

ADVANCING COLORADO'S MILLET INDUSTRY FY 2010

Millet is an ideal rotational crop for Colorado farmers on the eastern plains, and about half of total U.S. millet production is grown there. Untapped and underdeveloped markets exist for millet, both domestically and internationally. This project was undertaken in response to the industry's interest in developing direct sales to customers, and exploring ways to collectively become more effective marketers. Producers sought assistance in identifying importers in Europe, and educating key buyers about available varieties, packaging and cleaning/hulling options. There were also questions about EU certification and handling requirements for the gluten-free market, requirements for U.S. manufacturers of gluten-free products, and how to reach consumers with a message about the nutritional and environmental qualities of this specialty grain.

Export activities carried out under the grant included training on characteristics of target markets, and on banking and logistics considerations when exporting; conducting seminars for foreign buyers and providing opportunities to meet Colorado millet suppliers; and development of promotional resources for use in U.S. and international markets. Domestic activities included development of millet recipes for consumers; creation of a central millet website; and facilitation of discussions within the industry on forming a state or national millet association or market order. The FSMIP project also provided momentum for several non-grant activities to advance the millet sector which are noted in the final report.

FINAL REPORT

Contact:

Timothy J. Larsen
Senior International Marketing Specialist
Colorado Department of Agriculture
303-239-4188

Timothy.Larsen@state.co.us



ADVANCING COLORADO'S MILLET INDUSTRY

Expanding Markets for Millet for the U.S. and
International Markets

A Report on Recent Activities to Develop
and Expand Markets for Colorado Millet

Executive Summary

This report is the final report for the FY2010 USDA FSMIP Grant.

Advancing Colorado's Millet Industry

In 2010, the Colorado Department of Agriculture received a USDA FSMIP grant of \$42,000 to prepare and assist the Colorado millet industry, the largest producer of millet in the U.S., to directly market their products to access domestic and international markets, which has no state or national organization.

With funding from FSMIP, the Colorado millet industry was able to identify and address several key issues facing their industry. With the focus of the grant, our farmers and first handlers have united in realizing that there are significant opportunities to expand Colorado's millet industry if they work together. As a result of this initiative, and the ancillary initiatives that sprang from this effort, the industry has had success in growing their market as well as determining that they must organize as an industry to continue to work on the goals identified in this project. Outcomes from this initiative included:

- Initiated efforts to organize an association, either as a state or national Market Order or a growers association.
- Developed and promoted recipes to demonstrate and promote the gluten-free and human consumption options for millet.
- Increased the involvement of the industry in exporting millet directly, rather than filling orders for out-of-state traders.
- Developed training for the industry to educate themselves on international banking and transportation issues.
- Conducted research on the European market to provide an understanding of the market and how to approach the European buyers for direct purchasing of both human and pet food millet.
- Provided web based training of what the gluten-free market is for growers.
- Provided web based training on issues facing growers targeting grain production for the gluten-free market.
- Hosted international buyers for millet and other specialty grains in Colorado through USDA MAP funded inbound missions.
- Participated in European trade shows for marketing millet. One trip was funded by the FSMIP grant, and others were funded by industry and other funding sources to follow up on buyer interest in millet. These shows provided follow up contact with the buyers who came to Colorado.
 - BioFach trade show in Germany, 2012, 2013, and 2014
 - InterZoo trade show for pet industry in Germany 2012
 - ZooMark trade show for pet industry in Italy 2013 (FSMIP funded)
 - Posted a web based review of insights learned from ZooMark
- Developed a research project to malt three varieties of millet for the gluten-free craft beer industry (funded with State of Colorado funds) which has created an ongoing market for malted millet for both U.S. and international markets.
- Developed website and portal for all millet information.

Colorado's millet producers and the Colorado Department of Agriculture are appreciative of the grant funds provided by the USDA FSMIP program. Without these resources, the industry would not have been able to take these steps to position itself for future growth.

An Overview of the Issues and Problems

The objectives focused on several core issues and opportunities facing the Colorado and U.S. millet industry.

Millet is an ideal rotational crop for Colorado farmers on the eastern plains. In the past five years Colorado has produced 50 percent or more of the U.S. millet. The opportunity exists to increase millet production in Colorado and increase the ability for local producers and handlers to directly market millet in the U.S. and globally. While Colorado produces 50 percent of the U.S. millet and exports 50 percent of the millet, Colorado producers and handlers only directly export about 12 percent of the exports when reviewing the phytosanitary certificate reports of millet exports. Colorado's millet industry wanted to understand international markets and increase their direct contact with international buyers to develop direct sales with these buyers. Millet could become a larger U.S. consumer product building on both the nutritional and low carbon footprint characteristics (*carbon footprint* measures the total impact your lifestyle makes on the environment and is a trend for shopping and lifestyle within the U.S., and millet is produced with dry land production using fewer inputs) and the gluten-free attributes of millet.

Expanded marketing opportunities exist for millet in several different markets. For success in each market, the industry asked for assistance specific to the market targeted.

Export Markets. The primary barriers for expanded exports of Colorado millet by local producers was a lack of knowledge of the international buyers and a lack of understanding of the buyer's requirements. Millet is available in field run, cleaned and dehulled condition, in organic and conventional production methods. A review of the 2009 exports of U.S. millet reveals a wide price range, from \$261 per metric ton to \$571 per metric ton. What was not known was the product and packaging requirements for each market. Research was needed to educate and assist the industry in understanding the markets in both Asia and Europe. In addition, the producers required assistance in identifying the importers in each market as well as an opportunity to educate the target buyers about Colorado's millet industry and varieties, as well as packaging and cleaning/hulling options. A further question was specific to the gluten-free use of millet in these markets. Initial research indicated the largest market for gluten-free products was Europe. Another industry question was what certification and handling requirements exist with the EU buyers to satisfy the buyers for a 'gluten-free' product designation.

The Colorado millet industry was asking for help in developing the direct sales of their millet.

Export Market Research was needed with the target markets to identify importers and end users and determine their product specifics to become a preferred supplier to each market. Elements included:

- Researched European Market issues and opportunities.

- Provided training for the Colorado millet industry on exporting, including banking and logistics.
- Developed seminars in the targeted international markets to educate them about the Colorado millet industry and introduce them to Colorado millet suppliers.
- Developed support materials for promotion of the industry for the U.S. and international markets (multilingual) as well as electronic posting of this information on a website.

Gluten-Free Market. For both domestic and international markets, the industry needed assistance with understanding the current regulations and industry standards and expectations for selling their products as gluten-free.

Domestic Market Development. Millet has an underdeveloped market potential within the U.S., both as a gluten-free product and as a low carbon footprint grain for general consumer consumption. The industry required assistance in developing a market initiative to increase U.S. sales to the consumer.

Project Approach

Overview

Establishing the *Advancing Colorado's Millet Industry Initiative* brought the industry together for the first time to discuss the millet industry and marketing opportunities. With the FSMIP grant as a catalyst, the millet industry increased their focus and commitment to developing markets and uses for millet. Some accomplishments in this report go beyond the initial scope and funding of the FSMIP project but are included because all elements became an important part of the Colorado millet marketing efforts. In some activities, the element had both domestic and international impacts.

Crop Issues in 2012 and Impact on Project

Throughout this report, references will be made to the 2012 harvest. In 2012, Colorado and U.S. production of millet collapsed. In Colorado, 40 percent of the fields were abandoned, and the remaining 60 percent yielded 50 percent of the average yield due to a drought. This drought also impacted the other millet producing states. This caused great turmoil in the global millet market. This also impacted some of Colorado's millet sales because for the 2012 season there was very little millet to market and there was a global shortage.

Gluten-Free Marketing of Millet for Both Domestic and International Markets

The gluten-free food products sector has become a growth sector for both the U.S. and international markets. The *Advancing Colorado's Millet Industry Initiative* was the catalyst for bringing the industry together to respond to the domestic and global interest in millet as part of the gluten-free market. Initiatives covered in this report include:

- Millet recipe development/promotion.
- Web site development.
- Discussions within industry on forming a state or national millet association or market order.
- Internet review of gluten-free industry and farmer production insights and guidance.
- Meetings with inbound international buyers for gluten-free products and ingredients (non-FSMIP funded).
- Attended BioFach (Germany) for marketing organic/gluten-free millet for the food sector (non-FSMIP funded, Colorado millet represented at BioFach in 2012, 2013 and 2014).
- Malted millet initiative (non-FSMIP funded).

Export Market Development

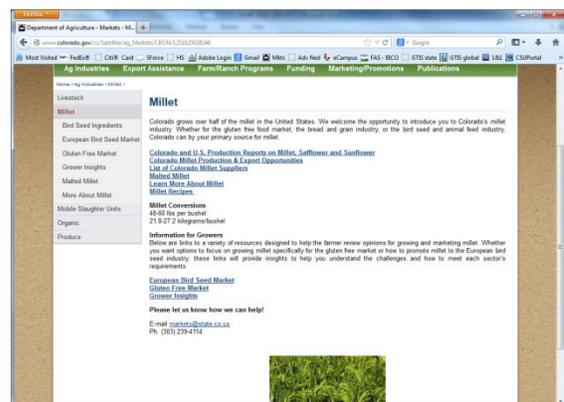
The initial market review indicated that the Colorado (and U.S.) millet industry must also focus on the export market that was purchasing approximately 25 percent of all U.S. millet. The initial review indicated that the European market offered the greatest new market potential and became the focus of the initiative. Elements critical to this sector covered by this report include:

- Millet marketing at BioFach (not funded by grant).
- International Banking and Transportation seminar.
- Web site development.
- InterZoo (non FSMIP funded).
- Discussions within industry on forming a state or national millet association or market order.
- ZooMark trade show participation and post event video review posting on internet.
- European market research.
- Email updates to global pet food industry buyers.
- Malted Millet initiative (non-FSMIP funded).

Web Site Development

The first activity for the initiative was to identify who was selling Colorado millet. While millet is grown as a rotational crop with winter wheat and other dryland crops, the products are sold through elevators and other groups who market the millet. Creating a list of the marketers of Colorado millet became the core of our program. Whether a domestic or international buyer, the first question usually is, "Who sells millet?"

With a supplier list, we created a website for the industry within the Colorado Department of Agriculture website, including a millet focused URL: www.coloradoagriculture.com/millet.



CDA's millet home page

The website initially provided basic information such as statistics on which states produce millet and the USDA statistics on U.S. millet production. The website also provided a list of the Colorado millet sellers. Within 30 days, a Google search for U.S. millet suppliers had the Colorado supplier list as the top link.

As we developed other elements of our millet initiative, the website became the location to share information with both growers and consumers, domestically and internationally.

Millet Recipe Development/Promotion

A key issue for developing consumer interest in incorporating millet into consumer foods was to develop options on how a consumer could eat millet, either as a gluten-free product, or just a new grain for human consumption.

For the development of recipes we partnered with Colorado State University in Ft. Collins, CO. We worked with a graduate nutrition class, who took as their project to develop recipes utilizing Colorado millet in a variety of recipes. Each student in the class was responsible for developing a recipe, which included a nutritional analysis. In November 2010 we introduced the new recipes with a reception at CSU which featured all the foods developed with the recipes and the students that developed the recipes. Over 45 industry representatives attended the tasting, including media, growers, and hospitality industry representatives.



November 2010 Millet Sampling at CSU

From appetizers and desserts to snacks and entrees, the recipes were diverse and included:

- Black Bean and Millet Medley
- Millet Stuffed Peppers
- Millet Salmon Cakes with Yogurt Dipping Sauce
- Millet Crisp
- Gorgonzola Millet Polenta with a Berry Salad
- Millet Dessert Salad
- Millet Pasta with Walnut Pesto and Kale
- Spiced Millet Pudding
- Millet Chili
- White Millet Soup
- Millet Curry
- Millet Lettuce Roll
- Fruit and Nut Granola



November 2010 Millet Sampling at CSU

The recipes (Appendix F) were posted to the CDA millet website and were picked up by a millet marketing company that also included the recipes on their website (Golden Prairie, Nunn, CO), <http://www.goldenprairieinc.com/millet-recipes.html>.

