

Colorado Bean News

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VegNet = Potato, Onion & Bean Technology Transfer

Get the latest information on weather patterns, plant development and pest alerts that can affect your crop and productivity in Colorado and Nebraska. Colorado State University is pleased to announce that the popular VegNet program will be available again as a resource for crop consultants, vegetable producers and others involved with the industry during 2000. The dry bean portion of this program will be supported in part by the Colorado State University Agricultural Experiment Station & Cooperative Extension, Colorado Dry Bean Administrative Committee, Nebraska Dry Bean Commission, Novartis Crop Protection, BASF, Elf Atochem NA, Agtrol International, Rohm & Haas, Zeneca Ag Products, and American Cyanamid. Other vegetable segments (onion, potato) will be supported also by the CSU Integrated Pest Management Program, Colorado Onion Association, Arkansas Valley Growers & Shippers Association, and the Colorado Potato Administrative Area III Committee.

Environmental Monitoring and Disease Forecasting programs will rely upon the COAGMET (Colorado) and High Plains Climate Center (Nebraska) remote electronic weather station systems that generate daily macroclimatic weather data accessible via internet for growers and researchers alike. The regional data has been very reliable for disease forecasting efforts during recent years for early blight and late blight of potato, rust of bean, and purple blotch of onion. CSU personnel continue to adapt and adopt additional pest monitoring and forecasting models for these crops and others throughout Colorado; including initial testing of Cercospora Leaf Spot of Sugar Beet in eastern Colorado during 2000.

The 2000 VegNet Program and information will be available in 3 formats for easy access:

1. Web Site <http://www.colostate.edu/Orgs/VegNet/> or via www.csuag.com
2. DTN Satellite 800-485-4000 to subscribe, activate the Colorado Information Section
3. Pest Alert Weekly newsletter available from Colorado State University, available as a mail subscription or via the internet at <http://www.colostate.edu/programs/pestalet/>

The success and utility of the VegNet program is directly dependent upon your input, especially with reports regarding crop development, sightings of rust of bean, and other diseases such as the bacterial blights and white mold, other pests, or damage from storms. Your report will be handled confidentially, and descriptions of affected areas will not include specific field locations or grower names. The purpose is to share information on trends and especially early alerts so that others in the vicinity can scout their fields to decide if a production or pest management strategy should be implemented on a more timely basis.

Please share reports on pest sightings or other concerns with Howard Schwartz (970-491-6987), Mark McMillan (970-491-7846) or Kris Otto (970-491-0256) at CSU. Our program personnel and students will be involved with periodic surveys and research plots throughout the region, and look forward to interacting with vegetable producers and industry personnel during 2000. Or contact your local extension agent, crop consultant, bean elevator field people or others involved with the production and protection of dry beans in our region.

Thank you again for your support and participation.

MAILING LABEL UPDATE
Please send changes to:
Dr. H.F. Schwartz, CBN Editor
E207 Plant Science Building
Colorado State University
Fort Collins, CO 80523-1177



**Colorado Dry Bean
Administrative Committee
EXECUTIVE BOARD**

Robert Schork **Manager**
Helen Davis (303-239-4121)
Colo. Dept. of Ag. **Advisor**

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**COLORADO DRY BEAN
ADMINISTRATIVE COMMITTEE UPDATE**

2000 Research Projects Funded:



- On March 6, 2000, the CDBAC reviewed and subsequently approved the following dry bean research projects at Colorado State University:
- Integrated Pest Management (\$ 5000) – H. F. Schwartz; incorporating disease resistance into commercially acceptable varieties in cooperation with the bean breeding program (M. A. Brick).
- VegNet Technology Transfer (\$ 4000) – H. F. Schwartz; transfer of bean production and pest management information via various formats including newsletters, DTN and the internet (www.csuag.com).
- Variety Performance Trials (\$ 7500) – J. J. Johnson; testing of advanced breeding lines and recent varietal releases at 3 irrigated locations in eastern Colorado, in addition to coordinating additional testing at other sites throughout southern and western Colorado.
- Value-added Bean Products (\$ 4000) – D. Johnson; developing a pinto butter product for initial testing.
- Southwest Colorado Testing (\$ 4400) – A. Berrada; germplasm nursery coordination with bean breeding (M. A. Brick) and variety testing.
- West Slope Colorado Testing (\$ 2500) – C. Pearson; germplasm nursery coordination with bean breeding (M. A. Brick) and variety testing.
- Southern Colorado Testing (\$ 1000) – F. Schweissing; variety testing.
- Bean Breeding and White Mold Resistance (\$ 11000) – M. A. Brick; improvement of bean yields and white mold resistance.

The CDBAC acknowledged the surplus of beans in the market and low bean prices for the last several years. As a result, the board seems less interested in researching ways to improve bean production in marginal conditions, e.g., areas of high salinity, and more interested in researching new bean products and new ways to promote the consumption of beans. This is clearly reflected in the board's 2000 budget that provides \$ 39400 for research and \$ 20600 for promotion.

2000 PROMOTION PROGRAMS:



The CDBAC has approved \$ 9000 for various promotion programs with the ACF Culinaricians of Colorado including working with Chefs Robert "Schnooze" Sherlock and Ron Pickarski to develop seminars and competitions for the 2000 Colorado Symposium on Culinary Arts (October 8) to define Colorado cuisine, continue the Match Made in Colorado competition, work with Cook Street and other schools to provide information and classroom instruction, continue the Celebrity PRO/AM Cooking Classic (May 10), and develop presentations for the ACF Regional and National Conventions (Nashville in July).

The CDBAC has encouraged the Colorado food industry professionals to focus on how to properly prepare beans and then how to make simple, delicious and healthy bean dishes that use pinto and kidney beans. The board feels that many of the national promotions and bean recipes are too time-consuming and complicated for the average consumer.

