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AVALANCHE, A NEW NAVY BEAN FOR THE NORTHERN PLAINS

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The Bean Improvement Cooperative celebrated the Fiftieth anniversary at the 2007 Biennial Meeting in Madison, Wisconsin. The highly successful meeting had approximately 120 registered participants and featured 27 oral presentations and 38 poster presentations. The quality of both the oral and poster presentations was excellent. The meeting began with The Frazier-Zaumeyer Distinguished Lecture, entitled: ‘From Ralph Corbett’s Bean Field to Molecular Details of Broad Spectrum Potyvirus Resistance’ The stimulating lecture was presented by Dr. Molly Jahn, Dean of The College of Agriculture and Natural Resources at the University of Wisconsin, Madison. The meeting received generous support from the following organizations: Seminis Vegetable Seeds; Harris Moran Seed Company; Syngenta Seeds, Inc.; Del Monte Foods; Brotherton Seed Company; Central Bean Company; Crites Moscow Growers, Inc.; Hartung Brothers, Inc.; and the Michigan Bean Commission. The BIC wishes to recognize the financial support of these organizations that helped the meeting to succeed. On behalf of the BIC, I wish to acknowledge the very substantial assistance of the organizing committee, particularly Ken Kmiecik, Roxanne Mainz, Rob Gehin, Alyson Thornton, and Michell Sass and I wish to thank the sponsors and the participants for making the meeting a success.

At the Award Banquet five BIC members were recognized, Former BIC President Mike Dickson was honored with ASHS Vegetable Breeding Working Group Award of Excellence and two student awards were presented for the best oral and poster presentations at the BIC meeting.

The outstanding student oral presentation was entitled: ‘Molecular diversity in the PvTFL1y sequence, a candidate gene for the determinacy (fin) locus’ presented by Myounghai Kwak, University of California, Davis Paul Gepts, advisor [pg.10].

The outstanding poster presentation was entitled: ‘Morphological and molecular characterization of Rhizoctonia solani isolates from western Nebraska dry beans’ presented by Jorge Venegas, University of Nebraska, Lincoln Jim Steadman, advisor, [pg. 86].

On behalf of the BIC, I would like to recognize Soon Park for his years of dedicated service on the BIC Coordinating Committee and I wish to welcome Peter Pauls as the newest member of the coordinating committee. I wish to acknowledge leadership that Jim Beaver provided to BIC Genetics committee and welcome Kirstin Bett as a new member to the Genetics Committee.

A standardization of the nomenclature for common bean chromosomes and linkage groups has been proposed by Pedrosa-Harand et al [pg. 106]. The numbers will conform with those previously assigned to bean linkage groups, Bl-B11. The proposal has the support of the BIC Genetics Committee [pg. iii-iv] and should simplify the reporting of bean chromosome numbers and linkage groups in future studies. The change has been made to the revised Bean Gene List posted on line.

The next BIC meeting is planned in Denver/Fort Collins in October, 2009. Details of the 2009 BIC meeting can be found at the BIC Web page (http://www.css.msu.edu/bic). Members are asked to check the web page periodically for upcoming events and deadlines related the BIC.

Dr. James D. Kelly, BIC President
BIG COMMITTEE MEMBERSHIP - 1957 to 2008

Coordinating Committee (approximate year of appointment):

