Patent On Mexican Yellow Beans Is Reversed
Bean Effects On Breast Cancer
Release Of ‘Croissant’ Pinto Bean
Release Of ‘Lariat’ And ‘Stampede’ Pinto Beans
Release Of ‘Santa Fe’ Pinto Bean
Chicago Climate Exchange
Heat Tolerant Beans
Northarvest Market Outlook
Outlook For 2008
Exports Down, Imports Up
CDBAC 2008 Budget
Grower Prices Advancing
CDBAC Minutes & Plans
Bean Root Health - CSU Plant Health Note
CDBAC Variety Summary
Bean Nutrition
Southwest Steak and Pinto Beans
LEGUME ipmPIPE
Patent on Mexican Yellow Beans is Reversed

Naturenews (7 May 2008) News in Brief reported that the “U.S. Patent and Trademark Office last week overturned a controversial patent on a breed of yellow beans. Opponents of the patent say the bean has been eaten in Latin America for more than a century, raising issues of biopiracy.”

“The patent was granted in 1999 to Larry Proctor of Delta, Colorado. According to the patent application, Proctor bought yellow beans in Mexico and bred them for two years to grow plants that gave a better harvest and produce beans with a distinctive yellow color. Proctor then began charging licensing fees on imports of yellow beans from Mexico, prompting the International Center for Tropical Agriculture, based in Cali, Colombia, to challenge the patent in 2001.”

“But the battle may continue. Proctor has the option of contesting the decision in federal court, and says he is consulting his lawyer. “Everybody may not be happy with what we’re fixing to do now,” he said, and declined to comment further.

BEAN EFFECTS ON BREAST CANCER

The 2008 Annual Report of the Bean Improvement Cooperative contained an article by Henry Thompson, Mark Brick, John McGinley and Mathew Thompson from Colorado State University that described some of their research on the incidence of cancer and consumption of dry edible bean in the human diet. Research by this group and others has found a significant inverse relationship between bean consumption and morbidity due to breast, prostate, and colon cancer. The CSU project was funded in part by USAID, Beans for Health Alliance and the Colorado Agricultural Experiment Station.

The CSU group has focused its initial investigations on dry beans representing both Centers of Domestication and market classes that account for the majority of global dry bean production. Market classes included Middle American (small red, great northern, navy, black) and Andean (dark red kidney, white kidney). Beans were provided by Archer Daniels Midland and Bush Brothers & Company. The objectives were to determine if dry beans in the diet have cancer inhibitory activity in a preclinical model for breast cancer, and if differences exist among dry bean market classes for anticancer activity.

Preliminary results found that all dry bean market classes evaluated had an ability to inhibit experimentally-induced breast cancer. Beans in the diet of laboratory rats reduced the incidence of cancer from 95% in the control group to 68% in animals fed beans. Multiplicity of tumors was also reduced from 3.24 tumors per animal in the control group to 1.45 in animals that were fed the bean diet. Dry beans of Andean heritage performed better (lower cancer multiplicity) than did beans of Middle American heritage.

RELEASE OF ‘CROISSANT’ PINTO BEAN

Mark Brick and colleagues recently announced the release of a new pinto bean variety (CO23704) developed and tested by Colorado State University in Colorado trials in recent years with support from the Colorado Dry Bean Administrative Committee, Colorado Seed Growers Association and CSU Agricultural Experiment Station. The new line possesses resistance to common rust, Bean common mosaic virus, has semi-upright plant architecture, medium harvest maturity (92 to 95 days), and excellent pinto seed quality. Plant Variety Protection will be sought for this new variety. Foundation seed will be released to seed producers in May of 2008, and certified seed should be available for producers in 1 - 2 years. More information is available from the bean breeder at Mark.Brick@ColoState.EDU