CDBAC Budget as of April 30, 2000

Budget Item	Budget (\$)	YTD – Actual \$	Remaining FY 1999 Commitments	Remaining Budgeted Funds
Assessments	145,000	50,547		
Interest	3,000	1,404		
TOTAL Income	148,000	51,951		
Research	39,400	2,800	0	0
Administrative	8,400	10,000	5,600	0
Promotional	20,600	14,300	0	6,300
Meetings & Travel	10,000	4,214	0	5,786
Dues	50,000	25,000	25,000	0
CBN Newsletter	8,000	2,000	6,000	0
Accounting/legal	2,400	2,100	0	300
Refunds	5,000	208	0	4,792
Telephone, postage	3,500	358	0	3,142
TOTAL Expense	147,300	90,380	36,600	12,386
Excess (Shortage)	700	(38,429)		

[Dues include membership in the National Dry Bean Council & American Dry Bean Board]

AMERICAN DRY BEAN BOARD HIGHLIGHTS

115 Railway Plaza, Scottsbluff, NE 69341 – Sue Hays, Executive Director

National Promotion of Beans

Excerpts from The Bean Bag, Spring 2000

We're proud of our beans and we want to share the good news about our great tasting, nutritious beans with American consumers! Sharing the good news is the focus of the American Dry Bean Board's (ADBB) national public relations program.

The building of our successful public relations program is the result of several years of effort. Our public relations agency, Manning, Selvage & Lee in Chicago, provides us with a staff of educated and experienced professionals who have established a working relationship with many of the key food and nutrition editors in this county.

The measurement of the success of a public relations campaign is in the number of readers of any particular media release. We closely monitor our releases through a clipping service, which reviews thousands of newspapers and magazines in the U. S. every day. In our case, the clipping service is searching for the word bean in the news articles printed each day. We achieved readership of 74.5 million in our 1998-99 fiscal year. For the fiscal year ending March 31, 1999, the print advertising equivalent (what we would have spent to buy the ad space) was \$ 717,229. What this means to you as a member of this industry is that we are receiving better than a 400% Return On Investment on an annual investment of \$ 200,000.

Along with the success we achieve in receiving media coverage of our releases, we annually submit our releases

See Promotion on page 7

RESEARCH IDEAS REQUESTED FROM GROWERS & HANDLERS:

The CDBAC and CSU personnel welcome input from growers and handlers on specific topics that warrant more research and education to help the growers and entire industry deal with production, pest management, promotion, marketing, consumption, and other issues associated with dry beans in Colorado and elsewhere.

Please share your research concerns, interests and willingness to participate on the CDBAC with your representatives listed in this newsletter, or call Robert Schork – CDBAC Manager (800-318-8049) or Howard Schwartz – CBN Secretary (970-491-6987).

CDBAC meeting, November, 1999 - Lakewood, CO



Plaques of appreciation were presented by Colorado Department of Agriculture Commissioner (L to R) Don Ament to Bob Taylor, Richard Folot, and Bud Pekarek, for their service to the CDBAC and the Colorado agricultural community. Brad Taylor is also pictured.



**Colorado Bean Network
EXECUTIVE BOARD**

- Harley Ross, Kelley Bean Chairman
970-463-5468
- Howard Schwartz, CSU Secretary
970-491-6987
- Steve Krosky, Greeley Elevator Treasurer
970-352-2575

COLORADO BEAN NEWS is published quarterly by the Colorado Bean Network, a non-profit organization which supports the dry bean industry in Colorado. Address all editorial, advertising and mailing materials to: H.F. Schwartz, Dept of Bioag. Sci. & Pest Mgmt. Colorado State University, Fort Collins, CO 80523-1177, or call Mark McMillan at (970) 491-7846.

Advertising Material Deadlines and Rates for the Colorado Bean News

- Circulation:** 3800 Bean Growers and Dealers in Colorado and Adjacent Area
- Publisher:** Colorado Bean News
- Editor:** Dr. Howard F. Schwartz, (970)491-6987
. hfspp@lamar.colostate.edu
- Layout:** Mark S. McMillan, (970)491-7846
. msmcm@lamar.colostate.edu

Publication Material Due Dates:

- Fall Issue [Market Emphasis] Sep. 7
- Winter Issue [Promotion, Nutrition Emphasis] Dec. 7
- Spring Issue [Planting, Production Emphasis] Apr. 7
- Summer Issue [Pest Mgmt., Harvest Emphasis] June 7

Advertising Rates:

- 1/4 Page (3.5"x4.5") B/W \$100*
- 1/2 Page (7.0"x4.5") B/W \$180*
- Full Page (7.0"x9.0") B/W \$350*
- Back Page B/W \$400*
- Each Additional Color \$75

Art Work Specifications:

- *PMT's - 85 lines preferred
- *Negatives to be stripped in 100 lines

Colorado Dry Bean Administrative Committee Supporters Qualify for Discounted Rates, Contact Editor for Details.

Terms of payment are U.S. Currency, Net in 30 days.

Please provide Camera-ready Copy. Make check payable to the Colorado Bean News. Send to Howard F. Schwartz, Colorado Bean News, E207 Plant Sciences Building, Colorado State University, Fort Collins, CO 80523-1177

COLORADO MARKET ORDER ANALYSIS



Excerpts from information provided by Helen Davis, Colorado Department of Agriculture liaison to the Colorado Dry Bean Administrative Committee.