Discussions Within Industry on Forming a State or National Millet Association or Market Order

Throughout the project activities Colorado's millet industry discussed the need and benefits that would result from the development of a millet association. During these discussions industry representatives reviewed options to create a state or national Market Order, as well as volunteer associations for creating a millet association. These discussions began during the training seminars and launch event for the millet recipes.

At a meeting in February 2014, members of the millet industry met and created a committee to review options and create a plan for developing a millet association that could address in the future, 1) plant genetic development (new varieties), 2) marketing both within human consumption and pet food industry, in both the U.S. and domestic markets. The current consensus is to target a single national, not state by state association. While the meetings and eventual outcome of the development of an association is beyond the period of the grant, this illustrates the industry's continuing interest in following through with initiatives and activities originating from the FSMIP project.

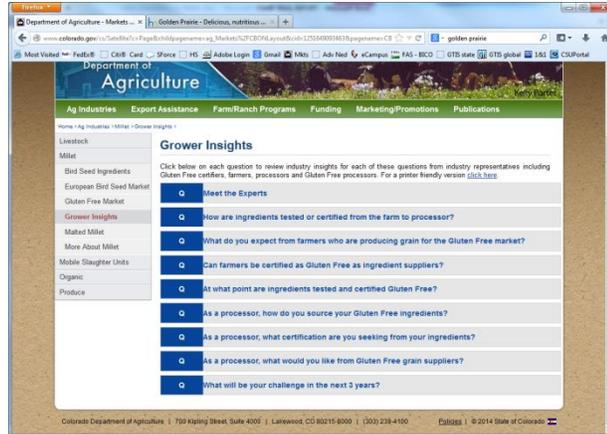
The Colorado Department of Agriculture will continue to serve as a resource for the industry as they finalize how to proceed.

Gluten-Free Industry and Farmer Production Insights and Guidance

Our initial focus was to provide assistance in understanding the current regulations and industry standards and expectations for classifying products as gluten-free. Our research revealed that there are no "standards" for the farmers who produce ingredients such as millet for the gluten-

free industry. There are U.S. and European standards for processed foods for PPM (parts per million) tolerances, but there is no guidance or standards for the producers of the raw commodities.

To provide guidance for growers we developed several elements, utilizing the website for distribution, with insights and guidance for farmers of millet and any other crops that would be utilized in the gluten-free industry. We developed and posted to our millet website a link to natural foods industry web presentations on the gluten-free industry and insights into the consumer.



CDA millet website, Grower Insights page

- **What is the gluten-free market and who is the customer?** Click on the link for access to the New Hope Communications rebroadcast of their 2013 seminar on [“Understanding the Gluten-Free Customer.”](#) You will have access to leading gluten-free experts who provide information the market-shifting trends, statistics and buying habits as well as an overview of this industry.

Without guidelines for growers in producing gluten-free products we asked members of the industry to answer a set of production questions to provide our growers with the shared insights of the industry on expectations and insights into growing millet and grains for the gluten-free market.

Our panelists included:

- **Seaton Smith**, President
GFO Inc. / GF Harvest, LLC/ Gluten Free Oats, LLC / Canyon Oats, Powell, WY
- **Jesse Stubbs**, Director of Marketing
Pappardelle’s Pasta, Denver, CO
- **Ted Craig**, Agricultural Program Coordinator
Wyoming Department of Agriculture, Cheyenne, WY
- **Marvin Goertz**, Technical Manager
Canyon Bakehouse, Loveland, CO
- **Jean Hediger**, President
Golden Prairie Inc., Certified Organic Grains, Nunn, CO

On the website, the collective answers to a set of questions are provided for the industry to review: [Understanding how farmers can grow products for the gluten-free industry](#) This site provides industry insights into how a farmer can grow millet and other grains for the gluten-free market.

Inbound International Buyers for Gluten-Free Products and Ingredients

With the Colorado millet industry creating a shared presence, CDA was able to include the industry in other USDA funded export programs.



Colorado millet industry meeting with European buyers

Through WUSATA (Western U.S. Agricultural Trade Association), there is an initiative to bring in gluten-free and other specialty as well as natural and organic products importers to western states for individualized meetings with local companies. Since 2010 our millet processors and sellers have been participating in these meetings. Inbound missions included:

European buyer missions, 2010, 2011, 2012 and 2013

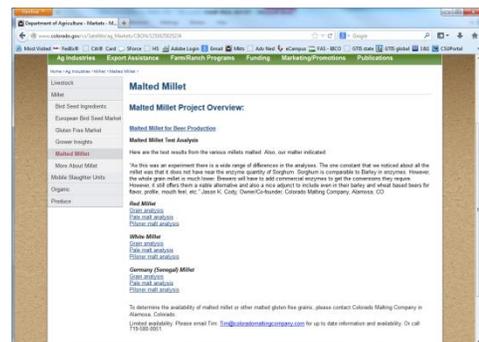
Japanese buyer missions, 2011, 2012 and 2013

Canadian buyer missions, 2011, 2012 and 2013

While these meeting were not funded by the FSMIP grant, the web site, brochures and other support materials have supported the marketing of millet to these buyers.

Malted Millet Initiative (non-FSMIP funded)

During a meeting and discussion on gluten-free products, the European buyers shared with the industry that the leading brand of gluten-free beer in Germany is based on malted millet. Building on this information the industry and CDA met with the only independent malter in Colorado to discuss the options to malt millet for the craft beer industry.



CDA millet website on malted millet

This discussion led to a CDA grant to the Colorado Malt Company in Alamosa, Colorado to adapt their production to work with malt and conduct a trial malting of three varieties of millet, each malted in both light and medium roast. These samples were then made available to craft brewers for experimentation. After the samples were depleted Colorado Malt Company continued to produce millet for the craft beer industry.

Full details on the malted millet project were then posted on the Colorado millet website.

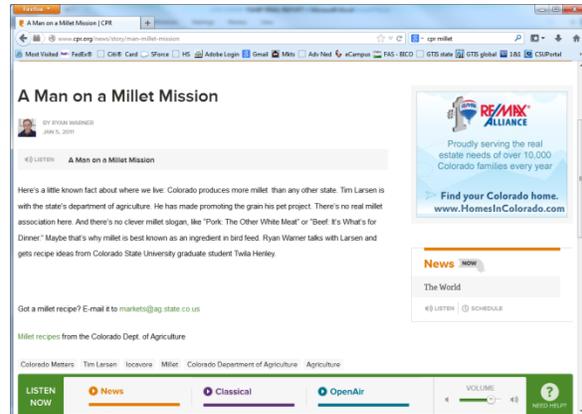
Media Coverage of Millet Initiative

Press releases and outreach to media was incorporated in the marketing initiative.

The millet project was featured on Colorado Public Radio, which provided an interview on millet.



Local newspaper coverage on malted millet



CPR website on millet story

Link to information and to listen to the interview:
<http://www.cpr.org/news/story/man-millet-mission>

After our initiative with malting millet the malting company was featured by a local newspaper.

Export Market Development

The initial market review indicated that the Colorado (and U.S.) millet industry must focus also on the export market that was purchasing approximately 25 percent of all millet. The initial review indicated that the European market offered the greatest new market potential and became the focus of the initiative. The following are elements within the FSMIP grant as well as additional sector activities initiated as a result of the FSMIP assistance in bringing the Colorado millet industry together as a group.

The first element of the international activities focused on research on the European market for millet. In working with the USDA staff in the UK, Germany and the Netherlands, as well as discussions with the European representative of the U.S. Grains Council, it became clear that there is little known research on the European millet industry. In addition, there did not appear

to be any EU based consultants with any knowledge of millet, therefore the decision was made for the Colorado Department of Agriculture staff to conduct the research.

The research was conducted by working with the USDA staff in the United Kingdom, the Netherlands (also covering Belgium) and Germany, as the three leading importers of U.S. millet. Meetings were arranged in the United Kingdom, Belgium, the Netherlands and Germany to meet with known millet importers including both food and pet food industry representatives. The objectives of the research included:

1. Colorado millet has market potential in Europe in several sectors:
 - a. For human consumption sector:
 - i. Millet as grain for other food products
 - ii. Millet for flour millers
 - iii. Millet as a gluten-free ingredient
 - b. Millet for bird and pet food
2. Understand the distribution system for grains such as millet into the European market.
3. What are best venues for EU importers and millet users to meet with and contact Colorado millet suppliers? What venues would they most prefer?
 - a. Do they attend U.S. trade shows?
 - b. What EU trade shows do they exhibit at and would they like U.S. suppliers to visit them at these shows?
 - c. Seminar followed by one to one meetings
 - d. Visit Colorado to meet growers and handlers
 - e. Other ideas from the industry on how best to market millet to these buyers.

Contribution of Public and Agency Partners in the Colorado Millet Marketing Initiative

Colorado's millet industry was engaged from the start on this project. Within the domestic marketing elements, a Colorado millet producer became a lead participant in the development and execution of the millet recipe development. This company provided unlimited millet (food grade cleaned, and hulled) for the class to work with, and organized working with the CSU staff to develop the recipes and lead in organizing the recipe sharing event.

The industry has made their warehouses, farms and hulling plants available for several international buyer groups who have come to Colorado on our gluten-free inbound missions. They participated in meetings with the buyers visiting Colorado and have traveled overseas (four international shows with a total of 9 companies) to participate (and pay) for trade shows

in Germany (3) and Italy (1). In 2014, two millet industry members will again attend the 2014 InterZoo Show in Germany within the WUSATA Pavilion.

The malting company has established a gluten-free segment of their business to provide malting of millet for the Colorado, and now national, craft brewing industry.

Summary of Results, Conclusions and Lessons Learned

The *Advancing Colorado's Millet Industry Initiative* had multiple activities addressing both the domestic and international markets. Each element is reviewed with results, conclusions and lessons learned by activity.

Human Consumption Element of Millet

- The EU market is more advanced and developed than the U.S.
- Food processors generally buy their grains such as millet from importers/distributors.
- Millet has a market as both a gluten-free product ingredient, and as a conventional grain.
- Identifying companies featuring or including millet is challenging. The best options are in-country research with a focus on visiting retail stores (conventional and specialty) to look for millet products, and then work back to the manufacturer. Manufacturers are open to discussions on U.S. millet, though they most likely buy their products through an importer, or even a further processor such as a miller. The companies will generally share or pass on information to their suppliers.
- Trade shows such as BioFach (Germany), Organic & Natural Foods (London) or others are good sources. You can often access the show's website to do product searches which will provide a list of food companies featuring millet, or similar products.

EU Millet Distribution

- Millet is a minor product for all importers/distributors. Millet falls within the specialty grains category and locating importers/distributors of specialty grains is a key for millet distribution, especially for the food sector. The bird seed sector sources grains from both the specialty grain importers and through direct imports.

Venues for Promoting Millet to EU Importers and Millet Users

- One consensus was that the buyers were not particularly interested in a millet specific seminar or showcase.
- For the organic/specialty foods segment, meeting at existing trade shows such as BioFach (Germany) and Natural & Organic Trade Show (UK) are good venues for meeting new suppliers and connecting with EU companies.
- Bird seed buyers are more likely to buy millet directly from the U.S. They are not interested in seminars but felt participation in the existing trade shows is the best venue to reach the companies.