RELEASE OF ‘LARIAT’ AND ‘STAMPEDE’ PINTO BEANS

Juan Osorno and colleagues recently announced the release of new pinto bean varieties (Lariat - ND020069 and Stampe - ND020351) developed and tested by North Dakota State University in northern trials in recent years with support from the Northarvest Bean Growers Association and North Dakota Dry Edible Bean Growers Association. Both varieties combine earliness with erect architecture, desirable seed characteristics, and disease resistance (rust, BCMV, anthracnose) under North Dakota growing conditions. Testing under Colorado conditions is suggested, and more information is available from the bean breeder at juan.osorno@ndsu.edu

RELEASE OF ‘SANTA FE’ PINTO BEAN

James Kelly and colleagues recently announced the release of a new pinto bean variety (P04205) developed and tested by Michigan State University in northern and western trials in recent years. Plant Variety Protection will be sought for this new variety. The variety combines erect
architecture, is resistant to lodging, has excellent pod load and placement in the plant canopy, has large seed, and has resistance to rust, BCMV, and avoids white mold under Michigan and other growing conditions. Testing under Colorado conditions is suggested, and more information is available from the bean breeder at kellyj@msu.edu

**CHICAGO CLIMATE EXCHANGE**

Employees of Colorado Seed Growers Association (Brad Erker, Director of Seed Programs at CSU) conducted field inspections during the Fall of 2007 to verify that land enrolled in the Chicago Climate Exchange (CCX) carbon credit trading program met its requirements. These field inspections are to verify that the landowner is successfully capturing carbon from the atmosphere by maintaining a no-till field or planting a grassland cover. Land enrolled in CCX programs earns annual payments at rates based on the amount of atmospheric carbon it sequesters. Landowners or operators who want to learn more about how to sign up for CCX programs may contact Tony Frank at Rocky Mountain Farmers Union at tony.frank@co-ops.org or call 303-283-3532.

**HEAT TOLERANT BEANS**

Agricultural Research magazine (Nov./Dec. 2007 issue) reported that USDA/ARS geneticist Tim Porch working from ARS’s Tropical Agriculture Research Station at Mayaguez, Puerto Rico, is trying to reduce the impact of heat stress in common beans grown in the continental United States by breeding for heat tolerance. He says that average temperatures exceeding 86 F in the day and 68 F at night can impede common beans’ reproductive development and that this translates into smaller potential yields during hot summers. Porch says that germplasm from the Tropics is the key to introducing the protective traits U.S. producers need. He is collaborating with scientists at various international research institutes including CIAT in Colombia and the University of Geneva in Switzerland.

**NORTHARVEST MARKET OUTLOOK**

Excerpts from March 28, 2008 - Northarvest Bean Grower

Although current indications point to a modest decline in total dry bean area, very strong prices for several dry bean classes indicate they could experience moderate increases in seeded area. The U.S. aggregate dry bean grower price averaged $26.40 during 2007/08 and is expected to rise again in 2008/09. Higher prices and a small gain in output pushed the farm value of the 2007 U.S. dry bean crop up 22 percent from a year earlier to $677 million - the highest since 1981 but well below the 1980 record ($737 million).

**OUTLOOK FOR 2008**

Assuming lower acreage for such classes as pinto, black, blackeye, and garbanzo beans, U.S. dry bean seeded area is expected to drop 5 to 9 percent from a year earlier. With average yields and average acreage losses, the 2008 dry bean crop would be at least 10 percent lower than the 25.4 million cwt of 2007. Although not necessarily a requirement, a smaller crop this fall would also make higher average dry bean prices (perhaps exceeding the 1988 record) during the 2008/09 marketing season a much safer bet. For 2008/09, grower revenue will undoubtedly benefit from the strong grower bids across most dry bean classes. This was certainly the case in 2007/08 as the marketing year average price for all dry beans rose 19 percent to $26.40 per cwt.