In early 1999, Colorado Agriculture Commissioner Don Ament appointed a nine-person task force to conduct a thorough study of each of Colorado's eight active market orders to determine if each order was meeting the needs of the industry it served and to suggest recommendations, if needed, to improve management, structure, or oversight provided by the Colorado Department of Agriculture. Task force members brought a wealth of experience and expertise from legal, financial, legislative, research, education, association management, marketing, and government backgrounds. During the summer and fall of 1999, the task force conducted extensive interviews, attended market order meetings and reviewed financial reports, audit statements and numerous other documents.

One of the most important, and sometimes visible, methods of structure and management is provided by the Colorado Agricultural Marketing Act of 1939. This statute has led to the establishment of marketing orders for eight products and commodities: wheat, corn, milk, Northeastern Colorado potatoes, San Luis Valley potatoes, dry edible beans, apples, and sweet corn. The combined value of agricultural sales from the commodities represented by these marketing orders exceeds \$ 1 billion annually (one-fourth of the state's total value of agricultural sales). Approximately 11,000 producers are covered by the state's marketing orders.

Specific activities of the marketing orders can and do vary widely as circumstances vary from product to product. Some products are perishable and directed towards the fresh market. Others are storable and intended for year round use. While some products reach the consumer in their original form, others such as wheat and corn pass through various processing stages and facilities, and are transformed into a myriad of products before being purchased and consumed. Each market order must develop the specific activities and programs, which will provide economic viability for all involved in the order.

Research is an important function of most marketing orders and much of it is conducted by regional Colorado State University Experiment Stations. Resources to pay for the research comes from assessments collected from the growers. Market order funded research has developed new varieties of potatoes, dry beans and wheat. Other research has helped to establish disease and insect resistance for improved yields and quality, and has provided marketing and transportation analyses. The results of this research accrue to the benefit of growers and consumers alike. The need for specific research is identified by growers, is structured and planned by committees of the market orders, and is monitored by them. The task force found that there was an excellent relationship between CSU and the market orders and that the research being conducted greatly assisted the growers represented by the market orders.

Market orders are grass roots driven and exist to serve the needs and desires of the participants. One fundamental service provided by many of the

**Colorado Dry Bean Administrative Committee
Variety/Crop Year CWT Summary**

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Pinto	1,966,727	2,524,825	3,580,857	2,494,438	2,346,493	2,387,224	2,487,128	2,227,880	1,689,470	1,867,358	2,398,766	1,245,489	27,216,655
LRK	38,113	72,934	16,475	41,874	70,784	63,776	129,064	232,610	79,360	228,202	109,946	63,148	1,146,286
GN	785	3,722	4,648	2,415	30,170	320	3,228	36,645	40,762	0	0	0	122,695
Navy	8,529	3,467	25,454	12,948	3,333	12,929	1,686	8,153	344	1,888	3,089	8,204	90,024
Blacks	0	0	0	394	16,634	17,830	5,998	9,125	0	0	0	1,892	51,873
Pinks	21,783	13,495	435	2,484	985	4,873	388	1,287	0	905	0	0	46,635
Anasazi	3,879	762	14	1,222	3,157	4,531	3,616	7,906	18	0	0	0	25,105
Sm White	11,957	7,672	0	0	0	0	0	0	0	0	0	0	19,629
Reds	0	3,525	138	1,853	8,456	30	0	308	5,909	912	0	0	21,131
Cranberry	0	0	0	0	0	0	0	798	0	0	0	0	798
Mayo Cuba	0	0	0	0	0	0	0	0	0	275	770	24,104	25,149
Total Assessments	2,051,773	2,630,402	3,628,021	2,557,628	2,480,012	2,491,513	2,631,108	2,524,712	1,815,863	2,099,540	2,512,571	1,342,837	28,765,980
Crop Estimate	2,558,000	3,108,000	4,275,000	3,300,000	2,608,000	2,609,000	3,140,000	2,558,000	2,250,000	2,280,000	2,868,000	2,755,000	
% of Estimate	80.21%	84.63%	84.87%	77.50%	95.09%	95.50%	83.79%	98.70%	80.71%	92.09%	87.61%	48.74%	

Market Order from page 4

market orders is that of information dissemination and education through meetings, newsletters and other forms of communication. The marketing orders help to identify issues that are important to the growers and provide a forum within which to evaluate the potential impact, develop appropriate responses, and commit resources to see that the issues are adequately addressed. The task force found that market orders are being proactive in addressing issues and are beginning to

take advantage of new technologies such as the internet and distance learning to assist them in this endeavor.

The task force finds that the eight market orders in Colorado play a key role in the advancement of agriculture in our state. Market orders also benefit consumers by providing orderly marketing of high quality products. The growers who fund these orders are well served and benefit greatly from market order programs. There is a significant amount of research, marketing and general education that would not occur if market orders did not exist.




**Review of the Colorado Dry
Bean Marketing Order**

Excerpts from the report by Robert F. Hill and Charles A. Hudson

The Colorado Dry Bean Marketing Order was established on July 1, 1988 to effectuate the provisions of the Agricultural Marketing Act of 1939 with respect to dry edible beans produced in the state of Colorado. The basic interpretation is that the Marketing Order is to provide a vehicle for research and promotion of Colorado dry edible beans to improve the profitability of the dry edible bean industry.

The largest budget items are for research, promotion and information. Partnerships with Colorado State University, National Dry Bean Council (NDBC), and American Dry Bean Board (ADBB) are working well and seem to be leveraging the CDBAC dollars very well. Approximately 40 % of the budget is used to fund specific research projects at CSU; another 40 % funds CDBAC's participation in the NDBC and ADBB. In the



**WESTERN
INTERNATIONAL
GRAIN**

**DRY BEAN RECEIVING &
PROCESSING**

Burlington: 1-800-827-9559
 Mobile (719) 340-1223
 Keenesburg: (303) 732-4241
 Milliken: 1-800-635-2326



BEAN BYTES

Tractor Web Site

Ed Reynolds, CSU ARDEC staff member, shares his favorite tractor web site sponsored by Yesterday's Tractors Magazine. This is a must see for tractor enthusiasts from all walks of life; check it out at:

www.ytmag.com

Is Plowing Now Illegal?