1957  Dean, Enzie, Frazier* (BIC Coordinator/President), McCabe, Zaumeyer
1960  Anderson, Atkin, Dean, Enzie, Frazier, McCabe, Zaumeyer
1962  Anderson, Atkin, Dean, Frazier, Pierce, Polzak, Zaumeyer
1968  Anderson, Coyne, Dean, Jorgensen, Polzak, Zaumeyer
1971  Briggs, Coyne, Dean, Jorgensen, Polzak, Zaumeyer
1972  Burke, Coyne, Dean, Jorgensen, Kiely, Polzak, Zaumeyer
1974  Ballantyne, Bravo, Burke, Coyne, Dickson, Emery, Evans, Kiely, Saettler, Zaumeyer
1977  Ballantyne, Bliss, Coyne, Dickson, Emery, Evans, Graham, Meiners, Morris, Saettler, Zaumeyer
1978  Atkin, Ballantyne, Bliss, Coyne, Dickson, Graham, Meiners, Morris, Saettler, Sprague
1979  Atkin, Bliss, Dickson, Graham, Hagedorn, Meiners, Morris, Sprague, Wallace
1980  Atkin, Bliss, Dickson, Hagedorn, Morris, Sprague, Steadman, Temple, Wallace
1982  Atkin, Coyne, Dickson, Hagedorn, Sprague, Steadman, Temple, Wallace, Wyatt
1983  Coyne, Dickson, Hagedorn, Saettler, Silbermagel, Steadman, Temple, Wallace, Wyatt
1985  Coyne, Dickson, Mok, Saettler, Silbermagel, Steadman, Temple, Wallace, Wyatt
1986  Coyne, Dickson, Mok, Saettler, Schoonhoven, Schwartz, Silbermagel, Steadman, Wallace
1988  Brick, Dickson, Emery, Magnuson, Roos, Schwartz, Singh, Steadman, Uebersax
1992  Dickson, Emery, Graffon, Magnuson, Schwartz, Singh, Stavely, Steadman, Uebersax
1994  Antonius, Dickson, Graffon, Magnuson, Park, Schwartz, Singh, Stavely, Uebersax
1996  Antonius, Graffon, Park, Schwartz, Singh, Stavely, Myers, Kotch, Miklas, Riley
1998  Antonius, Beaver, Kelly, Kotch, Miklas, Myers, Park, Riley, Schwartz (ex officio), Singh, Vandenberg
2001  Antonius, Beaver, Kelly, Kotch, Miklas, Myers, Park, Riley, de Ron, Schwartz (ex officio), Vandenberg
2003  Beaver, Kelly, Kmieciak, Kurowski, Miklas, Myers, Park, Riley, de Ron, Schwartz (ex officio), Vandenberg
2006  Beaver, Kelly, Kmieciak, Miklas, Myers, Park, Riley, de Ron, Schwartz (ex officio), Shellenberger, Vandenberg
2008  Beaver, Kelly, Kmieciak, Miklas, Myers, Pauls, Riley, de Ron, Schwartz (ex officio), Shellenberger, Vandenberg

Awards Committee:

1971  Baggett, Briggs, Burke, Dean, Wallace  1985  Emery, Hagedorn, Sandsted, Schwartz
1973  Burke, Dean, Mauth, Zaumeyer  1987  Emery, Hagedorn, Sandsted
1975  Ballantyne, Frazier, Mauth  1989  Coyne, Silbermagel, Wallace
1977  Ballantyne, Curme, Frazier, Schuster  1995  Coyne, Dickson, Stavely
1979  Ballantyne, Schuster, Silbermagel, Temple  1997  Coyne, Schwartz, Stavely
1981  Abawi, Bliss, Monis, Silbermagel  2001  Hosfield, Magnuson, Schwartz
1983  Adams, Bliss, Burke, Dean, Morris  2004  Hosfield, Schwartz, Singh
1983  2008  Hosfield, Schwartz, Singh

Genetics Committee

2007: Tim Porch (Chair), James Beaver, Matthew Blair, Paul Gepts, Phil McClean, Phil Miklas, Carlos Urrea, Molly Welsh (ex officio).
2008: Tim Porch (Chair), Kirstin Bett, Matthew Blair, Paul Gepts, Phil McClean, Phil Miklas, Carlos Urrea, Molly Welsh (ex officio).
REPORT OF THE BIC GENETICS COMMITTEE
(Minutes submitted by Carlos Urrea – abstracted)

The Genetic Committee met in Madison WI on October 31st, 2007 at 4:30pm. Decisions were made on six of the 10 topics discussed. A full version of the minutes can be found at www.css.msu.edu/bic

1. Topic: Regular cycle for review of the gene list and updating of the online list at the BIC website
   Decision: The gene list will be reviewed and updated every six months. Each Annual Report of the BIC will include a section with new gene symbols. The complete list of gene symbols will continue to be posted on the BIC website and published every 5 years in the Annual Report of the BIC.