**EXPORTS DOWN, IMPORTS UP**

During the first 4 months of the 2007/08 marketing year (September-December), dry bean export volume declined 10 percent from the strong levels of a year earlier but remained even with 2 years earlier. Higher prices likely weighed down U.S. dry bean exports with average export unit values up 17 percent from the previous year to 31.3 cents per pound. Export performance was mixed by class with increases for dark red kidney, pink, large lima, cranberry, and Great Northern being outweighed by reductions for most other classes. Volume was down 43 percent for black beans and 10 percent for pintos due partly to higher prices and reduced demand from Mexico.

Sharply higher prices for dry beans are drawing increased attention to the U.S. market from other bean-producing nations. Import volume from September to December rose 8 percent from a year earlier. Canada (40 percent of total volume), China (19 percent), Mexico (19 percent), and Turkey (10 percent) were the nations buying U.S. dry beans. The U.S. export performance in 2007/08 was not as strong as the previous year.

<table>
<thead>
<tr>
<th>COLORADO DRY BEAN ADMINISTRATIVE COMMITTEE</th>
<th>2008 PROPOSED BUDGET</th>
<th>2007 Actual</th>
<th>Budget vs. Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2008</strong></td>
<td><strong>2007</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposed Budget</td>
<td>3/2/2008 Actual</td>
<td>2007 Budget Actual</td>
<td>2007 Budget Actual</td>
</tr>
<tr>
<td>Assessments</td>
<td>$49,000</td>
<td>$12,099</td>
<td>$49,000</td>
</tr>
<tr>
<td>Interest</td>
<td>$2,000</td>
<td>$530</td>
<td>$250</td>
</tr>
<tr>
<td>Total Income</td>
<td>$51,000</td>
<td>$12,629</td>
<td>$49,250</td>
</tr>
<tr>
<td>Research</td>
<td>$30,000</td>
<td>$20,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Dues</td>
<td>$10,000</td>
<td>$22,009</td>
<td>$22,009</td>
</tr>
<tr>
<td>Meals &amp; Travel</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$956</td>
</tr>
<tr>
<td>Administrative</td>
<td>$5,000</td>
<td>$6,000</td>
<td>$4,500</td>
</tr>
<tr>
<td>Bean Talk Newsletter</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>Refund of assessments</td>
<td>$2,000</td>
<td>$1,100</td>
<td>$2,103</td>
</tr>
<tr>
<td>Legal and audit</td>
<td>$1,000</td>
<td>$1,100</td>
<td>$950</td>
</tr>
<tr>
<td>Promotional (WebSite)</td>
<td>$2,000</td>
<td>$2,000</td>
<td>$2,000</td>
</tr>
<tr>
<td>Strategic Planning</td>
<td>$10,000</td>
<td>$0</td>
<td>$62,209</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>$70,000</td>
<td>$0</td>
<td>$62,209</td>
</tr>
<tr>
<td>Excess (Shortage) of revenue over expenses</td>
<td>($19,000)</td>
<td>($12,629)</td>
<td>($12,959)</td>
</tr>
<tr>
<td>Cash on hand</td>
<td>$90,705</td>
<td>$111,705</td>
<td>$99,077</td>
</tr>
</tbody>
</table>
percent), and Thailand (4 percent) were the top import sources. Imports rose for pinto, black, and navy beans, but were lower for light red kidney, lima, and mung beans. Dry bean imports from Thailand consist mainly of mung beans but small amounts of several other classes were also imported. Dry bean import volume from Canada rose 54 percent while volume from China increased 37 percent from a year earlier. Despite a larger U.S. crop last fall, black beans were the single largest import class, with more than 12 million pounds entering over the first 4 months of the marketing year. China accounted for 55 percent of these black bean imports.

**GROWER PRICES ADVANCING**

Reflecting reduced supplies, tight holding of unsold stocks, and competitive pressure from higher-priced field crops, dealer and grower bids have remained strong since harvest and have crept higher across most dry bean classes. The U.S. aggregate grower price for all dry beans averaged 25 percent above a year earlier during the initial 5 months of the marketing year (September 2007 through January 2008). With the exception of blackeye and lima beans, grower bids for every major dry bean class averaged above a year earlier during September to January.