Dr. Raj Khosla, Precision Farming and Cropping Systems Specialist in the Soil & Crop Sciences Dept. at CSU, recently sent an email message about the plight of a farmer in California who has been ordered by a federal judge to pay a fine of up to \$ 1.5 million for "deep plowing" his land. The judge ruled that the act of deep plowing violated sections of the federal Clean Water Act.

U. S. District Judge Garland E. Burrell Jr. ruled that Angelo Tsakopoulos committed 358 violations of federal environmental law and gave Tsakopoulos the option of paying the entire amount or paying \$ 500,000 and financing an environmental restoration project on his ranch. Burrell said Tsakopoulos must either pay a stiff civil penalty or make appropriate restoration for "depriving the nation of wetlands that support wildlife and endangered species – the fairy shrimp."

Burrell found that Tsakopoulos' machinery caused dirt to be discharged into 28 swales or intermittent drainages and one vernal pool that, by their nature, are legally waters of the United States. A swale is a sloped seasonal wetland containing aquatic plants. Intermittent drainages transport rainwater. And vernal pools, which serve as wildlife habitat, are low points on the landscape that collect such rainwater.

The judge rejected Tsakopoulos' challenge to the power of the U. S. Army Corps of Engineers and the EPA to regulate "deep ripping" on his 8,348 acre Borden Ranch 10 miles east of Galt. The EPA's counterclaim against him for water law violations – the first action of its kind in the nation – has been closely watched by farming interests nationwide.

Clearly when Congress framed the Clean Water Act, it had no intention of dragging farmers into court for polluting water because they used a plow. The court certainly has the right to interpret law, but it is absurd to think that the federal judicial system is going to take on the nation's farmers in a legal battle over point source pollution. The 9th US. Circuit Court of Appeals should reverse this ruling and bring some sense back to the enforcement of the Clean Water Act.

Raptor Herbicide for Dry Beans

The American Cyanamid Company is pleased to announce that a Section 18 label (EPA Reg. No. 241-379) has been approved for the use of Raptor herbicide for weed (grasses, smartweed, velvetleaf, nightshade, lambsquarters, sunflower, cocklebur, Kochia) control in dry beans in

See Raptor on page 8

Resource Personnel:	Expertise:	Telephone #:
Howard Schwartz	Plant Pathology	970-491-6987
Mark McMillan	Plant Pathology	970-491-7846
Kristen Otto	Plant Pathology	970-491-0256
Mark Brick	Plant Breeding	970-491-6551
Barry Ogg	Plant Breeding	970-491-6354
Jerry Johnson	Variety Testing	970-491-1454
Cynthia Johnson	Variety Testing	970-491-1914
Jim Hain	Variety Testing	970-345-2259
Jessica Davis	Soil Science	970-491-1913
Scott Nissen	Weed Science	970-491-3489
Frank Peairs	Entomology	970-491-5945
Don Lybecker	Agr. & Res. Econ	970-491-5496
Pat Kendall	Food Sci./Nutrition	970-491-1945
Reg Koll	ARDEC Station	970-491-2405
Frank Schweissing	Arkansas Valley	719-254-6312
Mike Bartolo	Arkansas Valley	719-254-6312
Abdel Berrada	S.W. Colorado	970-562-4255
Mark Stack	S.W. Colorado	970-562-4255
Calvin Pearson	West Slope	970-858-3629
Fred Judson	West Slope	970-858-3629
Jerry Alldredge	Weld Cnty.	970-356-4000 x 4465
Paul Aravis	Boulder Cnty.	303-776-4865
Bruce Bosley	Morgan Cnty.	970-867-2493
Randy Buhler	Logan Cnty.	970-522-3200 x 1308
Wayne Cooley	Montrose Cnty.	970-249-3935
Dan Fernandez	Dolores Cnty.	970-677-2283
Assefa Gebre-Amlak	Phillips Cnty.	970-854-3616
Bill Hancock	Otero Cnty.	719-254-7608
Gary Lancaster	Sedgwick Cnty.	970-474-3479
Tom McBride	Adams Cnty.	303-637-8100
Ron Meyer	Kit Carson Cnty.	719-346-5571
Stan Pilcher	Washington Cnty.	970-345-2287
Ken Smith	Montezuma Cnty.	970-565-3123
Frank Sobolik	Pueblo Cnty.	719-583-6566
Brent Young	Delta Cnty.	970-874-2195

Websites of interest to bean growers

www.csuag.com

www.colostate.edu/Orgs/VegNet/beanlinks

Promotion from page 3

and results to the New Analysis Institute (NAI) for an impartial evaluation of the effectiveness of our efforts to relay our message. For the program year ending March 31, 1999, our NAI rating is excellent. Based on the messages we intend to communicate with each release, NAI found the following results:

- 93 % position beans as part of today's healthy active lifestyle
- 97 % communicate beans' great taste
- 98 % generate awareness and familiarity of beans and provide new reasons/ways to use beans

Beginning in April 2000, new program components will be activated for the year. Providing nutritional and cooking information and great-tasting recipes to over 1000 food and nutrition editors across the country will continue to be our primary activity.

February 18 Bean Flash:

A great BEAN story appeared in the February 16 issue of the Chicago Tribune "Good Eating" section. BEAN reports the article highlights bean benefits and preparation tips, and emphasizes our message that any bean variety can be substituted for another in a recipe. Under the headline Liquid Legumes – You Can't Bean Bean Soup, the article included two recipes: Navy Bean Soup

and Chicken, White Bean and Fennel Stew. The article's author also provided detailed preparation techniques for dry packaged bean products. The Chicago Tribune has a readership of 1,895,307. We have been fortunate to receive coverage many times over the years from the Chicago Tribune.