- It is worth noting that on a visit to the largest EU bird seed company, the company commented that they were surprised by our visit. In fact, they noted, our visit to discuss millet was the first time anyone, from any country had visited them about millet. They appreciated the visit and interest in working with them for their millet requirements.
 - Individual suppliers might consider direct visits to key bird seed companies as a follow up to trade show meetings to reinforce their commitment to service a large importer.

Web Site Development

The web site portal to the Colorado millet suppliers list has been a great driver of buyers of millet to our suppliers. One supplier recently commented, “I now get three or more emails a week from international buyers seeking millet. Right now I have no more capacity to add new international customers. The web site has driven all this business to me and talking to other shippers, the same is happening for them.”

This project also made the website a venue for updates on the Colorado and U.S. millet industry. After the worst harvest in known records in 2012, Colorado millet was gone from the market until the 2013 harvest. We updated the website with the USDA statistics, and sent this to our list of global buyers. We received several thank you emails from overseas buyers for the update and they provided us with additional names of people within their company who wanted to receive future updates on the millet trends in the U.S.

Millet Marketing at BioFach

The Colorado Department of Agriculture obtained a grant to develop a marketing initiative at the 2012 BioFach (Germany) trade show which focused on all organic products. Within our group were several millet industry representatives. Again, while the show participation was not funded by FSMIP, the interest in the industry was driven by the *Advancing Colorado's Millet Industry Initiative*, with two companies participating and the website, listing of companies and market research conducted were critical to this activity. Attending this show helped establish Colorado as a key supplier of organic millet for the EU and world markets. At the 2012 show, the Colorado companies were able to connect with EU buyers who came to Colorado in 2011 and continue their discussions on millet.

- Colorado millet companies continued to attend BioFach in 2013 and 2014 without CDA funding, through funding support through the Organic Trade Association.

International Banking and Transportation Seminar

As a part of the *Colorado Millet Marketing Initiative*, we held an industry training seminar on March 3, 2011 in Ft. Morgan, Colorado focusing on training for the Colorado millet industry. Topics covered included international transportation, international banking and an overview of export opportunities and how the industry could become engaged in direct exporting of millet.



Seminar on International Logistics and Finance



Photos from March 2011 seminar on banking and transportation

Twenty three industry representatives attended the seminar, including people from Wyoming and Nebraska.

InterZoo

In 2012, Colorado was the lead in a pet food marketing initiative for the Western U.S. Agricultural Trade Association (WUSATA). While not funded by the FSMIP grant, one member of the Colorado millet industry attended the 2012 trade show.

Thunderbird Commodities attended the 2012 InterZoo show. In addition, we initiated an outreach to the 65 plus bird seed companies exhibiting at InterZoo to visit each booth and provide them with a brochure (Appendix G) about Colorado's millet industry which included a list of the millet suppliers. This was very well received and in some cases they asked for multiple copies of the brochure.



2012 Exhibitors at InterZoo, Germany

ZooMark

Building on the feedback from the European research, the *Colorado Millet Marketing Initiative*



2013 millet industry representatives at ZooMark

took four Colorado millet industry representatives to the 2013 ZooMark trade show in Italy. This booth was totally focused on millet and other bird seed ingredients.

Contacts made at the 2012 InterZoo show, and from the 2011 research tour, visited the Colorado booth throughout the show. We distributed the Colorado millet supplier brochure to all the exhibitors at the show.

The 2013 show was impacted by the 2012 crop loss. Buyers were understanding of the issue and typically ended with “as soon as you have a price for the 2013 crop, please send to me.” This included pricing requests for four containers per month for 12 months. The industry appreciated our attendance and the chance to meet directly with potential suppliers. Several times European bird seed companies would visit our booth and request our industry representatives to come to their booths for additional meetings and to “meet our company representatives.”

The 2013 show was impacted by the



CDA millet website view of Bird Seed Market video

We developed a video seminar of what was learned by our participating companies to be shared with others in the industry through the millet website. We formatted the report to include both the option to view the total video, or view the individual topics covered by the team.

Discussions Within Industry on Forming a State or National Millet Association or Market Order

An industry committee was formed in the winter of 2014 to initiate a Market Order Referendum for March 2015. During the lead up to this referendum they will review options to have either a state or national Market Order developed and voted on by the Colorado and/or U.S. millet growers. The core elements of the market order will be:

- Plant genetic research
 - Quality
 - Yield
 - Standability
- Market development
 - Human consumer
 - Export
- Grower and Industry Outreach
- Administration

Malted Millet initiative

The malted millet initiative reached beyond Colorado and the U.S. We have had inquiries on malted millet from Canadian beer companies to date, as well as sharing our research with all inbound gluten-free buyers missions.

Impact of 2012 Millet Harvest

The 2012 U.S. millet harvest was the worst in the industry's memory. Planted fields were abandoned at an unheard of level (39%) and the acreage harvested provided half the typical year. Marketable millet in 2012 was 1/3 of the previous year's harvest. This has had an immediate impact on sales in 2012 and 2013, which have impacted the ability of the industry to capitalize fully on the development efforts.

USDA/NASS NATIONAL STATISTICS FOR MILLET						
Data Items	2013	2012	2011	2010	2009	2008
ACRES HARVESTED	638,000	205,000	338,000	363,000	265,000	460,000
ACRES PLANTED	720,000	335,000	370,000	390,000	350,000	520,000
PRODUCTION, MEASURED IN BU	18,436,000	3,090,000	9,149,000	11,535,000	8,875,000	14,880,000
YIELD, MEASURED IN BU / ACRE	28.9	15.1	27.1	31.8	33.5	32.3

Gluten-Free Marketing of Millet for Both Domestic and International Markets

Millet for human consumption as both an ancient grain and a gluten-free grain has achieved increased consumer awareness since the beginning of this initiative. A Google search shows over 3.1 million listings for millet recipes. Attributing changes to our initiative cannot be documented.

Current and Future Benefits

The *Advancing Colorado's Millet Industry Initiative* brought the Colorado millet industry together. In addition, this focus connected millet industry representatives from other states into a discussion on the millet industry as well. Each element is reviewed to highlight current and future benefits from this initiative.

- Millet recipe development/promotion
 - This program was completed and well received by the target audience. The recipes developed have been incorporated into the millet industry's website as well as partner Colorado millet markets.
 - The initiative received positive media including local news, including an on-air review of the millet initiative and recipes (link provided).
 - This was listened to nationally based on the telephone calls Tim Larsen received from multiple other states after the airing of the program.
 - The development of recipes helped the Colorado millet industry understand and appreciate the human consumption options for millet.
 - A lesson learned was that to continue this momentum, the industry needs a continual effort of outreach, not just to consumers, but to foodservice to grow this market.
- Web site development
 - Creating the web site was a very important and effective element of this project. It was effective in consumer, domestic and international outreach.
 - To date there has been over 6,326 'hits' to the website
 - Lesson learned was that the state web posting software does not provide the detailed analytics to effectively record all hits.
 - If the growers create an association and assume control of the website, selecting a service provider with detailed analytics should be an important consideration in selection of the web site software and hosting.
 - One millet handler stated "I get at least three international leads per week from the posting of millet suppliers on the website. I hear the same comment from my

competitors. The website has given me so much business I need to slow down and grow handling capacity before I reach out for more buyers.”

- Discussions within industry on forming a state or national millet association or market order
 - The industry discussion continues on this topic with meetings planned in the spring of 2014 to create a business plan to develop an association. They are currently focused on making this a national rather than state association.
- Internet review of gluten-free industry and farmer production insights and guidance
 - The initiative thought there would be more industry guidance available for growers. In absence of regulations for farming for the gluten-free industry, an online Q &A format which presented questions to members of the industry to answer farmer’s typical questions on growing for the gluten-free industry.
 - One outcome is a national gluten-free certification group has suggested they would work with us in 2014 to develop suggested best practices and a seminar specific to these issues.
 - The conclusion is more work is needed to develop effective guidance for farmers targeting growing gluten-free grains for the U.S. and international market.
- Meetings with inbound international buyers for gluten-free products and ingredients (non-FSMIP funded)
 - With the development of this initiative the industry became focused on developing new markets. When opportunities developed for them to meet international buyers the industry responded in meeting with the buyers as well as hosting them for tours of their farms, elevators and hulling facilities.
 - This effort resulted in ongoing sales to European buyers of millet.
 - Industry representatives have indicated an interest in continuing to host these buyers.
- Attendance at the BioFach trade show (Germany) for marketing organic/gluten-free millet for the food sector (non-FSMIP funded) included Colorado millet in 2012, 2013, and 2014.
 - The research confirmed that the European industry preferred meeting the suppliers at existing global trade events. During the buyer visits to Colorado, the industry was encouraged to attend the BioFach Organic Trade Show in Germany, held each February. The millet industry has been at the show within the U.S. Pavilion in 2012, 2013 and 2014.

- The industry appears to be prepared to continue to attend this show for maintaining connections with existing customers as well as an opportunity to meet new suppliers.
- Malted Millet initiative (non-FSMIP funded)
 - The malted millet initiative increased public awareness of Colorado as the leader in the millet industry.
 - The company is promoting and marketing malted millet as a continuation of this effort.

Export Development Initiatives

- International banking and transportation seminar
 - The International Banking and Transportation seminar was well received by the industry with twenty three attendees from Colorado as well as Wyoming and Nebraska. This provided the industry with tools they could use in responding to international inquiries.
 - The Colorado Department of Agriculture, in cooperation with the millet industry will continue to promote training on international trade to the industry through groups such as the Denver World Trade Center.
- Web site development
 - Creating the web site was a very important and effective element of this project. It was effective for consumer, domestic and international outreach.
 - As of there have been over 6,326 'hits' to the website
 - Lesson learned was that the state web posting software does not provide the detailed analytics to effectively record all hits.
 - If the growers create an association and assume control of the website, selecting a service provider with detailed analytics should be an important consideration in selection of the web site software and hosting.
 - One millet handler has stated; "I get at least three international leads per week from the posting of millet suppliers on the website. I hear the same comment from my competitors. The website has given me so much business I need to slow down and grow handling capacity before I reach out for more buyers."
- Millet marketing at BioFach (not funded by FSMIP)
 - To expand exports of millet for human market, the BioFach show is an effective show for reaching not just the European but the global market.
 - The Colorado millet industry had companies exhibit at BioFach in 2012, 2013, and 2014. The FSMIP initiative has been pivotal in bringing international buyers

together with our suppliers, who now see the BioFach show as a critical element within their international marketing efforts.

- To obtain maximum international success, a booth highlighting millet within the food market at BioFach would further expand the marketing for Colorado.
- InterZoo (not funded by FSMIP)
 - Colorado's millet industry went to the 2012 InterZoo show building on the marketing contacts and focus provided by the FSMIP grant.
 - Companies are returning to the 2014 InterZoo show to market millet in May of 2014. (InterZoo is held every other year)
 - International buyers are interested in more than millet. By positioning Colorado as a source for additional bird seed ingredients, such as sunflower seeds and safflower, the impact on positioning Colorado as a center for bird seed ingredients will be further enhanced.
 - We are also developing lists of pet food ingredients beyond the bird seed market for inclusion in future promotions.
- Discussions within industry on forming a state or national millet association or market order
 - The industry is has created a committee to review the options for formation of a millet association.
 - The industry is confident that they will form a state or national association for millet in 2014.
- ZooMark trade show participation and post event video review posting on internet
 - The participation of four representatives of Colorado's millet industry at the 2013 ZooMark show demonstrated the effectiveness for trade shows for reaching global buyers.
 - Outreach to exhibitors who feature bird seeds exhibiting at the show was very well received by the companies.
 - Having a booth provided additional interaction with buyers, including many who did not have a booth at the show.
 - The video review of the show, posted on the website appears to be a good follow up to share with the Colorado and U.S. industry the impacts of shows such as ZooMark.
 - The format of four different suppliers within a "Colorado Millet Industry" booth was an effective way for participating companies to meet buyers.
 - A larger shared area in the future with a sitting area would enhance the impact.

