Chia offers opportunity for farmers, consumers

From the Kentucky Center for Agriculture and Rural Development

As a 4th generation grain farmer and entrepreneur, Chris Kummer knows that new crop enterprises take time to develop, so after more than five years of production and market research he is excited to launch his newest venture, Heartland Chia. Heartland Chia’s story begins with the early flowering chia plant developed and patented by Dr. Tim Phillips and Dr. David Hildebrand with the University of Kentucky.

“Drs. Tim Phillips and David Hildebrand were using traditional plant breeding techniques to develop a 100% non-GMO early flowering chia (Salvia hispanica),” said Kummer. “I was aware that they were working on this, so I asked them to let me know when they were ready to do a farm trial. We grew 3 acres in 2011 just to evaluate the crop, and the following year we produced the first commercial crop of early flowering chia ever grown anywhere in the world in one of our fields in Simpson County.”

Kummer secured the only license to grow and sell the patented early flowering chia seed in the commercial marketplace after his first commercial crop in 2012. Heartland Chia was established in 2014 with the objective of developing this crop opportunity for farmers while benefiting consumers, food and feed companies with a reliable, local, traceable supply of chia.

“Chia is an ancient grain and is considered a super food because of its nutritional value. There is growing demand for the grain as an ingredient in mainstream food products due to the fact it is rich in omega-3 fatty acids, insoluble fiber, protein, and minerals,” explained Kummer. “I knew if the early flowering chia grew in our climate we had the potential to develop something really nice for farmers and be the first U.S. source for this ancient grain.”

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Heartland Chia offers a closed loop production system for the early flowering chia plant, assuring buyers of a reliable, domestic source for the product. Heartland provides the seed and production advice necessary for growers to successfully produce early flowering chia. They then work with the grower on harvesting and marketing of the chia produced for the food and feed industry.

Kummer turned to the staff at the Kentucky Center for Agriculture and Rural Development (KCARD) for assistance in the design of the business and management plan for Heartland Chia. “I had worked with KCARD in the past on a project and I knew that they could bring a unique insight to the development of the project,” said Kummer.

“Along with consulting with Chris on various aspects of Heartland Chia’s business development, we also reviewed his company’s applications for a Kentucky Agriculture Development Fund grant and a Value-Added Producer Grant,” said Brent Lackey, KCARD Business Specialist.

Kummer was awarded a KADF grant and a Value-Added Producer grant to contract with a consultant who specializes in food ingredients to conduct a study on the market development and feasibility of processing chia for seed, oil, meal, and flour.

“It is the collaboration with UK on the production side and KCARD on the business development side that has helped us to be way ahead of where we thought we would be when we licensed this product three years ago,” explained Kummer.

Kummer is now focusing on marketing Heartland Chia beyond the farm. He points out that the key to developing farmer opportunities with the new crop is to develop the connections with food producers to provide a market for chia. Kummer explains that the high level of traceability and the quality control process provided by Heartland Chia’s closed loop system is a unique selling point as it provides food companies and ultimately consumers a high quality domestic supply of chia.

“This closed loop production model allows for us to provide the management needed to ensure optimum quality, testing, and control of the finished product,” explained Kummer. “Food safety is the main priority from planting until it leaves our control on a truck to the customer.

Food companies that purchase from Heartland Chia will know they are dealing directly with the producers of these quality chia seeds.”

Prior to the work done by Kummer and the UK researchers, chia had only been grown in tropical and subtropical climates due to its long life cycle. The only success most people had found growing chia in the U.S. was on the decorative “Chia Pets” popular on late night television commercials.

“Chia in not a flash in the pan product, it is an ancient grain and a super food seed source,” explained Kummer. “The health benefits of the grain have been known for centuries, but its use in health food products in the U.S. has really taken off in the last 10 to 15 years. It is now being widely used in mainstream food products and it can also be used in animal feed.”

While the chia grain might be new to farmers in the U.S., Kummer believes that grain farmers will adapt quickly to growing the early flowering chia.

“It has a lifecycle like a soybean, and would fit nicely as a second crop following wheat,” said Kummer “Also, traditional equipment can be used for production, so farmers would not have to invest in additional equipment.”

Kummer intends for the innovative spirit that inspired Dr. Phillips and Dr. Hildebrand to continue as the operation grows. He plans to continue to focus on research and development every year to improve growing practices of this new variety of chia. He also intends to continue

Photo courtesy of Heartland Chia
to research opportunities for on-farm processing of the grain, while growing the markets for the products.

“I feel honored Phillips and Hildebrand let me work with them and license the product. Our work doesn’t stop with the licensing though; we intend to develop Heartland Chia for the benefit of farmers and food manufacturers,” said Kummer. “Heartland Chia is a farmer-owned company, working with farmers, to produce a 100 percent non-GMO U.S.-grown chia. I can’t wait to see where the next five years take us on this journey.”