2. Topic: Review of published gene symbols or new gene symbols that have not gone through the genetics committee

   A. *Phg* gene symbol for angular leaf spot resistance
   James Beaver presented the proposed gene symbol for angular leaf spot (*Phg*) and indicated that allelism tests had already been completed (Mahuku et al., 2004). No Decision

   B. Gene symbols for *Apion godmani* resistance
   Several papers have been published using the *Agm* and *Agr* gene symbols for *Apion godmani* resistance, however these symbols have not been previously approved by the genetics committee. Matthew Blair presented the molecular mapping of *Apion godmani* resistance genes (Blair et al., 2006) and the previous assignment of gene symbols (Garza et al., 1996). No Decision

   C. Gene symbols for Arcelin
   Jim Myers presented the issue of the use of *Arc* or *Arl* gene symbols in the literature for Arcelin that confers resistance to bruchid insects. These gene symbols have previously been approved, but guidelines are needed for their application to molecular and genetic studies in tepary and common bean. No Decision

   D. Anthracnose gene symbols
   Celeste Gonclaves Vidigal presented results on the inheritance of anthracnose resistance in Mexico 222. No Decision

3. Topic: Nomenclature system
   Paul Gepts suggested that the common bean community should use the linkage group nomenclature (Freyre et al., 1998) instead of the chromosome number nomenclature (Pedrosa et al., 2003).

   Decision: The Genetics Committee will recommend the Freyre et al. (1998) nomenclature for linkage group nomenclature and orientation. Paul Gepts will contact the relevant groups concerning these new guidelines. These guidelines will then be posted on the BIC website. The prefix identification of each linkage group with the letter ‘B’ or ‘Pv’ is still under consideration. Either ‘B’ or ‘Pv’ will be selected.

4. Topic: QTL nomenclature
   QTL nomenclature varies from study to study in common bean. There is a need for a common system for assigning QTL symbols.

   Decision: Phil Milkas (convener), Matthew Blair, and Paul Gepts, will consult and decide on the best system for QTL nomenclature in common bean.
5. **Topic: Conflicting complementation results with Widusa and PI 207262 using race 65 in two publications**

There are conflicting complementation results from Widusa and PI 207262 from different groups that may be due to differences in the isolate of race 65 that is being employed. In addition, data from a number of different groups indicate that Co-9 and Co-3 are allelic.

**Decision:** Considering the allelism results presented, Co-9 will be renamed Co-3\(^3\). Jim Kelly will communicate this information to those scientists involved.

6. **Topic: Posting of items regarding common bean genetics on the BIC website. Review process for posting of unpublished results on the BIC website.**

Jim Kelly brought the issue of SSR data from different sources posted on the BIC website. There were several errors in some of the unpublished work on the website, thus the discussion involved whether or not unpublished work should be posted.

**Decision:** Post published information on the website. Post unpublished work with author names and a disclaimer so that the authors can be contacted in case questions arise.

7. **Topic: Change in Membership of Genetics Committee**

**Decision:** James Beaver stepped down from the Genetics Committee and Kirstin Bett will replace him.

8. **Topic: Next Meeting**

Recommendation to conduct a half-day meeting during the W1150 meeting in Puerto Rico in February, 2009 because of the lack of time to complete the Genetics Committee business during the short one hour meeting at the BIC.

**ADDENDUM**

Recent Decision in reference to “**Topic 3: Nomenclature system**” from the Genetics Committee meeting on 10/31/07 (above).

**Decision:** The revision of the linkage group nomenclature and orientation has been accomplished and approved by the Genetics Committee. It is available at:

http://www.css.msu.edu/bic/PDF/Standardized%20Genetic%20&%20Physical%20Bean%20Map%202008.pdf

It has been agreed to drop the prefix B from linkage group names. When warranted, for example in comparative genomics, the prefix Pv (e.g., Pv1) can be added to distinguish linkage groups with the same number but from different species. A full discussion is provided in the paper by Pedrosa et al. in the current BIC report.

Questions or comments should be addressed to the chairman of the committee: Dr. Tim Porch, USDA ARS SAA TARS, 2200 P.A. Campos Ave., Suite 201, Mayaguez PR 00680: ph. (787) 831-3435, ext. 254; fax. (787) 831-3386; and e-mail; maytp@ars-grin.gov