- European market research
 - Meeting with the UK, Belgium Germany and Netherlands buyers as well as working with the USDA Staff in these markets provided the core insights which have driven the European marketing initiatives.
 - Future activities could include an industry tour of these markets, visiting buyers, distribution centers etc., to solidify the Colorado industry as a committed and reliable millet supplier.

- Email updates to global pet food industry buyers
 - Utilizing the database of international buyers, we developed an industry update to share production trends for millet and other bird seed ingredients. The audience appreciates the information and the update has been very well received. (Appendix K)
 - The industry will continue to develop information for distribution in the future. The upcoming update will include information on Colorado’s millet industry participating in the InterZoo show.
 - With the establishment of an association, future updates will be included in the association activities.

- Malted Millet initiative (not funded by FSMIP)
 - While the focus of this element was targeting the U.S. market, there have been inquiries from Canada which indicate an international element might also develop.

Export Trends for U.S. Millet to Europe

The trends in 2011 indicated increased exports to Europe. The drought in 2012 reduced third and fourth quarter exports, which continued into 2013 until third quarter harvest provided exportable millet. Therefore no true trends can be reported for long term impact on exports.

U.S. Millet Exports					
Country	2009	2010	2011	2012	2013
World	15,402,964	16,529,237	26,898,826	20,555,616	12,594,821
EU	3,780,511	3,616,743	8,334,465	4,784,156	1,609,202
EU as % US	24.5%	21.9%	31.0%	23.3%	12.8%

Project Beneficiaries

The primary beneficiaries of this initiative have been the more than 1500 millet growers in Colorado and the U.S. Additionally, with millet industry storage and marketing located in the rural areas of Colorado and the U.S., developing their capacity for direct marketing is adding value and jobs within these communities. Colorado’s millet industry is located in communities such as Akron (population 1,686), Watkins (population 653) and Ft. Morgan (population 11,451). As these companies expand their direct exports they have and will increase jobs within these rural communities.

TOTAL NUMBER OF FARMS PRODUCING MILLET			
USDA Census of Agriculture			
	2002	2007	2012*
U.S.	1250	1528	N/A
Colorado	416	564	N/A
CO as % of US	33.3%	36.9%	N/A

*2012 Census will be available in 2014

Currently there are 21 sellers who market the millet from the 564 Colorado millet growers. These companies are all located in rural Colorado counties. (See supplier list at www.coloradoagriculture.com/millet for a list of companies and locations.)

The 2012 drought had a crippling impact on the Colorado and U.S. millet industry, with production dropping to just over three million bushels in 2012. The 2013 harvest indicates a strong rebound. The work in locating international buyers will be critical to marketing of the 2013 harvest.

Colorado’s exports of millet were trending up through 2011. With the drought, the international market was impacted as was the U.S. market. Continuing marketing efforts will hopefully bring more exports to Colorado.

CO AS PERCENTAGE OF U.S. TOTAL EXPORTS				
2009	2010	2011	2012	2013
51.9%	55.9%	59.5%	54.2%	48.6%

U.S. Exports of Millet						
U.S. Dollars, Millions						
2013 RANK	State	2009	2010	2011	2012	2013
	States	15.4	16.5	26.9	20.6	12.6
1	Colorado	8.0	9.2	16.0	11.1	6.1
2	North Dakota	2.1	2.2	3.8	2.8	1.7
3	Nebraska	0.8	1.4	2.4	2.3	1.2
4	Minnesota	1.1	0.6	0.7	0.6	0.5
5	South Dakota	1.0	0.9	0.9	0.9	0.5

Colorado was experiencing increased exports to Europe before the drought.

TOP GLOBAL U.S. MILLET EXPORT MARKETS					
Value in U.S. Dollars					
Country	2009	2010	2011	2012	2013
World	15,402,964	16,529,237	26,898,826	20,555,616	12,594,821
Mexico	1,629,486	1,551,264	2,328,256	1,968,806	3,131,578
Canada	3,369,306	3,193,148	5,267,914	4,966,158	3,014,854
Indonesia	1,434,072	2,271,463	2,979,421	2,756,891	1,625,854
Malaysia	957,458	1,455,838	1,551,338	1,217,110	667,967
Philippines	1,732,249	1,830,689	1,861,373	2,048,925	603,625
United Kingdom	1,275,070	1,335,322	2,802,192	1,583,213	465,624
Germany	569,614	833,939	1,688,907	746,320	401,818
Cameroon	0	0	0	0	369,220
Belgium	1,020,471	203,104	1,105,660	439,934	262,760
France	180,106	130,541	802,156	1,015,113	260,290

Conclusion

The initiation of the *Advancing Colorado Millet Industry Initiative* was a catalyst for the Colorado millet industry in understanding the potential for millet as a crop beyond the current level.

For domestic marketing the project illustrated options to create interest in millet for the U.S. consumer, but also illustrated the efforts that would be required to obtain quick growth. Individual marketers of millet for human consumption will continue to develop this market. A trade association could also increase millet marketing within the U.S. consumer market and through promotions and sampling at industry trade shows including adding an element to promote millet to the foodservice market.

The Colorado millet industry increased their participation in direct marketing and sales of millet. New companies have established millet marketing within their operation and companies who previously filled orders for out-of-state marketers are now engaged in direct exports themselves.

The creation of a state or national millet association will most likely occur, which is a direct result of this grant.

As the association develops they will be reviewing key elements for future focus. Initial feedback indicates they will focus on:

- Plant genetics.
- Export market development.
- Promoting millet as an alternative grain for the U.S. consumer.
- Additional research on marketing opportunities.

Contact Person for the Project

Timothy J. Larsen

Senior International Marketing Specialist

Colorado Department of Agriculture, Markets Division

700 Kipling St., #4000

Lakewood, CO 80215

Timothy.Larsen@state.co.us

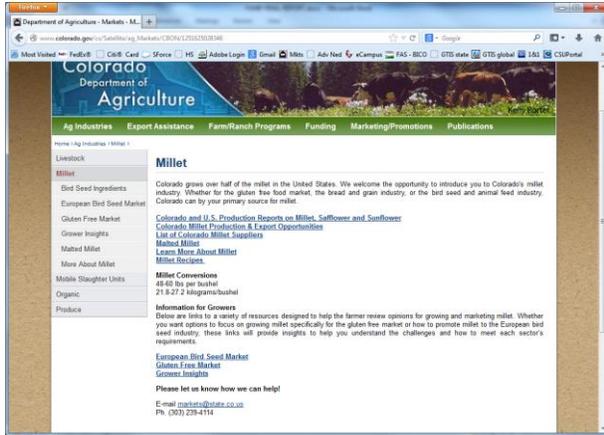
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Appendix

- A. Website
- B. Video Seminar on Promoting Millet to the Global Pet Food Industry
- C. What is the Gluten-Free Market
- D. Insights for Growers Web Portal
- E. Agenda for International Transportation and Banking Seminar
- F. Copy of Recipes Printed and Online
- G. Copy of Trade Show Hand Out on Millet Producers
- H. Colorado's Millet Industry (presentation for international buyers)
- I. Colorado's Millet Opportunities (presentation for Colorado's millet industry)
- J. Product Sheet from Colorado Malting Company with Malted Millet Offerings
- K. Copy of International Outreach "Millet, Sunflower/Safflower Production Outlook for 2013"

APPENDIX A Advancing Colorado's Millet Industry website

www.coloradoagriculture.com/millet



APPENDIX B Promoting Millet to the Global Pet Food Industry Video

Linked to through www.coloradoagriculture.com/millet



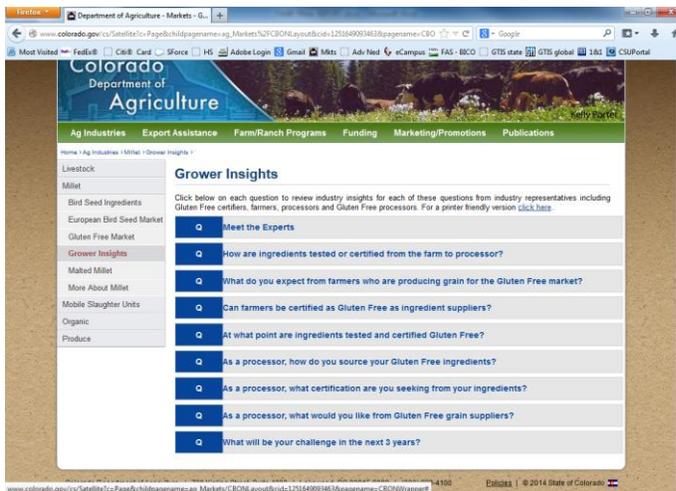
APPENDIX C What is the Gluten-Free Market

Linked through: www.coloradoagriculture.com/millet



APPENDIX D Insights For Growers Web Portal

Linked through: www.coloradoagriculture.com/millet



APPENDIX E Agenda for International Transportation and Banking Seminar**EXPORTING GRAINS AND SPECIALTY CROPS****March 3, 2011****Bloedorn Lecture Hall
Morgan Community College
20 Barlow Road
Ft. Morgan, CO**

- 9:00 am** **Introduction**
Tim Larsen, Colorado Department of Agriculture
- 9:15 am** **The Risk of Not Getting Paid**
Roy Becker, Roy Becker Seminars
Identifying risks, and options for payment in international trade
- Identify the financial risks of exporting
 - Know how to mitigate the risks
 - Recognize the components that should go into an offer (proforma invoice) and purchase order
 - Learn how the four methods of payment work in international trade
 - Understand the factors to consider when agreeing to payment terms
 - Discover how Incoterms® affect cost, risk and responsibility
 - Know how to choose the right Incoterm®
 - Comprehend how Incoterms® and payment terms need to work together
- Noon** **Lunch and discussions on Colorado's millet industry.**
- 1:30 pm** **Logistics Issues for Millet and Other Commodity Exporters**
Chad Lindsay & James Ferry, Gallagher Transport Int'l, Inc.
- Recognize the key concepts for export paperwork
 - Getting to know export service providers
 - Understand the logistics for containerized millet exports
 - Learn the best methods for rate gathering for new exporters
 - Discover the best practices for accurate quotations
 - Become familiar with transport mode selection
 - Understand why you should avoid EXW and DDP
 - Learn the features of ocean service contracts versus ad hoc quotations
 - Review a sample millet quote
- 4:30 pm** **Closing remarks/questions**

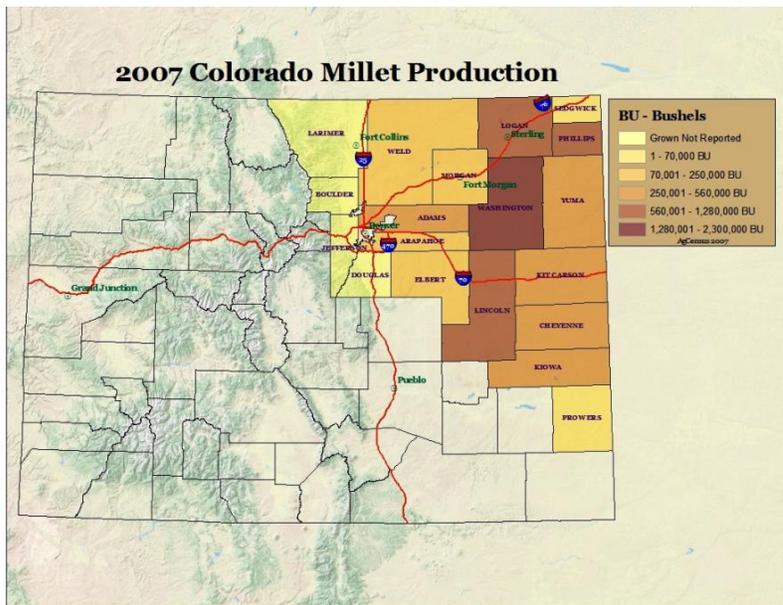
APPENDIX F Millet Industry Recipes



COLORADO MILLET RECIPES

Colorado is the largest grower of millet in the U.S, annually producing half of all the millet in the U.S.

