayonnaise. Using fingers, gently squeeze dough to form crumbs. Evenly sprinkle crumbs over Aronia Berries. Bake for 30 minutes or until the topping is golden brown.

Healthy Lettuce Salad

A healthy alternative to the same old dinner salad.

Ingredients:

3 tbs. Raw apple cider vinegar
6 tbs. Extra-virgin olive oil
2 tbs. Water
2 tsp. Dijon mustard
2 Cloves Garlic (minced)
2 tbs. Raw Honey
3 Romaine Lettuce Hearts
1 - 12 oz. Bag cabbage (shredded, about 4 cups)
1 cup Dried Aronia Berries
1 cup Almonds (sliced)
1 cup Gorgonzola (crumbled)
add Freshly Cracked Black Pepper (for serving)

Instructions:

With the kid's help . . . add all the ingredients, mix, and serve. The dijon mustard and garlic really make this healthy recipe pop.

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Instructions:

With the kid's help . . . add all the ingredients, mix, and serve. The dijon mustard and garlic really make this healthy recipe pop.

We're always looking for Recipes to share. If you have a tried and true Recipe you would like to share please send it to Dennise at publicrelations@americanaronia.org.



Do you have Aronia equipment to sell? What about products or services centered around the Aronia industry? If so, this section is for you. If you would like your items to be included in the AABA Conversation Board, simply email your post for consideration to publicrelations@americanaronia.org. Please include contact information so you can be contacted if there are any questions. Once your post is approved it will be added to the next Newsletter in the "AABA Conversation Board" section.

The American Aronia Berry Association reserves the right to rescind or reject any and all submissions to the AABA Conversation Board. The AABA expects its Members to act in an ethical and reputable manner when dealing with anyone responding to a post listed in the AABA Conversation Board. The AABA makes no representations about the products or services offered in the AABA Conversation Board section of the Newsletter but is merely offering this section to link Members and fulfill a need within the Association.



Now . . . Just a Few Articles on Current Research

Title	Authors	Citation	Journal/ Book	Publication Year	DOI	Download Link
Carbohydrate Hydrolase-Inhibitory Activity of Juice-Based Phenolic Extracts in Correlation to Their Anthocyanin/Copigment Profile	Berger K, Ostberg-Potthoff JJ, Bakuradze T, Winterhalter P, Richling E.	Molecules. 2020 Nov 10;25(22):E5224. doi: 10.3390/molecules25225224.	Molecules	2020	10.3390/molecules25225224	https://www.mdpi.com/1420-3049/25/22/5224/htm
Chemometric contribution for deeper understanding of thermally-induced changes of polyphenolics and the formation of hydroxymethyl-L-furfural in chokeberry powders	Michalska-Ciechanowska A, Brzezowska J, Wojdyło A, Gajewicz-Skretna A, Ciska E, Majerska J.	Food Chem. 2020 Oct 8;128335. doi: 10.1016/j.foodchem.2020.128335. Online ahead of print.	Food Chem	2020	10.1016/j.foodchem.2020.128335	
Fabrication of Functional Bioelastomer for Food Packaging from Aronia (Aronia melanocarpa) Juice Processing By-Products	Lee KH, Chun Y, Jang YW, Lee SK, Kim HR, Lee JH, Kim SW, Park C, Yoo HY.	Foods. 2020 Oct 28;9(11):E1565. doi: 10.3390/foods9111565.	Foods	2020	10.3390/foods9111565	https://www.mdpi.com/2304-8158/9/11/1565/htm
Cytotoxic and DNA-Damaging Effects of Aronia melanocarpa, Cornus mas, and Chaenomeles superba Leaf Extracts on the Human Colon Adenocarcinoma Cell Line Caco-2	Efenberger-Szmechtyk M, Nowak A, Nowak A.	Antioxidants (Basel). 2020 Oct 22;9(11):E1030. doi: 10.3390/antiox9111030.	Antioxidants (Basel)	2020	10.3390/antiox9111030	https://www.mdpi.com/2076-3921/9/11/1030/htm
Synthetic dye's substitution with chokeberry extract in jelly candies	Ghendov-Mosanu A, Cristea E, Sturza R, Niculaua M, Patras A.	J Food Sci Technol. 2020 Dec;57(12):4383-4394. doi: 10.1007/s13197-020-04475-6.	J Food Sci Technol	2020	10.1007/s13197-020-04475-6	