At the wholesale level, early February dealer prices for several of the major classes changed as follows:

- Pintos (CO), $36.00—up 18 percent from a year earlier;
- Navy (MI), $39.25—up 43 percent;
- Great Northern (NE), $44.50—up 44 percent;
- Black (MI), $39.50—up 27 percent;
- Light red kidney (MI), $57.00—up 61 percent;
- Dark red kidney (MI), $57.50—up 74 percent;
- Baby lima (CA), $43.25—down 9 percent;
- Garbanzo beans (ID/WA), $39.50—up 7 percent.

**CDBAC MINUTES & PLANS**

The Colorado Dry Bean Administrative Committee met on March 26, 2008 at the Department of Agriculture's conference room in Lakewood. Directors present were Steve Brown (president), Harvey Colglazier, Larry Lande, and Troy Seaworth. Rod Tanner was present via telephone to constitute a quorum. Visitors included Bob Schork (CDBAC Administrator), Steve Anderson (Colo. Dept. of Agr. Statistics), Tom Lipetzky and Wendy White (Colo. Dept. of Agr.), and Howard Schwartz (Colorado State University via telephone for part of the meeting).

Bob Schork presented a summary of the 2007 financial statements showing $99,077 on hand as of 12/31/07. The Committee's 2007 records were currently being audited by Scolfield & Scolfield; the financial statements were accepted as an accurate record of the Committee's financial conditions. Bob also presented the variety/crop year summary as of March 25, 2008; Steve Anderson said the NAS report would be out March 31, 2008 crop acreage planted would be out June 30th, and the yield forecast would be out August 1st.

Bob then presented Steve Brown's 2008 proposed budget for discussion which included a producer survey by a strategic planner. A motion was approved to accept the budget with two changes: reduce strategic planning from $12,000 to $7,500 and add $2,500 for direct communication with producers (either a survey or direct limited newsletter). After lunch, the committee interviewed two strategic planning candidates. (After subsequent telephone interviews, the committee made a motion that Richard Fritz conduct a strategic plan based on his experience with the Colorado Agriculture industry; outcome of the vote is pending.)

$30,000 was approved for research projects at Colorado State University: (1) To support investigation pertaining to the development of improved, high quality, disease resistant, and high yielding dry edible bean germplasm for Colorado. This is a continuing program under the leadership of Dr. Mark A. Brick, Dept. of Soil & Crop Sciences ($14,000). (2) To support investigation pertaining to the management of diseases of dry beans, including support for disease resistance evaluations in the breeding and variety testing programs, and monitoring major dry bean production areas for plant disease threats. This is a continuing program under the leadership of Dr. Howard F. Schwartz, Dept. of Biological Sciences & Pest Management ($8,000). (3) To support investigation pertaining to the testing of public and private experimental and commercial varieties of dry beans in collaboration with the CSU breeding and pathology projects under farm conditions, including support for testing at 2 locations in eastern Colorado. This is a continuing program under the leadership of Dr. Jerry J. Johnson, Dept. of Soil and Crop Sciences ($8,000). Two issues of Colorado Bean News @ $2,500 per issue were also approved.

Tom Lipetzky then led a discussion about a specialty crops grant for $700,000 that will be available shortly. He would like to have a bean representative on this committee.
**BEAN ROOT HEALTH**  
**COLORADO STATE UNIVERSITY**  
**PLANT HEALTH NOTE**

By Drs. Howard F. Schwartz and Mark A. Brick, Professors in the College of Agriculture  
Depts. of Bioagricultural Sciences & Pest Management and Soil & Crop Sciences, Fort Collins, CO

Soil-borne diseases, environmental stresses and production practices can contribute to reduced plant stands, greater soil compaction, and economic losses of dry beans grown in Colorado and the surrounding high plains states. Profitability of pinto beans (and other market classes) has become more difficult in recent years due to declining bean prices and increasing operating costs. Monitor every aspect of the crop to maintain profitability; this may require cutbacks in some inputs with investments in other inputs to increase plant health and net returns. This Plant Health Note provides a brief review of common soil borne diseases, and 9 steps to enhance bean root health, crop productivity, and net return by at least 10 – 25%.