Colorado's dry high plains fields offer the ideal growing conditions for millet.



Whether you are seeking conventional or organic millet, for the gluten-free food market, the bread and grain industry, or the bird seed and animal feed industry, Colorado can be your primary source for

Background: 2010 Colorado Millet Development Initiative

The Colorado Department of Agriculture Markets Division received a USDA FSMIP grant to assist the Colorado millet industry in developing Colorado, U.S. and international markets. Key elements of the initiative include:

- Develop Colorado and U.S. market for millet with development and promotion of recipes and millet use within Colorado and the U.S.
- Provide technical training to Colorado millet industry on industry best practices, regulations and industry expectations on millet products sold within the gluten-free market sector.
- Provide technical training for millet industry on international shipping and payment logistics.
- Research European millet market.
- Provide technical seminars in Europe to introduce Colorado millet and suppliers to European buyers.

COLORADO MILLET RECIPES

Developed by CSU for the Colorado Department of Agriculture by Professor Martha Stone and her graduate class in Food Product Development in 2010 with funding from the USDA FSMIP grant.

All millet recipes are also online at: www.coloradoagriculture.com/millet

How Do I Cook Millet?

Before we introduce our recipes, here are basic instructions on cooking millet from Colorado's premier organic millet grower, Jean Hediger at Golden Prairie Inc.

Like with all grains, we recommend that you rinse the millet before cooking. Put 2½ cups of water in a pot and add 1 cup of millet. Set the millet to a medium high heat and when it starts boiling turn down the heat and loosely cover with a lid. After 20-25 minutes all the water should be absorbed and the millet will be cooked. Remove the pot from heat and let sit for 10 minutes (if you have the time) to optimize the texture and flavor. Use ½ cup more water if the texture is too crunchy for you!

To introduce a nuttier flavor to the millet, you could roast the grains first before boiling. To do this, place the grains in a dry skillet over medium heat and stir them frequently. When they have achieved a golden color, add them to the boiling water. Millet more than doubles in quantity when cooked.

Source: www.goldenprairieinc.com

Black Bean and Millet Medley

A savory Southwestern entrée or side dish that is vegetarian, gluten-free, and provides a complete source of protein.

Nutrition Facts	
Serving Size (195g)	
Servings Per Container	
Amount Per Serving	
Calories 140	Calories from Fat 45
% Daily Value*	
Total Fat 5g	8%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 310mg	13%
Total Carbohydrate 21g	7%
Dietary Fiber 4g	16%
Sugars 3g	
Protein 4g	
Vitamin A 15%	• Vitamin C 70%
Calcium 4%	• Iron 6%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Saturated Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300 mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	

Ingredients:

- 3 ½ cups water
- 1 cup uncooked millet
- 1 orange bell pepper, chopped
- 1 green bell pepper, chopped
- 1 red bell pepper, chopped
- 2 large tomatoes, diced
- 1 sweet yellow onion, chopped
- 1 ¾ cups cilantro, chopped
- 1 avocado, chopped
- 2 ½ cups drained unsalted canned whole black beans
- 5 tablespoons + 2 teaspoons freshly squeezed lime juice
- 4 tablespoons balsamic vinegar
- 3 tablespoons olive oil
- 2 teaspoons top flake coarse salt
- ½ teaspoons black pepper
- ½ teaspoons ground cumin

Directions:

Bring water to a boil in a medium saucepan and add in uncooked millet. Allow water to come to a boil again and then cover saucepan and reduce heat to low to medium low. Cook covered for 30 minutes or until the millet absorbs all the water in the saucepan. Remove from heat and allow millet to cool uncovered for 30-45 minutes. Break up clumps and fluff cooled millet with a fork. The final cooked millet amount will be around 4 cups.

Add chopped bell peppers, tomatoes, onion, and cilantro, to a bowl and toss to mix. Avocado can be added at this time as well if dish will be served immediately; otherwise wait until just before serving to add avocado in order to avoid unwanted browning. Drain black beans and add to the vegetables. Squeeze juice from 3 medium limes and mix with balsamic vinegar and olive oil. Pour over the vegetables. Add salt, black pepper, and cumin and then mix in cooked millet until everything in the mixture is well dispersed. Serve immediately or chill until serving.

Yield: 16 (6.9 ounces) servings

Created by Alex Brand

Millet Stuffed Peppers

A vegan, gluten-free twist on an old homestyle favorite.

Ingredients:

Nutrition Facts	
Serving Size (725g)	
Servings Per Container	
Amount Per Serving	
Calories 380	Calories from Fat 80
% Daily Value*	
Total Fat 9g	14%
Saturated Fat 1.5g	8%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 1320mg	55%
Total Carbohydrate 66g	22%
Dietary Fiber 10g	40%
Sugars 16g	
Protein 11g	
Vitamin A 25% • Vitamin C 270%	
Calcium 10% • Iron 20%	
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
Calories: 2,000 2,500	
Total Fat	Less than 65g 80g
Saturated Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300 mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	

- 4 medium sized green bell peppers
- 1 cup dry millet
- 2 ½ cups water
- 2 tablespoons olive oil
- 1 medium red onion, diced
- 1 cup white mushrooms (cut into 1/8s or smaller)
- 1 to 2 cloves garlic (depending on size), minced
- 14.5 ounce can of diced tomatoes
- ¼ cup water
- 15 ounce can plain tomato sauce
- ½ cup white cooking wine
- ½ teaspoon salt
- ½ teaspoon pepper
- 1 teaspoon Italian seasoning

Directions:

Preheat oven to 400°F

Bring water to a boil in a medium sauce pan. Add millet, reduce heat, cover and simmer for about 25 minutes. Remove from heat and allow it to cool for at least 5 minutes before fluffing with a fork. While millet is cooking, cut tops from peppers and clean insides. Microwave peppers on high for 15 minutes until soft; do not overcook.

In a frying pan on medium heat, add olive oil, onions and mushrooms. Cook until onions are translucent. Add the garlic and cook until browned. Add water and the diced tomatoes. Add salt, pepper and Italian seasoning. Cook on medium for 10 minutes to thicken.

Add sautéed tomato mixture directly to millet. Stir until evenly mixed. Stuff peppers with mixture and place in a casserole dish. Add white wine to the bottom of the pan. Pour tomato sauce over the peppers. Cover with aluminum foil and bake for 30 minutes.

Meat Version: Replace ½ a cup of millet with ½ pound of ground meat of your choice. Add ground meat to sautéed mushrooms and onions to cook. When cooking ½ cup of dry millet, 1 ¼ cups of water are required.

Yield: 4 servings

Created by Matt St. Onge

Millet Salmon Cakes with Yogurt Dipping Sauce

Hearty, gluten-free salmon cakes that make a great appetizer or entrée.

Nutrition Facts	
Serving Size (114g)	
Servings Per Container	
Amount Per Serving	
Calories 170	Calories from Fat 80
% Daily Value*	
Total Fat 9g	14%
Saturated Fat 1.5g	8%
Trans Fat 0g	
Cholesterol 55mg	18%
Sodium 420mg	18%
Total Carbohydrate 13g	4%
Dietary Fiber 2g	8%
Sugars 2g	
Protein 10g	
Vitamin A 6%	Vitamin C 15%
Calcium 6%	Iron 6%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Saturated Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300 mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	

Salmon Cake Ingredients:

- | | |
|--|--------------------------|
| 1 cup millet | 1/4 cup chopped cilantro |
| 1 ½ cups water | 1/4 cup ground flax |
| 1 pound salmon | ¼ cup millet flour |
| 1 tablespoon olive oil | 1/2 cup chopped walnuts |
| ½ medium onion, diced (about ½ cup) | 2 teaspoon sea salt |
| ½ medium red bell pepper (about ½ cup) | 1 teaspoon black pepper |
| 1 stalk celery, diced (about ½ cup) | 1 teaspoon lime zest |
| | 1 tablespoon lime juice |
| | 3 eggs |
| | Nonstick cooking spray |

Salmon Cake Instructions:

Preheat oven to 375 degrees. Combine millet and 1 ½ cups water in a medium saucepan. Bring to a boil. Cover and reduce to a simmer. Simmer for 20 minutes. Turn off heat. Take off lid and let sit for 10 minutes. Fluff with a fork and proceed with recipe. (Note: 1 cup of dry millet cooked is about 4 ½ cups.)

While millet is cooking, poach salmon over medium low heat for about 8 minutes per side. Add enough liquid so that it travels about halfway up the salmon fillet. Put 1 tablespoon olive oil in a large non-stick pan over medium heat. Add onions, pepper and celery to the pan. Sauté for 5 minutes, stirring occasionally, until veggies are beginning to soften. Remove from heat, stir in cilantro and cool for 5 minutes. Flake salmon into a large bowl; remove any bones. In a separate small bowl, toss cooked millet with ground flax and millet flour until millet is coated. Add millet/flax mixture and walnuts to salmon, set aside. In a small bowl, whisk together sea salt, pepper, lime zest, lime juice and eggs. Add cooled sautéed vegetables to the salmon and pour egg mixture over the salmon. Gently toss all ingredients together with a fork. Using approximately ¼ to 1/3 cup of the salmon mixture per patty, measure out and form 16 salmon patties.

Spray two cookie sheets with nonstick baking spray. Using approximately ¼ to 1/3 cup of the salmon mixture per patty, measure out and form about 16 patties. Spray the tops of the patties, then put them into the preheated oven for 18-20 minutes. While cakes are baking, mix the yogurt dipping sauce.

Yogurt Dipping Sauce Ingredients:

- | | |
|---|---------------------------|
| 1 (7 ounce) container Greek yogurt | ¼ teaspoon Dijon mustard |
| 2 scallions, thinly sliced using both white and green parts | ½ teaspoon sea salt |
| Juice of 1 lime (approximately 1/4 cup) | ¼ teaspoon black pepper |
| | ¼ teaspoon cayenne pepper |

Directions:

Whisk all ingredients together in a small bowl. Chill until service. Makes 1 ½ cups of sauce.

Yield: 16 servings

Created by Alexandra Tudor

Millet Crisp

This classic American dessert incorporates millet flour and can be made gluten-free if desired.

Nutrition Facts	
Serving Size (163g)	
Servings Per Container	
Amount Per Serving	
Calories 310	Calories from Fat 100
% Daily Value*	
Total Fat 12g	18%
Saturated Fat 7g	35%
Trans Fat 0g	
Cholesterol 25mg	8%
Sodium 5mg	0%
Total Carbohydrate 50g	17%
Dietary Fiber 5g	20%
Sugars 28g	
Protein 4g	
Vitamin A 8%	Vitamin C 60%
Calcium 6%	Iron 8%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Saturated Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300 mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	

Ingredients:

- | | |
|--------------------------|---|
| Crust: | Fruit filling: |
| 1 cup whole millet flour | 3 cups chopped (6-8 foot-long stalks) rhubarb |
| 1 cup quick cooking oats | 3 cups chopped strawberries |
| 2/3 cup sugar | ½ cup sugar |
| ½ cup (1 stick) butter | 3 tablespoons cornstarch |

Directions:

1. Chop the rhubarb and strawberries and combine them in a large saucepan. Simmer over medium-low heat for 20 minutes.
2. While the fruit mixture is simmering, combine the millet flour, quick cooking oats, and 2/3 cup sugar in a large mixing bowl. Melt the butter and add it to the mixing bowl and mix well (hands work best). Take half of this mixture and press it evenly on a 9" x 9" baking tray with walls at least 2 inches high (or a similarly sized pie dish). This will form the bottom crust.
3. Preheat oven to 425°F.
4. After the fruit mixture has been simmering for 20 minutes, drain some of the liquid (approximately 1/3 cup) from the fruit mixture into a bowl and let cool for at least 2 minutes. Add 3 tablespoons of cornstarch, mix well until there are no visible clumps, and add back into the simmering fruit mixture. Add the ½ cup of sugar and cook for an additional 10 minutes, then remove from heat and let cool for at least 20 minutes.
5. Pour the fruit mixture over the bottom crust. Sprinkle the remaining crust mixture on top of the fruit mixture. Bake at 425°F for 30 minutes or until top crust turns golden brown. Remove from oven and let cool for at least 20 minutes before serving.