**Coordination of Genes and Gene Symbol Nomenclature - BIC Genetics Committee**

The Genetics Committee is a sub-committee of the Bean Improvement Cooperative that organizes and coordinates activities that deal with *Phaseolus* genetics. The committee has served as a clearinghouse for the assignment and use of gene symbols. The committee also maintains the **Guidelines for Gene Nomenclature** (last published in the Annual Report of the Bean Improvement Cooperative in 1988, 31:16-19 and supplemented in 1999, 42:vi). The committee also evaluates materials submitted for inclusion in the Genetics Stocks Collection of the Plant Introduction System (for those rules see 1995 Annu. Rpt. Bean Improvement Coop. 38:iv-v).
Dr. Molly Jahn was born in Michigan on June 4, 1959. When she was 11 years old, she began trialing vegetable varieties in her family garden and has continued her dedication to vegetable breeding ever since. With a family heritage of world-famous plant breeders, she was inspired to pursue her passion for biology and agriculture. Dr. Jahn received her bachelor’s degree with distinction in biology from Swarthmore College in 1980. She completed her Masters degree in plant genetics at the Massachusetts Institute of Technology in 1983 and her doctorate on virus resistance in common bean with Dr. Mike Dickson and Dr. Henry Munger at Cornell University in 1988.

Dr. Jahn began her professional career at Cornell University in 1991 after completing a postdoc at UC Berkley and working as a research associate at the Boyce Thompson Institute. Her research has focused on plant gene discovery, the analysis of crop genome structure and function, and the application of these findings to crop improvement. Her research has successfully integrated research from fundamental studies on the relationship between model species and crops, to the study of breeding methods and the release of varieties. A few of the research accomplishments include, a detailed comparative genetic map of the Solanaceae, the broadest dicotyledonous comparative genetic system; the application of this comparative genetic map to the isolation of genes for a diversity of traits including disease resistance and product quality; the development of molecular markers for indirect selection; the assessment of naturally occurring genetic diversity for several plant traits; and the elucidation of the genes that control distinctive traits, such as pungency in Capsicum. In addition to these basic research successes, Dr. Jahn has 51 active commercial licenses in force for open-pollinated and hybrid varieties, and hybrid parents, and received the prestigious seed-industry award of All-America Selection (AAS) in 2002 for the squash variety ‘Bush Delicata.’ In addition to research on pepper and squash, Dr. Jahn has integrated worked with common bean, pumpkin, and melon, and has published her research in highly regarded journals. As a result of her significant contributions in plant research, she was inducted as an AAAS fellow in 2006.

Dr. Jahn has been successful in the development of a dynamic network for technology transfer and germplasm distribution in the US, successfully fostering collaboration between industry and the public sector. Dr. Jahn is the director of the Organic Seed Partnership and the Public Seed Initiative, both programs focus on extension using an alliance of the public, private, and non-profit sectors interested in improving the dissemination and utilization of public plant varieties and crop genetic diversity. Through formal and informal collaborations, Dr. Jahn has completed extensive research and extension activities worldwide. She is a member of the Board of Directors of the AVRDC (Asian Vegetable Research and Development Center) and she was also a member of the oversight committee of the collaborative crops research committee of the McKnight Foundation, both focused on agricultural development overseas.

Dr. Jahn has placed high value on successful teaching and training, and as a result, numerous graduate, post-doctoral, and visiting scientists have been trained through her program at Cornell. In August 2006, Dr. Jahn became the first female dean in the history of the UW-Madison College of Agriculture and Life Sciences. She now oversees a UW-CALS campus of 2,200 undergraduate students, 1,000 graduate students, and 270 faculty members, and a budget of more than $150 million. In January of this year she unveiled the new Wisconsin Bioenergy Initiative and outlined how the College is taking the lead in Wisconsin’s bioenergy research. Dr. Jahn is an innovator, and a dedicated and skilled educator, who understands the importance of teamwork and the critical role of a land grant university in today’s economy.
ROBERT L. GILBERTSON

Dr. Robert L. Gilbertson, Professor of Plant Pathology at the University of California-Davis, was born in Chicago and earned a B.S. degree in Wildlife Biology from the University of Massachusetts-Amherst in 1978. Bob earned a M.S. in Plant Pathology from the University of Massachusetts in 1980. He received his Ph.D. in Plant Pathology at Colorado State University in 1985. From 1986 to 1990, Dr. Gilbertson was a Research Associate and Assistant Scientist at the University of Wisconsin-Madison working on the USAID-funded Bean/Cowpea CRSP project.