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

**Step 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; avoid back to back cycles of bean – potato – sugar beet, alternate with small grains and corn.

**Step 3** Reduce soil compaction and improve drainage by deep chiseling or ripping in the fall and prior to planting or early post-emergence; avoid all field traffic when the soil is wet.

**Step 4** Plant high quality certified seed of a market class and varieties adapted to your farming situation and resources; treat seed with recommended pesticides to reduce seedling damping off and reduced root vigor from soil-borne insects and pathogens.

**Step 5** Control weeds by cultivation and the timely use of herbicides formulated to control the weeds specific to your field and soil type. Minimize direct bean plant (growing point) contact with post-emergence herbicides that could stress beans and delay maturity.

**Step 6** Plant bean seed 2 – 2.5 inches deep in a firm, weed-free seedbed when the morning soil temperature reaches 50 F at planting depth; generally between May 25 to June 15.

**Step 7** Planting rates on 30” wide rows should produce approximately 75000, 85000 and 95000 emerged seedlings/acre for most pinto/great northern, black/navy, and red kidney/yellow beans, respectively.

**Step 8** Irrigate when approximately 50% of the available soil moisture has been depleted; irrigate early and often to avoid stress to plant roots and to refill the root zone (12 – 24” depth) as needed throughout the season.

**Step 9** Inspect bean fields weekly to detect and quickly manage problems associated with soil compaction, nutrient deficiencies, moisture deficiency, salinity, insects, diseases and other factors before they reduce yields.
The Food Pyramid
Beans are one of the most nutritionally complete foods. Considered both a vegetable and a protein, beans are the only food found in two places on the mypyramid.gov.

Naturally Nutritious
As part of a balanced diet, beans make sense for anyone looking for better overall nutrition. No other food can match beans in providing high amounts of these nutrients:
- Protein • Iron • Magnesium • Folate • Potassium • Zinc

Carbohydrates and Calories
Beans are high in complex carbohydrates, which are necessary for sustained physical activity, and also are low in calories. In fact, the calorie content of one cup of cooked beans equals the calories of one cup of cooked rice, one cup of cooked pasta, or a 7-ounce baked potato. This makes beans an excellent source of energy for health-conscious consumers.

Protein
Dry beans are the only vegetable high enough in protein, an important nutrient for maintaining muscle health, to be listed as both a vegetable and a protein on the USDA Food Guide Pyramid. One cup of cooked dry beans provides between 21 percent and 27 percent of the U.S. Recommended Daily Allowance of protein.

Fiber
Beans are an excellent source of soluble fiber. Soluble fiber dissolves in water and plays an important role in metabolic functions. Soluble fiber also has been shown to help regulate blood glucose levels in people with diabetes.

Vitamins
One half-cup serving of cooked dry beans supplies as much as 40 percent of the minimum daily requirement of the B-vitamins thiamin and pyridoxine, which are important for healthy skin and bones.

Fat and Cholesterol
Beans are very low in fat and cholesterol. When part of a low-fat diet, dry beans have been shown to help reduce cholesterol levels.

Folate
- Dry beans are one of the best vegetable sources of folate, an important B-vitamin for proper cell division and overall good health.
- According to research studies from Harvard Medical School and from the Framingham (Massachusetts) Heart Study, folate helps break down the amino acid homocysteine. Researchers say that high levels of homocysteine in the blood in combination with insufficient folate in the diet can triple the risk of heart attack.
- Recent research at the University of Chicago and Tufts University has found that folate may reduce the risk of several types of cancer due to its role in healthy cell division and the repair of damaged cells.
- Folate plays an important role in the cell development which occurs rapidly during the early stages of pregnancy. Studies show that folate may help reduce by 50 percent the risk of certain birth defects like spina bifida (a potentially crippling defect in which the spinal cord is not completely encased in bone) and anencephaly (a fatal defect in which a major part of the brain never develops).
- Because folate is so important in the early stages of pregnancy -- before many women are even aware they are pregnant -- the U.S. Public Health Service recommends that all women of childbearing age consume 400 micrograms of folate each day.