Modifications, additions, and serving suggestions:

- To make gluten-free, use 1 cup of gluten-free oats or rice flakes in place of the quick cooking oats.
- A variety of fruits can be used to make the filling for this recipe. The total volume of the fruit mixture should be approximately 6 cups.
- Depending on the fruits used, a variety of spices can be added to the crust and/or filling (e.g. cinnamon, nutmeg, cloves, ginger, etc.)
- This dish goes well with ice cream, whipped cream, and frozen or regular yogurt.

Yield: 9 (3x3" squares) servings

Created by Andrew Kester

Gorgonzola Millet Polenta with a Berry Salad

A simple, yet elegant, whole grain vegetarian appetizer topped with fresh fruits.

Nutrition Facts	
Serving Size (127g) Servings Per Container	
Amount Per Serving	
Calories 370	Calories from Fat 240
% Daily Value*	
Total Fat 27g	42%
Saturated Fat 7g	35%
Trans Fat 0g	
Cholesterol 20mg	7%
Sodium 2740mg	114%
Total Carbohydrate 20g	7%
Dietary Fiber 4g	16%
Sugars 4g	
Protein 11g	
Vitamin A 10%	• Vitamin C 15%
Calcium 4%	• Iron 6%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Saturated Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300 mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram: Fat 9 • Carbohydrate 4 • Protein 4	

Ingredients:

- ¾ cup millet, uncooked
- 24 ounce vegetable stock
- ¼ cup butter
- ¼ teaspoon white pepper
- ¼ teaspoon salt
- 1/3 cup + 1 tablespoon gorgonzola cheese, crumbles
- 1 ¾ cup raspberries, fresh
- 1 tablespoon Balsamic vinegar
- 1 ½ tablespoons sugar
- ¾ cup + 1 tablespoon olive oil
- ½ cup spinach
- 1 ½ cups arugula
- ½ cup blackberries



Directions:

1. Pulse millet in a small blender until it resembles cornmeal. Set aside until needed.
2. Line a 9x9 baking pan with plastic wrap.
3. Bring stock and butter to a boil.
4. Add millet, pepper, salt and reduce to a simmer. Stir constantly for 20 minutes.
5. Pour half of the mixture into the baking pan. Evenly distribute the cheese over the millet in the baking pan. Pour the remaining millet over the cheese. Cool millet to at least 40 ° F. Cut polenta into 9 even squares. Chill until needed
6. Puree 1 cup (4.5 ounces) raspberries, balsamic and sugar together with an immersion blender. Slowly pour in oil while blending until the entire mixture is emulsified. Chill in refrigerator until needed.
7. Combine spinach and arugula. Refrigerate until needed.
8. To serve: Grill polenta on both sides. Place an even amount of salad greens on each piece of polenta. Drizzle a little more than 2.5 tablespoon (1.6 ounces) of raspberry sauce over salad. Garnish with left over berries.

Yield: 9 (3x3" squares) servings

Created by Tercera Jones

Millet Dessert Salad

A sweet salad or dessert packed with antioxidant-laden fruits and whole grain millet.

Nutrition Facts	
Serving Size (119g)	
Servings Per Container	
Amount Per Serving	
Calories 210	Calories from Fat 70
% Daily Value*	
Total Fat 7g	11%
Saturated Fat 3.5g	18%
Trans Fat 0g	
Cholesterol 10mg	3%
Sodium 55mg	2%
Total Carbohydrate 36g	12%
Dietary Fiber 2g	8%
Sugars 23g	
Protein 3g	
Vitamin A 10%	• Vitamin C 4%
Calcium 2%	• Iron 4%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Saturated Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300 mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	

Ingredients:

- 2 2/3 cups water
- 3/4 cup uncooked millet
- 1 1/2 cups drained crushed canned pineapple (1, 20 ounce can)
- 6 1/2 cups miniature marshmallows (1, 10.5 ounce bag)
- 1 cup softened cream cheese – (1, 8 ounce package)
- 1/2 cup sugar
- 1 tablespoon salad dressing (such as Miracle Whip)
- 1 cup drained canned apricot, diced
- 1/2 cup dried cranberries
- 1/2 cup walnuts, chopped
- 1/4 cup sweetened coconut
- 1 1/2 cups whipped topping

Directions:

Bring water to a boil in a medium saucepan and add in uncooked millet. Allow water to come to a boil again and then cover saucepan and reduce heat to low to medium low. Cook covered for 30 minutes or until the millet absorbs all the water in the saucepan. Remove from heat and allow millet to cool uncovered for 30-45 minutes. Break up clumps and fluff cooled millet with a fork.

Drain pineapple very well; if drained improperly it will make mixture very wet. Add drained pineapple and marshmallows to a large mixing bowl and mix well. Mix cream cheese, sugar, and salad dressing in a bowl until smooth. Add this mixture to the pineapples and marshmallows. Next, mix in the 3 cups of cooked millet, diced apricot, cranberries, walnuts and coconut into the mixture of pineapples, marshmallows, cream cheese, sugar, and salad dressing. Fold in whipped topping last after all other ingredients are mixed well. Chill before serving to help mixture to solidify.

Yield: 22 (4.2 ounces) servings

Created by Alex Brandt

Spiced Millet Pudding

A creamy, spiced, gluten-free dessert that incorporates the warm comforts of fall in a classically spiced dessert.

Nutrition Facts	
Serving Size (153g)	
Servings Per Container	
Amount Per Serving	
Calories 180	Calories from Fat 50
% Daily Value*	
Total Fat 6g	9%
Saturated Fat 3.5g	18%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 29g	10%
Dietary Fiber 2g	8%
Sugars 13g	
Protein 2g	
Vitamin A 0%	• Vitamin C 0%
Calcium 2%	• Iron 20%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
Calories: 2,000 2,500	
Total Fat	Less than 65g 80g
Saturated Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300 mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	

Ingredients:

- 1 ¼ cups water
- ½ cup dry, whole millet
- 1 (14 ounce) can lite coconut milk
- 2 tablespoon honey
- ½ teaspoon nutmeg
- ½ teaspoon cinnamon
- ¼ teaspoon cloves
- 1 teaspoon vanilla extract
- ½ cup raisins (any variety)

Directions:

1. Boil 1 ¼ cups water and add millet. Simmer on low for about 25-30 minutes, until millet has absorbed all of the water. Let cool for 5 minutes and then fork to a fluffy consistency.
2. In a separate saucepan, combine cooked millet and coconut milk. Simmer over medium heat for about 15-20 minutes until mixture has thickened. Remove from heat.
3. Stir in honey, nutmeg, cinnamon, cloves, vanilla, and raisins. Serve warm.

Yield: 6 (5.4 ounce) servings

Created by Jess Hedden

Millet Chili

A quick, nutritious solution to dinner-time dilemmas. This vegetarian chili is gluten-free and will fill even the biggest appetites on a cold winter night!

Nutrition Facts	
Serving Size (276g) Servings Per Container	
Amount Per Serving	
Calories 210	Calories from Fat 20
% Daily Value*	
Total Fat 2.5g	4%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 720mg	30%
Total Carbohydrate 38g	13%
Dietary Fiber 7g	28%
Sugars 7g	
Protein 9g	
Vitamin A 15%	• Vitamin C 40%
Calcium 6%	• Iron 15%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Saturated Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300 mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	

Ingredients:

- 1 tablespoon olive oil
- 1 large white onion, diced
- 1 green bell pepper, diced
- 4 cloves of garlic, finely chopped
- 1 jalapeño pepper, finely chopped
- 1 teaspoon salt
- 1 teaspoon ground black pepper
- 1 teaspoon chili powder
- 1 teaspoon cumin
- 1 (15 ounce) can of corn kernels
- 1 (15 ounce) can dark kidney beans
- 1 (15 ounce) can light kidney beans
- 2 (15 ounce) cans of vegetable broth
- 1 cup millet
- 1 (6 ounce) can tomato paste
- 1 (15 ounce) can diced tomatoes
- Optional: Shredded cheddar cheese and sour cream as garnish

Directions:

Warm olive oil in large saucepan. Sauté onions, peppers, garlic, salt, and pepper for 4-5 minutes until the onions become translucent. Add in corn, beans, broth, spices, and bring to a low boil. Add millet and stir. Cover, reduce heat to medium low and simmer for 30 minutes. Remove lid, add diced tomatoes and tomato paste, and stir. Chili is ready to serve, but additional simmering will improve flavor. Serve with shredded cheddar or sour cream on top.

Yield: 12 servings (276g servings)

Created by Gretchen Wall

White Millet Soup

This one pot meal is simple and delicious! The unique spice profile complements the vegetables, chicken, and millet.

Nutrition Facts	
Serving Size (309g)	
Servings Per Container	
Amount Per Serving	
Calories 180	Calories from Fat 50
% Daily Value*	
Total Fat 5g	8%
Saturated Fat 0.5g	3%
Trans Fat 0g	
Cholesterol 10mg	3%
Sodium 170mg	7%
Total Carbohydrate 24g	8%
Dietary Fiber 4g	16%
Sugars 2g	
Protein 9g	
Vitamin A 10%	Vitamin C 20%
Calcium 4%	Iron 10%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Saturated Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300 mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	

Ingredients:

- 1 tablespoon canola oil
- 1/2 cup onion, chopped
- 1/2 cup raw chicken, chopped
- 4 cups water
- 1 fresh tomato, chopped
- 1/2 teaspoon salt
- 1/4 teaspoon turmeric powder
- 1/4 cup hummus
- 1/2 cup potato, chopped
- 1/2 cup frozen mixed vegetables includes: peas, corn, carrots and green beans
- 1/2 cup millet
- 1 teaspoon dried mint or 1 tablespoon fresh mint
- 1/4 cup fresh parsley
- 1/4 teaspoon ground ginger
- 1/4 teaspoon cinnamon

Instructions / Directions:

- 1-In small pan mix together oil, onion, and chicken and cook until onion translucent.
- 2- Add the rest of Ingredients: water, fresh tomato, salt, turmeric powder, hummus, peas, carrot, corn and potatoes to sauce pan and cover pan. Cook for about 30 minutes on low on the stove.
- 3- Remove from heat and add mint, ginger, cinnamon, and parsley.

Yield: 5 (1 cup) servings.

Created by Fauzi Amer

Millet Curry

This dish contains all the spices generally used in curries. It is a short and simple recipe that incorporates millet and vegetables.