March 7 Bean Flash:

This week BEAN is mailing a media release announcing a recipe booklet (Meals for the New Millennium) along with a sample of the new booklet to our list of food and nutrition editors. Consumers will request the booklet by sending a self-addressed, stamped envelope to our office. The recipes used in the booklet reflect information BEAN learned in our 1999 survey of chefs and their opinions of food trends for the new millennium. The booklet's back cover provides information and tips on preparing dry packaged bean products. The booklet is 4-color, and it looks great.

Dietitians and health professionals will be able to order the Millennium booklet in quantities of 100 through our website, americanbean.org. The website has proved to be an effective method of offering the folate brochure in quantities. The Millennium booklet is available to all members. If you would like to see the booklet before ordering, just let us know by fax (or e-mail bean@prairieweb.com) and we'll be happy to forward one to you.



"The Dry Bean People"

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Red Kidney Bean Needs

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Ryan Hill

Kansas
Receiving Station
St. Francis, KS
(785) 821-2785

April 6 Bean Flash:

The Chicago Sun-Times Food Section for April 5, 2000 featured an article entitled, "Bean Cuisine – let legumes become a regular in your diet." In the article, the editor gives information on using the quick soak method of preparation, factors influencing the cooking time of beans, freezing beans for use in the future, adding salt or acidic ingredients, and a brief background on beans through the centuries. BEAN is pleased that the article emphasizes our message that any bean variety can be substituted for another in a recipe.

We just want you to know that since the media release mailing to food and nutrition editors a month ago, we've had over 1,700 requests from consumers for the booklet. Right now, these requests are coming from Pennsylvania and New Jersey. Responses in late March included consumers from Illinois and Florida.

Review from page 5

early years of the Marketing Order, more emphasis was made on promoting dry beans at the local (Colorado) level. That emphasis has changed in recent years to target consumer education and marketing improvements at the National level by partnering with the national organizations.

The CDBAC has an excellent information dissemination tool through the Colorado Bean News published by Dr. Howard F. Schwartz at Colorado State University. At an annual cost of \$ 8000, an information tool as professionally done and effective is a real bargain. The CDBAC also has funded a very innovative and effective program to encourage prominent chefs to promote the use of dry edible beans.

One of the most significant concerns observed was the lack of interest in the producer segment to be involved in the management of the Order by serving on the Board of Directors. It is an interesting observation that while there appears to be little interest in Board participation among growers, the large majority of Colorado producers must be satisfied with the management of the Order, because the refund rate is extremely low. In our interviews, it was very apparent that most producers view dry edible beans as a secondary enterprise and don't look upon themselves as dry bean farmers.

The Board raised some excellent questions regarding their authority to collect assessments regarding beans grown in Colorado but sold to a first handler outside the State of Colorado as well as beans grown outside Colorado but sold to a first handler in Colorado. These issues arise on both the Nebraska and Kansas borders, as well as the Utah border.

We recommend consideration that the Order be modified to eliminate the two consecutive term limit. We also recommend that the Board consider retaining a knowledgeable person with agricultural ties (Director, producer, etc) to represent the Colorado dry edible bean industry at National and State meetings and functions. The main purpose here would be to raise the visibility of the industry and Marketing Order among the agricultural sector, and more specifically, with producers.

Raptor from page 6

Colorado, Minnesota, Montana, Nebraska, North Dakota, Wyoming and Wisconsin for the 2000 season. Consult your local Cyanamid rep and other experts for specific label information, uses and restrictions.

The ammonium salt of imazamox is applied at the broadcast rate of 4 ounces per acre postemergence only. Raptor should be applied when the beans are at the first trifoliate and before the weeds reach 3 inches in height. University research indicates that a non-ionic surfactant and Basagran should always be added with Raptor for additional effectiveness and crop safety. Colorado State University personnel (Dr. Scott Nissen), the CDBAC and others worked together with American Cyanamid, the Colorado Department of Agriculture and EPA to bring this exciting product to the marketplace for bean producers in Colorado and elsewhere.

The following rotational crops can be planted after applying up to 4 fl oz/A of Raptor herbicide in dry bean: Soybean – anytime; Wheat – 3 months; Rye – 4 months; Corn – 8.5 months; sunflower and most vegetable crops including potato and onion – 9 months; Sugar Beet – 18 months if the soil pH is greater than 6.2.

Storability of Dry Beans

Excerpts from Northarvest Bean Growers Association Res. Report, May 2000

Research during 1999 by Dr. Kenneth Hellevang, Agr. & Biosystems Engineering Dept. at North Dakota State University, focused on the storability of dry edible beans such as pintos. Literature review found that yellow and red colors increase with increased humidity (bean moisture content), temperature and storage time based on a limited range of conditions.



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For the storage research, pinto beans were harvested at moisture contents exceeding 18 % and dried to 14 %, 16 % and 18 % using low temperature drying (air warmed less than 5 F). Seed samples were stored in covered 5-gal pails for about 9 months. Beans were stored at 40 F and 80 F; the higher temperature selected to represent summer storage conditions. One sample of beans was exposed to ultraviolet light to determine the affect of light on bean color.

Beans exposed to ultraviolet light darkened dramatically within days. This indicates the need to minimize exposure to light in storage and possibly even before storage.

The effect on bean color of storing pinto beans at different moisture contents and temperatures after 4 months was dramatic. Beans at 18 % moisture content stored at 80 F were much darker than those stored at 40 F (Hunter L values of 42 vs 48, higher Hunter L values indicate whiter beans). Beans at 16 % moisture content stored at 80 F were darker than those stored at 40 F (Hunter L values of 43 vs 48). Beans at 14 % moisture content stored at 80 F were somewhat darker than those stored at 40 F (Hunter L values of 45 vs 48).