KADF grant funds horticulture on-farm demonstration program

A Kentucky Horticulture Council grant from the Kentucky Agricultural Development Fund has funded an on-farm demonstration program in the UK Department of Horticulture to assist farm families in the diversification of their enterprises to include horticulture. This program will implement specialized technologies such as plasticulture for vegetable production, container production of floral or nursery crops, small fruit production systems, etc. The impacts of the projects will be multiplied through field plot tours at the farms.

In return for hosting a field day event and keeping production records, farm families will receive assistance in planning the plot, some of the necessary supplies, and regular visits by an Extension associate during the production cycle. The farm family provides all labor and most of the supplies, markets the crops and receives the income. We are currently planning on-farm demonstrations for 2015 and 2016. There are a few remaining opportunities in 2015. If you or someone you know are considering starting or upgrading a horticulture crop production and marketing system, please contact your county Extension agent or email Dr. Dewayne Ingram at dingram@uky.edu.

MarketReady regional trainings coming up in Eastern Kentucky

A MarketReady Producer Training Program will be held at the Knott County Extension Office, 149 Parks Branch Road, Hindman, KY, on March 23rd from 10 a.m. to 4 p.m. EDT.

The MarketReady Producer Training Program is for those interested in selling products to restaurants, grocers/wholesalers/retailers, and schools/institutions. MarketReady will provide you with a professional marketing education to improve sales relationships, and get you up to speed with the latest local food programs and resources. MarketReady also offers continuing education credits for Extension agents.

UK Extension Professor Tim Woods will present the curriculum, and participants will also enjoy a panel of guest speakers. Meet buyers, chefs, and staff from the KY Department of Agriculture, KCARD, KY Small Business Development Center, and more. Registration is $25, which includes
Napa cabbage and kimchi

By Jeong Hyun An

Kentucky’s climate is suitable to grow various ethnic crops, especially those of Korean origin. Latitude (37.5) and hardiness zones match between the two regions, as well as four distinct seasons. Napa cabbage is the main ingredient of kimchi, the most famous fermented Korean food.

The type of cabbage used in traditional Korean kimchi is known as napa cabbage in the U.S. In Korea, these cabbages are called “bae-chu” with many different varieties. Depending on the days to maturity, there are early (about 50 days), mid-season (about 65 days), and late bae-chu varieties (70-90 days). Bae-chu is most typically planted in late August and harvested in November in Korea. It can also be planted in January or February in greenhouses and harvested in April. In some parts of Korea with high altitude (over 1,968 feet), summer planting is done as well. The optimal temperature for bae-chu growth is 68°F. It needs plenty of water and sandy loam soil that allows excess water to drain away.

While there are more than 200 varieties of kimchi using different vegetables and other ingredients, kimchi mostly known worldwide today is the bae-chu kimchi. It is made with salted napa cabbages and a hot pepper powder-based seasoning paste.

Let’s take a brief look at some business possibilities with napa cabbages. In addition to being sold as fresh produce, napa cabbages are used to make such food products as salted cabbages or kimchi. The salted cabbage business is extremely popular and lucrative in Korea, catering to those who want to save time and avoid the hassle of preparing bulky cabbages to make kimchi at home. Kimchi, ready-to-eat food, is now a global business. With the right branding and marketing efforts, kimchi made in Kentucky could enjoy a national and global reputation and success.

For further information, contact Ann Montgomery at 7thindustry@gmail.com, or visit her website at www.7thindustry.org.

class materials, refreshments, and lunch. Space is limited so register now!

To register, send an email to UK Extension Associate Kevin Heidemann at kevin.heidemann@uky.edu or call at 859-218-4383. Registration deadline is Tuesday, March 17th by 4 p.m.

Also, an Eastern KY Regional MarketReady Graduate Meet the Buyer Forum will be held at the Morehead Conference Center, located at 111 E 1st Street in Morehead, on April 9th from 10 a.m. to 2 p.m. EDT. This event is for MarketReady Graduates ONLY!

**Agenda:**

10 a.m. – 11:15 a.m.: Farm to School, Farm to Restaurant, and Farm to Grocery/Wholesale/Retail panels. Guest panelists will include buyers and producers from each respective market.

11:15 a.m. – 12:45 p.m.: Round table “Speed Date” discussions with buyers

12:45 p.m. – 2 p.m.: Special local lunch. Hear from the chef, eat, and continue to mingle.

Registration fee is $20, payable by cash or check. To register, please email kevin.heidemann@uky.edu or call 859-218-4383. Registration deadline is Monday, March 30th by 4 p.m.

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