Nutrition Facts	
Serving Size (252g)	
Servings Per Container	
Amount Per Serving	
Calories 160	Calories from Fat 45
% Daily Value*	
Total Fat 5g	8%
Saturated Fat 0.5g	3%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 1180mg	49%
Total Carbohydrate 25g	8%
Dietary Fiber 4g	16%
Sugars 2g	
Protein 4g	
Vitamin A 6%	Vitamin C 6%
Calcium 2%	Iron 8%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Saturated Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300 mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	

Ingredients:

- 1/2 cup whole millet
- 3 cups water
- 1 tablespoon oil
- 1 teaspoon cumin seeds
- 1 teaspoon mustard seeds
- 4 cloves
- 1/4 teaspoon ground cardamom or 3 cardamom pods
- 2 bay leaves
- 1 cinnamon stick
- 1 medium-sized chopped onion
- 2 chopped green chilies
- 2 chopped tomatoes
- 1/3 cup peas
- 2 teaspoons salt
- 3 teaspoons curry powder
- 1 teaspoon ground coriander seed
- 2 teaspoons red chili powder
- 2 teaspoons turmeric powder
- 1 tablespoon ginger-garlic paste

Directions:

- Cook millet with 2 cups of water in a pressure saucepan for 15 minutes. Allow the pressure to reduce naturally. (If a pressure saucepan is not available, combine 1/2 cup millet with 1 1/2 cups boiling water. Cover and simmer on medium/low heat for about 25 minutes. Remove from heat and allow it to cool for at least 5 minutes before fluffing with a fork.)
- In a large pan, heat the oil and when it is hot, add cumin seeds, mustard seeds, cloves, cardamom pods, bay leaves and cinnamon stick. Keep stirring continuously to prevent the spices from burning.
- Add onions and chopped green chilies and sauté till onions are golden brown.
- Add the cooked millet and a cup of water. If the millet has formed a cake after cooking, mash it well. Then add chopped tomatoes, green peas, salt, curry powder, coriander seed powder, red chili powder, turmeric powder and ginger-garlic paste. Cook for about 10 minutes with the lid on.
- Add water to adjust consistency as desired.

Preparation time: 10 minutes

Cooking time: 25 minutes

Yield: 4 servings (252 g)

Created by Gaurav Madiwale

Millet Lettuce Roll

This is an easy to prepare vegetarian and gluten-free appetizer or side dish. Serve alone or with a dipping sauce, such as vinaigrette or tzatziki sauce.

Nutrition Facts	
Serving Size (117g)	
Servings Per Container	
Amount Per Serving	
Calories 90	Calories from Fat 35
<small>% Daily Value*</small>	
Total Fat 4g	6%
Saturated Fat 2g	10%
Trans Fat 0g	
Cholesterol 10mg	3%
Sodium 230mg	10%
Total Carbohydrate 10g	3%
Dietary Fiber 2g	8%
Sugars 2g	
Protein 5g	
Vitamin A 15%	• Vitamin C 2%
Calcium 4%	• Iron 2%
<small>*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:</small>	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Saturated Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300 mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
<small>Calories per gram:</small>	
Fat 9 • Carbohydrate 4 • Protein 4	

Ingredients:

- 1 teaspoon olive oil
- 1 cup boiling water
- ¼ cup dry millet
- ¾ cup sliced, fresh mushrooms
- ¾ cup sweet corn, canned
- ¾ cup crumbled feta cheese with basil and dried tomatoes
- 12 bibb lettuce leaves

Directions:

- 1.) Boil 1 cup of water. Add millet and simmer with the lid on for 20 -25 minutes. Fluff millet with a fork and set aside.
- 2.) Preheat skillet to medium high heat. Add ½ teaspoon of



oil. Wait for oil to heat up. Add sliced mushrooms and sauté for 5 minutes or until brown.

- 3.) Mix cooked millet, sweet corn, mushrooms and feta cheese.
- 4.) Separate lettuce leaves and wash with running, cold, tap water. Blot dry to remove excess water.
- 5.) To prepare a roll, open lettuce leaf and place ¼ cup of millet mix in the middle. Carefully roll the leaf and make sure the open end stays on the bottom or hold with toothpicks.

Serving size: 2 rolls

Recipe serves 6

Created by Eva Borjas Orellan

Fruit and Nut Granola

This simple, tasty homemade granola features whole millet, which offers a unique crunch not found in many other granolas on the market.

Nutrition Facts	
Serving Size (69g)	
Servings Per Container	
Amount Per Serving	
Calories 300	Calories from Fat 120
% Daily Value*	
Total Fat 13g	20%
Saturated Fat 2.5g	13%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 30mg	1%
Total Carbohydrate 41g	14%
Dietary Fiber 5g	20%
Sugars 16g	
Protein 6g	
Vitamin A 0%	• Vitamin C 0%
Calcium 2%	• Iron 10%
<small>*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:</small>	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Saturated Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300 mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
<small>Calories per gram: Fat 9 • Carbohydrate 4 • Protein 4</small>	

Ingredients:

- 3 cups rolled oats
- ½ cup uncooked millet
- 1/3 cup unsweetened, shredded coconut
- ¼ cup chopped pecans
- ¼ cup pumpkin seeds
- ¼ cup hulled sunflower seeds
- ½ teaspoon ground cinnamon
- 1/8 teaspoon ground cloves
- 1/8 teaspoon salt
- 1/3 cup honey
- 1/3 cup olive oil
- ½ cup dried cranberries
- ½ cup raisins

Directions:

Preheat oven to 300°F. Mix oats and millet in a large bowl and spread on to a cookie sheet. Bake for 15 minutes. While this is baking, combine coconut through oil, add the oat millet mixture and stir thoroughly. Spread out mixture on cookie sheet and bake for 15 minutes. Remove from oven and stir. Bake for another 10 minutes. Remove from oven and allow to cool for 5 minutes then break up granola with a large spatula or wooden spoon. Cool for another 10 minutes before mixing in dried fruit.



Yield: 11 (½) cup servings

Created by Twila Henley

Millet Pasta with Walnut Pesto and Kale

Gluten-free millet pasta in an Italian dish with fresh garden herb and vegetable highlights.

Laurie's Millet Pasta:

Nutrition Facts	
Serving Size (128g)	
Servings Per Container	
Amount Per Serving	
Calories 350	Calories from Fat 160
% Daily Value*	
Total Fat 18g	28%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 5mg	2%
Sodium 420mg	18%
Total Carbohydrate 39g	13%
Dietary Fiber 3g	12%
Sugars 1g	
Protein 11g	
Vitamin A 25%	• Vitamin C 20%
Calcium 10%	• Iron 10%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Saturated Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300 mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	

- | | |
|----------------------------|------------------------------|
| 1 cup organic millet flour | ½ tablespoon gum acacia |
| 1 1/3 cup potato starch | ½ tablespoon sodium alginate |
| 2/3 cup egg white solids | 2/3 cup water |
| | 1 tablespoon olive oil |

Directions:

Mix dry ingredients. Slowly add water and mix by hand or electric mixer until mixture is doughy.

Extrude pasta using hand crank or electric pasta maker. Immediately place in boiling water with

1 tablespoon of olive oil to keep pasta from sticking together. Boil about 3 minutes for al dente, about 5 minutes for a softer pasta. Drain.

Pesto:

- | | |
|---|--------------------------------|
| 2 cups packed basil leaves | 1/4 lime zest & juice |
| 1/3 cup toasted walnuts | 1 clove garlic |
| 1/2 cup grated Parmigiano Reggiano cheese | 1/8 cup extra virgin olive oil |
| 3/4 teaspoon sea salt | 1/8 cup canola oil |
| 1/4 lemon zest & juice | |

Directions:

Blend all pesto ingredients in a food processor, adding the oils last slowly to emulsify. Set aside.

To assemble:

After pasta and pesto are made, combine the following vegetables and steam for about 1 minute.

- 1 cup chopped kale
- 1 cup cherry tomatoes, quartered

Add pesto to pasta, using a little reserved pasta cooking water so that pesto coats pasta. Fold in steamed veggies.

Short on time? Use commercial pesto and substitute 16 ounces dried brown rice/millet pasta.

Yield: 8 servings
 Created by Krista Hall
 Millet Pasta created by Laurie Scanlin



Colorado Millet production

Year	Planted (1,000 acres)	Harvested (1,000 acres)	Yield (bushels/acre)	Production (1,000 bushels)	Price per Unit (US\$)	Value of production (\$1,000)	Colorado as share of US total
2004	370	330	24	7,920	2.70	21,384	50.40%
2005	290	275	20	5,500	3.10	17,050	40.20%
2006	290	255	21	5,355	4.00	21,420	52.50%
2007	270	260	33	8,580	4.50	38,610	50.80%
2008	270	230	33	7,590	3.25	24,668	51.00%
2009	170	150	35	5,250	2.90	15,225	53.20%

COLORADO MILLET SUPPLIERS



For a list of Colorado companies are ready to help you buy your millet from the number one state source of millet, Colorado

www.coloradoagriculture.com/millet.

For assistance:

Timothy J. Larsen
 Sr. International Marketing Specialist
 Colorado Department of Agriculture
Timothy.Larsen@state.co.us
 303.239.4118

APPENDIX G Copy of Trade Show Hand Out on Millet Producers

COLORADO, The U.S. Source for all your millet requirements.

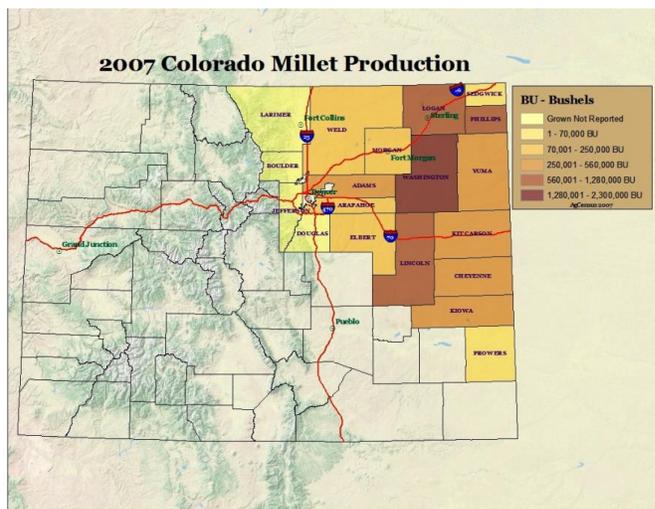
Colorado grows over half of the millet in the United States.



We welcome the opportunity to introduce you to Colorado's millet industry. Whether you are seeking conventional or organic millet, for the gluten-free food market, the bread and grain industry, or the bird seed and animal feed industry, Colorado can

be your primary source for millet.

Colorado is the largest grower of millet in the U.S, annually producing half of all the millet in the U.S.



Colorado's dry high plains fields offer the ideal growing conditions for millet. As the source of half of the U.S. millet, Colorado is also the largest exporter of millet.



Colorado Millet production

Year	Planted (1,000 acres)	Harvested (1,000 acres)	Yield (bushels/acre)	Production (1,000 bushels)	Price per Unit (US\$)	Value of production (\$1,000)	Colorado as share of US total
2004	370	330	24	7,920	2.70	21,384	50.40%
2005	290	275	20	5,500	3.10	17,050	40.20%
2006	290	255	21	5,355	4.00	21,420	52.50%
2007	270	260	33	8,580	4.50	38,610	50.80%
2008	270	230	33	7,590	3.25	24,668	51.00%
2009	170	150	35	5,250	2.90	15,225	53.20%

COLORADO MILLET SUPPLIERS



For a list of Colorado companies are ready to help you buy your millet from the number one state source of millet, Colorado,

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Millet Conversions

48-60 lbs per bushel
 21.8-27.2 kilograms/bushel

For assistance:

Timothy J. Larsen
 Sr. International Marketing Specialist
 Colorado Department of Agriculture
Timothy.Larsen@state.co.us
 303.239.4118

Appendix H, Colorado's Millet Industry (Presentation for International Buyers)

3/7/2014

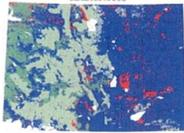
COLORADO DEPARTMENT OF AGRICULTURE

COLORADO MILLET



- Global Supplier
 - Conventional & organic
 - Gluten-free grain
 - Malted millet
 - Dehulled millet
 - Bird food industry

Colorado acreage
Private ownership usage (31.1 million acres)



- 19.6 million pasture/grazing
- 11.5 million acres cropland
 - 8.9 dryland crops
 - 2.6 million irrigated crops

Colorado produces 50-60% of U.S. millet



2007 Colorado Millet Production

U.S. millet production

- Colorado**
 - 7.1 million bushels
 - 215,000 acres
 - 61.5%
- Nebraska**
 - 2.6 million bushels
 - 23%
- S. Dakota**
 - 1.8 million bushels
 - 16%

Need More Millet?