The results show how important storing at cool temperatures is in maintaining the color of pinto beans. Beans should be cooled as rapidly as possible using aeration to maintain the color. If bean temperature cannot be cooled, then likely pinto beans need to be stored at moisture contents of about 13 % or drier to maintain color.


Dry Bean Grower Survey

Excerpts from Northharvest Bean Growers Association Res. Report, May 2000

A survey by Art Lamey, Dept. of Plant Pathology at North Dakota State University, in 1998 provided some interesting background on bean production in the north central states of Minnesota and North Dakota:

- Maverick was the leading pinto planted, with over 40 % of the pinto acres in 1998.
- Maverick, Winchester, Remington and Chase, which are all resistant to current rust races, were planted on 71 % of the acres.
- Use of rust fungicides declined in 1997.
- Norstar was the leading navy variety.
- Minnesotans ranked disease as the worst problem. North Dakotans ranked weather as No. 1.
- Minnesotan said root rot was their worst disease in 1998. They reported it on 66 % of their acres. They estimated white mold to be a problem on 51 % of their acres.
- Nightshade topped the list as the worst weed, and many farmers said ragweed was becoming a serious problem.

- North Dakotans reported an increase in grasshopper problems. Approximately 29 % of their acres were affected.
- Rotation Practices: dry beans followed wheat in the rotation on 70 % of North Dakotans' acres. In Minnesota, about half the dry beans were planted in wheat stubble and half were planted in corn stubble.



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THE ONLY SUSTAINABLE AGRICULTURE

By L.W. Timmer, Univ. of Florida, in *Phytopathology News*, April 2000

The following excerpts were taken from this editorial first published in the *Florida Grower* (92:18-19).

Most people's concept of sustainable agriculture involves minimal use of pesticides and inorganic fertilizers, less mechanization, and low energy inputs. It usually includes widespread utilization of biological control and pest resistance. It is far from modern day agriculture with highly computerized, automated equipment with substantial inputs of fertilizers, pesticides, and water. But which system is really sustainable over the long haul?

The earth's population is still increasing. True, the rate of growth has decreased, but we reached 6 billion today,

Magic Beans

Excerpts from article by Shaun Stanley, Denver Post, April 3, 2000

If there is such a thing as bean chic, Adobe Milling is one of its creators. Of course, it helps to have magic beans. The community of Dove Creek bills itself as the "Pinto Bean Capital of the World", but that market has been poor of late, leaving Adobe Milling's "one-stop designer bean shop" on U. S. 666 as a bright spot in a bleak Dolores County economy.

Part of the secret of its success is a bean first grown by the Anasazi Indians 1000 years ago. The splotchy, yet pretty, red-and-white beans first showed up around here in the early 1970s, when a little girl from the Pleasant View area took a handful of the ancient beans to her kindergarten show-and-tell, farmer Bessie White says. The little girl's father or uncle had found them in a pot in a ruin in the middle of one of his fields, says White, 69. A handful of the antique seeds were turned over to the school's science teacher, Nancy Porter, who coaxed them into germinating.

White credits Ernie Waller, who founded Adobe Milling in 1983, with popularizing the bean. "He did a lot for them," White says. "He made a market." Waller died one year ago, but his wife, Joyce, the county health nurse, still owns the business. Last fall harvest, Adobe Milling took in a million pounds of Anasazis and 2 million pounds of other beans from local farmers, office manager Vickie Cooke says.

But Waller didn't stop with the Anasazi bean in capturing the flavor of the Southwest. The store carries several lines of locally grown heirloom beans, such as Bolita and Black Turtle beans of Mexico, the Rio Zape bean, another descendant of Anasazi agriculture, Zuni Gold, Scarlet Runners and "gourmet" pinto beans.

New Prospects for an Ancient Crop

Excerpts from Growing Affinities, December 1999
[Contact: o.voysest@cgiar.org]

Farmers around the city of Cusco in southern Peru have a longstanding tradition of paying tribute to Saint Isidore. They pray that he will grant them abundant harvests, and as an expression of gratitude for his favors, they adorn the saint's statue with the fruits of their labor. For decades the image was adorned with garlands made from ears of white maize. But since 1997, Saint Isidore has instead worn garlands made with pods of Q'osco Poroto, an improved variety of the ancient popping bean. The new variety is bursting into local markets, creating almost as much noise as popping beans do in the rural kitchens of Peru's inter-Andean valleys.

Prepared in much the same way as popcorn, the many varieties of this unusual legume are variously referred to as "poroto", "nuna", "numia", "popping", or "toasting" beans. All are native to the Andean zones of Peru and Bolivia. Archeological evidence suggests that the popping bean was domesticated in pre-Columbian times, perhaps about 3000 years ago. Still a popular foodstuff in many households – especially those of poor families – it is considered something of a delicacy.

Q'osco Poroto, the first variety of popping bean to be released by the Peruvian Ministry of Agriculture, is resistant to several pests and diseases, high yielding, and early maturing (6 months vs 8 – 10 months for other popping bean varieties). It also outperforms other varieties in popping ability: 100 % of its grains pop when roasted. The prospects for a better future in the legendary land of the Incas are becoming a reality, even though much remains to be done. "We need help in finding an outlet," says Angel Vaca Illa, a farmer from Valle Sagrada.