Southwest Steak and Pinto Beans

INGREDIENTS:
- 1 tsp garlic salt
- 1 tsp ground cumin
- 1/4 tsp ground red pepper
- 1 lb boneless sirloin steak, trimmed
- Cooking spray
- 1 tsp vegetable oil
- 1 c. diced red bell pepper
- 1/2 c. bottled chunky salsa, divided
- 1 can pinto beans (15oz), rinsed and drained
- 1/4 c. chopped cilantro

PREPARATION:
Heat a grill pan over medium-high heat. While steak cooks, heat the oil in a medium saucepan over medium-high heat. Add bell pepper; saute 4 minutes or until tender. Add reserved cumin mixture, 1/4 cup salsa, and beans; cook 1 minute or until thoroughly heated, stirring constantly.

Place 1/2 cup bean mixture on each of 4 plates; divide beef evenly over bean mixture. Top each serving with 1 tablespoon salsa and 1 tablespoon cilantro. Serves 4.

Corn bread makes an excellent accompaniment to this dish.

While steak cooks, heat the oil in a medium saucepan over medium-high heat. Add bell pepper; saute 4 minutes or until tender. Add reserved cumin mixture, 1/4 cup salsa, and beans; cook 1 minute or until thoroughly heated, stirring constantly.

Place 1/2 cup bean mixture on each of 4 plates; divide beef evenly over bean mixture. Top each serving with 1 tablespoon salsa and 1 tablespoon cilantro. Serves 4.

Colorado Bean News - Volume 21 Issue 1
We are pleased to announce that the 2008 Legume ipmPIPE program will be available (after June 9, 2008) on-line for your access and use. During 2008, a team of university, USDA and industry specialists will be monitoring and reporting on priority disease and insect pests in critical Legume Crops grown across North America. The PIPE enhances the role of Integrated Pest Management specialists by providing near real-time access to legume pest observations, model output, pest management information, as well as communication tools to support pest management decision making by growers during that growing season.

The Legume ipmPIPE (PIPE = Pest Information Platform for Extension and Education) consists of a network of 160 Sentinel plots in 30 states, provinces and districts of the U.S., Canada and Mexico; and is a spin-off from the successful Soybean PIPE which has monitored the progress of and provided timely management strategies for Soybean Rust and Soybean Aphid on Soybean in recent years. The threat to other legume crops such as common bean has been increasing annually as more soybeans become infected earlier each year in the U.S., and now even in Canada and Mexico; and legume monitoring will be even more critical during 2008. Funding is provided through the USDA Risk Management Agency, and other sources including legume check-off programs, agricultural experiment stations and extension projects.

The 2008 Legume ipmPIPE Web Site will include a series of menus, maps, reports, illustrations, and management links for topics that may include:

- **LEGUME CROPS**
  - Common Beans (dry bean, snap bean, processing bean)
  - Cool Season Legumes (chickpea, field pea, lentil)
  - Warm Season Legumes (lima bean, cowpea or black-eyed pea)

- **DISEASES & INSECT PESTS**
  - Soybean Rust, Common Rust
  - Ascochyta Leaf Spot
  - Bacterial Diseases such as Common Bacterial Blight, Halo Blight, Bacterial Brown Spot, Bacterial Wilt
  - Viruses such as Alfalfa mosaic, Bean common and yellow mosaics, Beet curly top, and Cucumber mosaic
  - Insect pests (and virus vectors) such as Soybean Aphid, other aphids, beetles

- **IMAGE GALLERY**
  - e.g., Common Beans (in cooperation with the Bugwood Network)
  - Representative images of priority diseases and pests will also be available