Title	Authors	Citation	Pub Year	PubMed Abstract Link	Open Sourced Article Link
Effects of aronia berry (poly)phenols on vascular function and gut microbiota: a double-blind randomized controlled trial in adult men	Istas G, Wood E, Le Sayec M, Rawlings C, Yoon J, Dandavate V, Cera D, Rampelli S, Costabile A, Fromentin E, Rodriguez-Mateos A.	Am J Clin Nutr. 2019 Aug 1;110(2):316-329. doi: 10.1093/ajcn/nqz075	2019	10.1093/ajcn/nqz075	
Black Chokeberry Aronia melanocarpa L.-A Qualitative Composition, Phenolic Profile and Antioxidant Potential	Sidor A, Gramza-Michałowska A.	Molecules. 2019 Oct 15;24(20):3710. doi: 10.3390/molecules24203710.	2019	10.3390/molecules24203710	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6832535/
Aronia berry extract inhibits TNF-α-induced vascular endothelial inflammation through the regulation of STAT3	Iwashima T, Kudome Y, Kishimoto Y, Saita E, Tanaka M, Taguchi C, Hirakawa S, Mitani N, Kondo K, Iida K.	Food Nutr Res. 2019 Aug 16;63. doi: 10.29219/fnr.v63.3361. eCollection 2019.	2019	10.29219/fnr.v63.3361	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6698673/
Aronia Berry Supplementation Mitigates Inflammation in T Cell Transfer-Induced Colitis by Decreasing Oxidative Stress	Pei R, Liu J, Martin DA, Valdez JC, Jeffery J, Barrett-Wilt GA, Liu Z, Bolling BW.	Nutrients. 2019 Jun 12;11(6):1316. doi: 10.3390/nu11061316.	2019	10.3390/nu11061316	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6627224/
Dietary Prevention of Colitis by Aronia Berry Is Mediated Through Increased Th17 and Treg	Pei R, Martin DA, Valdez JC, Liu J, Kerby RL, Rey FE, Smyth JA, Liu Z, Bolling BW.	Mol Nutr Food Res. 2019 Mar;63(5):e1800985. doi: 10.1002/mnfr.201800985. Epub 2018 Dec 13.	2019	10.1002/mnfr.201800985	
The effect of Aronia consumption on lipid profile, blood pressure, and biomarkers of Inflammation: A systematic review and	Rahmani J, Clark C, Kord Varkaneh H, Lakiang T, Vasanthan LT, Onyeché V,	Phytother Res. 2019 Aug;33(8):1981-1990. doi:	2019	10.1002/ptr.6398	
meta-analysis of randomized controlled trials	Mousavi SM, Zhang Y.	10.1002/ptr.6398. Epub 2019 Jun 24.			
Effect of the black chokeberry (Aronia melanocarpa (Michx.) Elliott) juice acquisition method on the content of polyphenols and antioxidant activity	Kobus Z, Nadulski R, Wilczyński K, Kozak M, Guz T, Rydzak L.	PLoS One. 2019 Jul 18;14(7):e0219585. doi: 10.1371/journal.pone.0219585. eCollection 2019.	2019	10.1371/journal.pone.0219585	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6638934/
Dietary Aronia melanocarpa extract enhances mTORC1 signaling, but has no effect on protein synthesis and protein breakdown-related signaling, in response to resistance exercise in rat skeletal muscle	Makanae Y, Ato S, Kido K, Fujita S.	J Int Soc Sports Nutr. 2019 Dec 11;16(1):60. doi: 10.1186/s12970-019-0328-1.	2019	10.1186/s12970-019-0328-1	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6907222/
Black chokeberry (Aronia melanocarpa) polyphenols reveal different antioxidant, antimicrobial and neutrophil-modulating activities	Denev P, Číž M, Kratchanova M, Blazheva D.	Food Chem. 2019 Jun 30;284:108-117. doi: 10.1016/j.foodchem.2019.01.108. Epub 2019 Jan 23.	2019	10.1016/j.foodchem.2019.01.108	
Aronia melanocarpa (Michx.) Elliot fruit juice reveals neuroprotective effect and improves cognitive and locomotor functions of aged rats	Daskalova E, Delchev S, Topolov M, Dimitrova S, Uzunova Y, Valcheva Kuzmanova S, Kratchanova M, Vladimirova-Kitova L, Denev P.	Food Chem Toxicol. 2019 Oct;132:110674. doi: 10.1016/j.fct.2019.110674. Epub 2019 Jul 12.	2019	10.1016/j.fct.2019.110674	
Extract from Aronia melanocarpa L. Berries Protects Against Cadmium-Induced Lipid Peroxidation and Oxidative Damage to Proteins and DNA in the Liver: A Study using a Rat Model of Environmental Human Exposure to this Xenobiotic	Mężyńska M, Brzóska MM, Rogalska J, Galicka A.	Nutrients. 2019 Mar 31;11(4):758. doi: 10.3390/nu11040758.	2019	10.3390/nu11040758	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6520854/
Protective effects of Aronia melanocarpa juices either alone or combined with extracts from Rosa canina or Alchermilla	Valcheva-Kuzmanova S, Denev P, Eftimov M, Georgieva A, Kuzmanova	Food Chem Toxicol. 2019 Oct;132:110739. doi:	2019	10.1016/j.fct.2019.110739	

As you can see, research on Aronia is becoming more and more frequent and we are updating information on the AABA website and newsletter at an increasing rate. We are here for you.