COLORADO AG STATISTICS: 1997 Census of Agriculture Data - Colorado Agricultural Statistics Service
Colorado Data: [For more information, contact: 800-727-9540 or www.usda.gov/nass/]

5-Year Period	# of Farms	Farm Size–Acres	Market Value of Land + Bldg (\$/A)	Market Values (\$) of Ag Prod / Farm
1964	29,798	1284	70	20,544
1969	27,950	1313	95	39,389
1974	25,501	1408	188	77,261
1978	26,907	1310	317	96,257
1982	27,111	1237	454	108,476
1987	27,284	1248	369	115,201
1992	27,152	1252	426	151,575
1997	28,268	1154	618	160,401

Planting Intentions:

The April 2000 Ag Update Report projected that 2000 dry bean planting intentions for Colorado would be 135,000 acres, which is a 13 % reduction from the 155,000 planted in 1999. United States estimates were 1.84 million acres in 2000, which is a 9 % reduction from the 2.02 million acres planted in 1999.

Sustain from page 9

1.8 billion of which are under 15 years old. We are projected to have 10 billion by 2050. Thus we will have to double food production in 50 years to stay even. To feed the population 50 years from now, we will need to substantially increase yields per acre or alternatively increase the amount of land cultivated.

I think it is far preferable to extract maximum yields from a minimum amount of land than to use more land. That means efficient use of water, high inputs of pesticides and fertilizers, and minimal use of manual labor to keep the cost of food low. It also means widespread use of genetically modified crop varieties to provide pest and disease resistance, high yield and quality, and most effective use of fertilizer and water. Maximum land utilization will mean more food production in "factories" – greenhouse hydroponics, intense fish farms, and chicken houses.

But from an environmental point of view, is such a system sustainable? Certainly dangers exist, but I think they can be managed. Today's pesticides frequently have low mammalian toxicities, short residual activity, and are effective at far lower rates. While use of classical biological control has been of great help in pest control, most biocontrol products are simply ineffective. Agriculture must use less water more efficiently. Runoff and leaching of fertilizers into surface and ground waters

must be controlled. With some effort, these types of problems can be addressed.

Modern, high-tech agriculture may have some sociological disadvantages, but other alternatives are not sustainable. Low input agriculture is also low-yield agriculture. That means that far greater land areas are needed to produce the same amount of food. Low-impact agriculture can be used to successfully produce crops. However, low inputs of energy, fertilizer and pesticides usually means high input of labor. Except for areas where labor is cheap, that usually means high cost. Cost of food must be maintained relatively low or it will be beyond the reach of the poor. That benefits no one.

Perhaps, the wealthy can afford organically produced foods, but people with limited resources would starve if we produced all food that way. Maybe the Europeans can reject genetically modified crops, but the rest of the world will have to accept the minute risks involved to achieve the yields necessary to sustain populations. Modern, efficient agriculture may have its downsides, but until we solve our population problems, it is the only sustainable agriculture. We should stop apologizing for what we do well.



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NDBC Trade Policy Issue – Mexico

The dry bean industry in the United States has long been frustrated by the Mexican dry bean import quota and permit system. From the beginning of NAFTA, the industry has found that this system, while ostensibly developed to provide for a gradual transition to the free trade of beans between Mexico, the U. S. and Canada, has provided the Mexican government with the means to restrict trade similar to the way it restricted trade under the former system of tariffs.

For the past year, NDBC has been working diligently with the importing/wholesale trade in Mexico to identify areas of concern about the tariff rate quota (TRQ) auction system. There are many aspects of the current system that also discourage Mexican importers and wholesalers. NDBC has had informal discussions with both SECOFI and the U. S. Embassy in Mexico about the issue in the hope that problems experienced with the system in 1998 and 1999 would not be repeated in 2000.

Our industry estimates that the price of permits in 1998 generated \$ 7.2 million of revenue for the Mexican government. Some feel the auctions have become a means for the Mexican government to generate significant revenues, in addition to the tariffs levied on beans shipped outside of the quota, and other common customs fees. This is clearly not in the spirit of NAFTA.

NDBC urges the Mexican government to provide written assurances that it will publicly announce within the first 30 days of each year the system by which it will hold that year's permit auction and the date of the auction.

NDBC also urges the Mexican government to hold one permit auction in the first 60 days of each calendar year.

NDBC also supports efforts to reduce the cost of the permits to importers, as this represents a de facto tariff on U. S. dry bean imports.

Mexico Growers Demand NAFTA Modification

(March 2000, El Financiero News) - ... the bean market is not working properly due to the existing carryover, which has caused price depression, and that this problem became worse due to mistakes made by the government. This demonstration (by 500 farmers from various states of Mexico) is a form of protest from the Mexican bean producers on the bean market disorder that has driven the prices of beans down to \$ 2.50 pesos per kilo, when these used to be sold at \$ 6.00 two years ago when CONASUPO still existed. ... there are important bean contraband transactions taking place and that it is the only way that you can explain how Mexico has a dedicated bean production now with such large domestic bean inventories from the crops of 1998 and 1999.

CSGA
1/4 page
Green

30 % Tariff for NAFTA Imports

(February 2000, NDBC Monthly Report) - In Mexico's Federal Register dated December 31st 1999, the Secretariat of Treasury published the year's income policy by President Ernesto Zedillo. Under the transitory chapter two article, it says that all NAFTA products under TRQ that are imported over the quota set by NAFTA, will pay 30 % duty. This article affects all of the US agricultural products including dry edible beans. NDBC office in Mexico City is not sure yet if additional permits to the regular yearly TRQ's will be paying this additional 30 % after being auctioned.

Mexico Bean Forecast

(Bean Market News, April 14, 2000) - Imports are forecast to increase to 170,000 MT for MY 2000, based on the need to rebuild stocks. Carryover stocks are expected to decrease significantly because lower than expected production in MY 1999. The government of Mexico has stated that administration of the dry bean Tariff Rate Quota will be handled through three auctions for CY 2000: Feb. 14, April 14 and Aug. 15.