Millet is a rotational crop with wheat
Colorado Wheat Acreage
• 2.2 million acres

Millet and wheat are dryland crops, requiring no irrigation in Colorado



Colorado's Millet Varieties



- White Proso millet varieties:
 - Earlybird
 - Sunrise
 - Sunup
 - Huntsman
 - Cope
- Red Proso millet
- Grey Proso millet
- Yellow millet
- Bird/finch varieties in US market (foxtail family)
 - Golden German
 - Red Siberian

Global Millet Supplier



- Exporting over 50% of U.S. millet
- Exporting to 34 countries

3/7/2014

U.S. and Global Millet Markets

- Gluten-Free grain
 - Whole, flaked, puffed
 - Flour
- Conventional grain
 - Whole, flaked, puffed
 - Flour
- Organic & conventional
- Gluten-free beer
 - Malting millet
- Bird Seed/pet food



Planting and Growing Colorado Millet



Growing Millet



Maturing Millet



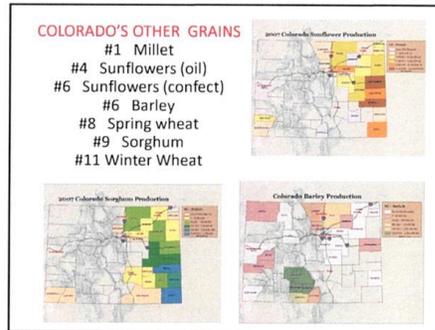
Windrowing



Harvesting



3/7/2014



APPENDIX I Colorado's Millet Opportunities (Presentation for Colorado Millet Industry)

3/12/2014

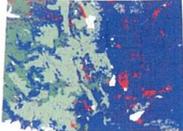
COLORADO DEPARTMENT OF AGRICULTURE

COLORADO MILLET



- Global Supplier
 - Conventional & organic
 - Gluten-free grain
 - Malted millet
 - Dehulled millet
 - Bird food industry

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- 11.5 million acres cropland
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2007 Colorado Millet Production

U.S. millet production

Colorado

- 7.1 million bushels
- 215,000 acres
- 61.5%

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- 2.6 million bushels
- 23%

S. Dakota

- 1.8 million bushels
- 16%

Need More Millet?

Millet is a rotational crop with wheat

Colorado Wheat Acreage

- 2.2 million acres

Millet and wheat are dryland crops, requiring no irrigation in Colorado



Colorado's Millet Varieties



White Proso millet varieties:

- Earlybird
- Sunrise
- Sunup
- Huntsman
- Cope

Red Proso millet

Grey Proso millet

Yellow millet

Bird/finch varieties in US market (foxtail family)

- Golden German
- Red Siberian

Global Millet Supplier



- Exporting over 50% of U.S. millet
- Exporting to 34 countries

3/12/2014

U.S. and Global Millet Markets

- Gluten-Free grain
 - Whole, flaked, puffed
 - Flour
- Conventional grain
 - Whole, flaked, puffed
 - Flour
- Organic & conventional
- Gluten-free beer
 - Malted millet
- Bird Seed/pet food



Planting and Growing Colorado Millet



Growing Millet



Maturing Millet



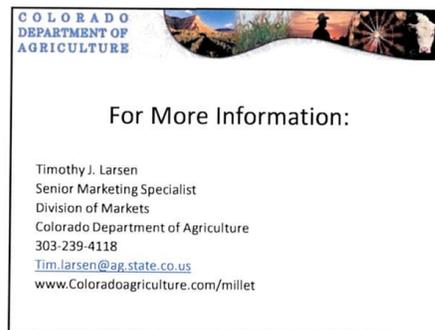
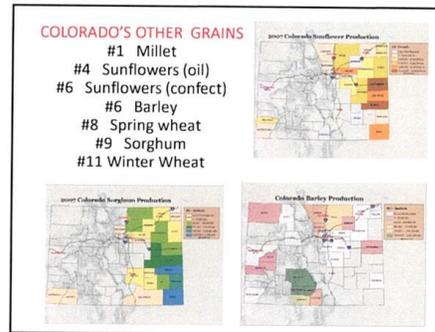
Windrowing



Harvesting



3/12/2014



APPENDIX J Colorado Malting Company product sheet on malted millet products**Gluten-free Fermentable Malts Pricing**

Red Proso Millet (2.0-3.0L)

Buckwheat (2.0-3.0L)

Red MILO (2.0-2.5L)

Gluten-free Specialty Malts**Red Proso Millet**

Colo-Pils Red Millet Dextrin Malt (1.5-1.9L)

Colo-Foam Red Millet Dextrin Malt (2.0-3.0L)

Colo-Munich Red Millet (20-60L)

Colorado Crystal Red Millet (20-90L)

Colorado Vienna Red Millet (6-7L)

Colorado Munich Red Millet (10-12L)

Colorado Chateau Abbey Red Millet (17-19L)

Chocolate Red Millet Roasted Malt (200-300L)

UNmalted Red Millet RAW Roast (300-400L)

Buckwheat

Colo-Pils Buckwheat Dextrin Malt (1.5-1.9L)

Colo-Foam Buckwheat Dextrin Malt (2.0-3.0L)

Colo-Munich Buckwheat (20-60L)

Colorado Crystal Buckwheat (20-90L)

Colorado Vienna Buckwheat (6-7L)

Colorado Munich Buckwheat (10-12L)

Colorado Chateau Abbey Buckwheat (17-19L)

Chocolate Buckwheat Roasted Malt (200-300L)

UNmalted Buckwheat RAW Roast (300-400L)

Gluten-free Custom Malt - by Request - 250# min - PrePaid - Contact for Quote

Teff

Quinoa

Amaranth

Sunflower

Rice

Oats

White Millet

White MILO

Our Gluten-free grains are malted utilizing isolated gluten free equipment, and in certain cases by hand, in order to avoid gluten cross-contamination.

The above listed products may contain traces of gluten. COLORADO MALTING COMPANY shall not be held responsible for any gluten illness or reaction.

Please Brew Responsibly

December 2013

APPENDIX K Copy of International Outreach



**Colorado & U.S. Millet / Sunflower / Safflower
Production Outlook for 2013**

Colorado Agriculture—Supplying the World
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**Proso Millet Area Planted and Harvested - States and United States:
2012 and 2013**

ISSN: 1949-1522

Released June 28, 2013, by the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA).

Proso Millet Area Planted and Harvested - States and United States: 2012 and 2013
 [Blank data cells indicate estimation period has not yet begun]

State	Area planted		Area harvested	
	2012	2013	2012	2013 1/
	1,000 acres			
Colorado	210	310	120	
Nebraska	70	120	55	
South Dakota ...	55	100	30	
United States ...	335	530	205	

1/ Estimates to be released January 2014 in the "Crop Production Summary."

Sector insights:

Proso millet: Area planted to proso millet in 2013 is estimated at 530,000 acres, up 195,000 acres from 2012. Planted acreage increased from last year in all three estimating States. Strong anticipated prices are the main reason for the increase in planted acres this year.



**Colorado & U.S. Millet / Sunflower / Safflower
Production Outlook for 2013**

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Sunflower Area Planted and Harvested by Type - States and United States: 2012 and 2013

Varietal type and State	Area planted		Area harvested	
	2012	2013	2012	2013 1/
	1,000 acres			
Oil				
California	48.0	52.0	47.5	51.5
Colorado	75.0	45.0	61.0	40.0
Kansas	70.0	55.0	65.0	50.0
Minnesota	38.0	30.0	37.0	29.0
Nebraska	33.0	28.0	29.5	26.0
North Dakota	770.0	480.0	755.0	470.0
Oklahoma	4.0	5.0	3.8	4.7
South Dakota	580.0	530.0	560.0	515.0
Texas	40.0	43.0	33.0	7.0
United States	1,658.0	1,268.0	1,591.8	1,223.2
Non-oil				
California	2.8	3.0	2.8	3.0
Colorado	11.0	16.0	9.0	14.0
Kansas	17.0	21.0	16.0	9.0
Minnesota	11.0	13.0	10.5	12.0
Nebraska	8.5	15.0	7.3	13.0
North Dakota	90.0	98.0	88.0	94.0
Oklahoma	0.7	1.0	0.6	0.8
South Dakota	65.0	87.0	63.0	84.0
Texas	55.0	45.0	52.0	39.0
United States	261.0	299.0	249.2	278.8
All				
California	50.8	55.0	50.3	54.5
Colorado	86.0	61.0	70.0	54.0
Kansas	87.0	76.0	81.0	69.0
Minnesota	49.0	43.0	47.5	41.0
Nebraska	41.5	43.0	36.8	39.0
North Dakota	860.0	578.0	843.0	564.0
Oklahoma	4.7	6.0	4.4	5.5
South Dakota	645.0	617.0	623.0	599.0
Texas	95.0	88.0	85.0	76.0
United States	1,919.0	1,567.0	1,841.0	1,502.0

1/ Forecasted.



Colorado & U.S. Millet / Sunflower / Safflower Production Outlook for 2013

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Sunflower: Area planted to sunflower in 2013 totals 1.57 million acres, down 18 percent from 2012. Harvested area is expected to decrease 18 percent from last year to 1.50 million acres. Planted area of oil type varieties, at 1.27 million acres, is down 24 percent from 2012, and is the lowest since 1976. Planted area of oil varieties in Colorado is the lowest since 1996 when 45,000 acres were also planted. Planted area of oil varieties in Kansas is the lowest since 1990 and in North Dakota is the lowest since 1976. Planted acreage of non-oil varieties, estimated at 299,000 acres, is up 15 percent from last year. For the first time, planted area for all sunflower varieties is higher in South Dakota than North Dakota.

Planting began much later than normal in most areas due to cool spring temperatures and wet conditions. As of May 26, only 9 percent of the intended crop had been planted, compared with the 5-year average of 26 percent. Planting progress continued to lag behind normal in all four major States through early June, but planting in Colorado was able to catch up to normal pace by mid-June. As of June 16, producers had planted 55 percent of the crop in the four major States, 33 percentage points behind last year and 22 percentage points behind the 5-year average.



**Colorado & U.S. Millet / Sunflower / Safflower
Production Outlook for 2013**

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**Crop Area Planted and Harvested, Yield, and Production in Metric Units -
United States: 2012 and 2013**

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2013 crop year. Blank data cells indicate estimation period has not yet begun]

Crop	: Area planted		: Area harvested	
	: 2012	: 2013	: 2012	: 2013
	: hectares			
Proso millet	135,570	214,490	82,960	N/A
Safflower	68,720	61,110	64,790	58,480
Sunflower	776,600	634,150	745,030	607,840

**Crop Area Planted and Harvested, Yield, and Production in Metric Units -
United States: 2012 and 2013 (continued)**

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2013 crop year. Blank data cells indicate estimation period has not yet begun]

Crop	: Yield per hectare		: Production	
	: 2012	: 2013	: 2012	: 2013
	: metric tons			
Proso millet	0.84		70,080	
Safflower	1.26		81,390	