- **OTHER RESOURCES**
  - State specialists will provide commentary on disease and pest reports
  - Links will be available to resources such as Legume Growth Stages, management recommendations for priority diseases and pests

**WEB SITE ADDRESS:** (after 06/09/08) check us out at http://legume.ipmpipe.org

**REGIONAL COORDINATORS:**
- Eastern Region: marie.langham@sdstate.edu
  tel #: 605-688-5539
- Western Region: howard.schwartz@csu.colostate.edu
  tel #: 970-491-6987

**SOYBEAN PIPE – SBR SUMMARY FOR 2007:**

The Soybean Rust (SBR) web site reports that SBR has now been found in 331 counties in the U.S.; highest number of counties reporting the disease since it was first discovered in the continental U.S. in 2004. SBR has now been detected in one Province in Canada, in two states (3 municipalities) in Mexico, and in 19 States and 331 counties in the U.S including: 40 counties in Alabama (19 soybean), 33 counties in Arkansas (soybean), 24 counties in Florida (11 soybean), 48 counties in Georgia (14 soybean), four counties in Illinois (soybean), one county in Indiana (soybean), 14 counties in Iowa (soybean), nine counties in Kansas (soybean), three counties in Kentucky (soybean), 21 parishes in Louisiana (18 soybean), 26 counties in Mississippi (21 soybean), 37 counties in Missouri (soybean), four counties in Nebraska (soybean), six counties in North Carolina (soybean), 12 counties in Oklahoma (soybean), seven counties in South Carolina (soybean), seven counties in Tennessee (soybean), 26 counties in Texas (25 soybean), and nine counties in Virginia (soybean).

**Figure 1. Soybean Rust (SBR) monitoring during 2007; darker spots indicate sites where SBR was confirmed on hosts including soybean (Glycine max), kudzu (Pueraria lobata) and jicama or Yam Bean (Pachyrhizus erosus) in Sentinel Plot or commercial fields [http://sbrusa.net ].**
Colorado Bean News

Circulation: 2800 Bean Growers and Dealers in Colorado and Adjacent Area

Editor: Dr. Howard F. Schwartz
(970)491-6987
Howard.Schwartz@colostate.edu

Layout: Mark S. McMillan
(970)491-7846
msmc@lamar.colostate.edu

Websites of interest to bean growers
www.csuag.com
www.coagmet.com
www.colostate.edu/Orgs/VegNet/beanlinks
www.csuag.com/cbn (back issues)

Colorado Dry Bean Administrative Committee
Executive Board

Robert Schork - Manager
Wendy White Colo. Dept. of Ag. Advisor
(303)239-4119

District 1 Representatives:
Rod Tamner - Midland Bean, Dove Creek - Handler
Tom Humphrey - Olatho - Grower

District 2 Representatives:
Larry Lande - Northern Feed & Bean (Sec./Treas.) - Handler
Rick Johnson - Loveland (VP) - Grower
Troy Seaworth - Wellington - Grower

District 3 Representatives:
Steve Brown - Jack Bean Company L.L.C (Pres.) - Handler
Harvey Colglazier - Holyoke - Grower
Bud Pekarek - Burlington - Grower

The Colorado Bean News is supported in part by your voluntary check-off dollars administered by the Colorado Dry Bean Administrative Committee. 31221 Northwoods Circle, Buena Vista Colorado 81211. Phone 800.318.8049

Colorado Bean Network Executive Board

Harley Ross - Kelley Bean - Chairman
(970)463-5468

Howard Schwartz - CSU - Secretary
(970)491-6987

Larry Lande - Northern Feed & Bean - Treasurer
(970)352-2575

Colorado Bean News is published bimannually by the Colorado Bean Network, a non-profit organization which supports the dry bean industry in Colorado. Although the content of articles and information published in Colorado Bean News is true to the best of our knowledge, the Colorado Bean Network and its personnel accept no responsibility for its accuracy. No endorsement of products mentioned is intended nor is criticism implied of products not mentioned. Check pest management and agronomic advice with local sources, and always read and follow product labels.