Growers have complained that crop's accumulations in CY 1999 has caused significant financial losses and they are worried about the current 1999-2000 Fall/Winter crop and the upcoming 2000 Spring/Summer crop and their consequent lower prices. At the same time, some bean grower's organizations have continued to complain

about alleged illegal imports. According to them, there is already a huge surplus of dry beans yet to be marketed. According to our sources, the problem is that the market is also saturated due to illegal imported dry beans which were allowed in by Mexican authorities.

The government of Mexico has recognized that the current dry bean accumulation in several producing states is one of the main problems, and guaranteed that in CY 2000, the beans TRQ's will be given out from the domestic crop seasons to avoid additional problems of surplus and low prices paid to producers. Industry sources, however, indicate that it is very difficult to rationalize decreased dry bean imports in MY 2000 as the expected higher production will not offset the increased consumption and draw down on stocks. They also pointed out that depressed domestic dry bean prices and increasingly heated political climate this presidential election year, are the main factors impacting the flow of bean imports.

The production estimates for 1999/00 has been lowered to 935,000 MT due to continued dry weather during the spring/summer crop. For 2000/01, production is forecast to increase to approximately 1.2 MMT assuming normal weather conditions and increased harvested area. Imports in 2000/01 are expected to be up 13 % based on expanding demand, which reflects basically the population growth.



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TOP 10 BEAN GROWING TIPS

M. A. Brick and H. F. Schwartz, Professors - Colorado State University

Bean growers often ask university and industry personnel, "How can I consistently and economically produce 25 cwt/Acre of high quality dry beans?" Experience, hard work, support from experts (including university research & extension specialists, bean elevator and Co-op field people, crop consultants, chemical and seed suppliers), good weather, and sometimes a little luck all play important roles for the successful bean grower. Also, it is obvious that these individuals are really interested in getting the most out of their bean crop as opposed to simply growing beans as a required rotation or necessary evil.

We have found that the following 10 production tips are often associated with and receive the most attention from successful bean growers we have had the opportunity to interact with over the years in Colorado and the surrounding region. More detailed information on these 10 tips is available in the regional *DRY BEAN PRODUCTION & PEST MANAGEMENT Bull. No. 562A*.



Tip 3. Reduce soil compaction by deep chiseling or ripping prior to planting or early post-emergence, and avoid all cultural practices when the soil is wet.




Tip 1. Soil test prior to planting and carefully plan your fertilizer and inoculant needs. In Colorado, the most important nutrients to consider are nitrogen, phosphorus, and zinc.



Tip 2. Use crop rotations in 3 - 4 year cycles to minimize the damage caused by plant pathogens, insects, weeds, herbicide carryover, soil compaction and crop residue.

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California Rejects GMOs

(California Bean Marketer, May 2000)

"GMO", the acronym for Genetically Modified Organism, has been discussed in many circles for many years, and has been called by many names. There are other terms used to describe or refer to the procedure, such as genetically altered, transgenic, biotechnology, genetic engineering, etc. However, what is generally meant by most of these terms is the transfer of a "foreign" gene into a plant or organism – a gene that is not normally found in that plant or organism.

An example of this would be to take a gene from a fig tree and transfer it into a corn plant. This type of technology has been used in the development of many crops such as soybean and corn. This year, the California bean industry was faced with making a decision on what to do about GMO;s ... and the Board said NO!!

Earlier this year, a University of California researcher submitted a proposal that appeared to involve work that could be interpreted as a GMO project. The proposal was presented to 3 of the varietal councils where there was a lot of discussion, and acceptance if the proposal was reworded. The language was changed, but the Board rejected the councils' request for funding.

The issue has international implications and has been discussed at the National Dry Bean Council level.

NDBC's representatives in European countries indicate that importers want a statement from the U. S. bean industry that no beans being shipped contain GMO's. Japanese importers have also been asking for a similar statement. These buyers are telling us, "if the beans you are selling contain GMO's, we will not buy them."

At the NDBC meeting in Washington in February, a statement was released by the USDA stating that "there were no transgenic beans commercially available in the United States at this time." It was recommended that this USDA statement be given to anyone who asks about the issue. So when the subject came up at the Board meeting, many asked, "If word gets out, or even the idea is circulated that we are working on such a bean, who is going to buy it and what is going to happen to our overseas markets?"

These questions were asked by growers and shippers alike, and no one was able to give the Board any assurance that those overseas markets would still be there if California growers were to start producing "GMO" beans. Further, it was noted that several U. S. firms had recently withdrawn their plans to attempt the marketing of GMO products. Thus the request for funding of the research project was denied.

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Tip 4. Plant high quality certified seed of a market class and variety (ies) adapted to your farming situation.



Tip 5. Control weeds by cultivation and the timely use of herbicides formulated to control the weeds specific to your field. Minimize direct bean plant contact with post-emergence herbicides.



Tip 6. Plant bean seed 2 - 2.5 inches deep in a firm weed-free seedbed when the morning soil temperature reaches 60 F at planting depth (May 25 - June 15)



Tip 7. Planting rates on 30" wide rows should produce approximately 75000, 85000 and 95000 emerged seedlings/acre for most pintos, blacks and red kidney beans, respectively.



Tip 8. Irrigate when approximately 50% of the available soil moisture has been depleted in the bean root zone (12 - 20"). The crop can use 2.5" of water per week during the rapid vegetative and pod fill stages.



Tip 9. Inspect bean fields weekly to detect and manage problems associated with nutrient deficiencies, salinity, insects, diseases and other factors before they reduce crop yield.



Tip 10. Harvest the bean crop when seed has reached proper moisture. Adjust combine cylinder speed, concave and other settings to prevent seed damage; monitor seed quality during harvest; air dry to 14%.