For over 20 years, Dr. Gilbertson has conducted research on bacterial, fungal, and viral diseases of common bean. He has used molecular biology for pathogen detection and analysis of pathogen diversity and plant/pathogen genetics. Bob has worked on detection, characterization and molecular biology of geminiviruses. He and his team cloned and sequenced the complete genomes of six bean-infecting geminiviruses, and pioneered the development of DNA probe and PCR-based geminivirus detection methods. Dr. Gilbertson and his associates were the first to utilize particle bombardment to confirm the infectivity of cloned geminivirus DNA, in addition to developing agroinoculation techniques for Bean golden yellow mosaic virus (BGYMV) and Bean dwarf mosaic virus (BDMV). They inserted the green fluorescent protein gene into BDMV and followed the viral movement in susceptible and resistant common bean cultivars. This revealed that resistance involved a block in long-distance movement of the virus. The BDMV-GFP reporter was also used to clone a common bean gene involved in viral resistance. Dr. Gilbertson has also detected viruses infecting common bean in California, and helped incorporate resistance to BCMV and BCMNV into major market classes.

While at the University of Wisconsin-Madison, Dr. Gilbertson initiated studies on common bacterial blight caused by Xanthomonas campestris pv. phaseoli (Xcp) and X. campestris pv. phaseoli var. fuscans (Xcpf). He developed a dry-inoculum technique for infecting common bean in the field, and demonstrated that the bacteria could over-winter in common bean debris on the soil surface, but not in the soil. He established that common bean debris could be colonized by a diversity of non-pathogenic xanthomonads and used DNA probe and PCR detection methods to differentiate pathogenic from non-pathogenic xanthomonads. He used RFLP and repetitive element PCR analyses to elucidate the genetic diversity between and within Xcp and Xcpf populations. Moreover, he identified a genetically distinct Xcp population from East Africa with pathogenic specialization for the Andean bean.

Dr. Gilbertson and colleagues demonstrated the existence of genetically distinct pathogen populations of Phaeoisariopsis griseola (the cause of angular leaf spot) in different geographic regions of the world, and showed pathogenic specialization on the predominant common bean gene pool. This suggested co-evolution of the pathogen with the common bean, which had practical implications in terms of selecting appropriate pathogen isolates for resistance breeding for various production regions around the world. Dr. Gilbertson is an internationally renowned Plant Pathologist and an accomplished educator and leader. He teaches Introduction to Plant Pathology, Plant Bacteriology, Plant Virology, and Plant-Virus-Vector Interactions. He has mentored numerous Ph.D. students, visiting and postdoctoral scientists from around the world, and is actively involved in the Plant Pathology Graduate Program at UC Davis. He has served as an Editor for Plant Cell Reports, Phytopathology, Plant Health Progress and Crop Protection; and is currently the Editor-in-Chief for Phytopathology. Dr. Gilbertson has been an active member of the Western Regional W-1150 Bean Project and BIC. He also has been very active in international research and development since the mid 1980’s. He currently has collaborative projects in the Caribbean, Central America, and West Africa. Bob has received numerous national and international awards including the Award from the Minister of Agriculture of the Dominican Republic for his research on the management of Tomato yellow leaf curl virus (1999). Dr. Gilbertson is also a Fellow of the American Association for the Advancement of Science.
WALTER EDWIN (ED) KEE Jr.

Walter Edwin (Ed) Kee Jr. was born on August 28, 1951 in Wilmington, Delaware. He earned a B.S. in Agriculture from University of Delaware in 1973. In 1975 he completed a M.S. degree in Plant Science, also from the University of Delaware, under the direction of Dr. Vernon Fisher. His thesis was titled "Evaluation and Implementation of Quality Measurement Techniques for Raw Lima Beans". Ed worked as the farm manager for Nassau Orchards, Nassau, DE from 1975 – 78. In 1978 Ed began his career with University of Delaware Cooperative Extension as the County Agriculture Agent for Kent County, Delaware. Since 1982 Ed has served as the State Extension Vegetable Crops Specialist, based at the Elbert N. & Ann V. Carvel Research and Education Center, Georgetown, Delaware.

As State Vegetable Specialist Ed advises farmers and conducts applied research on a variety of vegetable crops, including watermelon, cantaloupe, peas, sweet corn, and pickling cucumbers. It was Ed’s work with lima beans, however, that motivated his involvement in the Bean Improvement Cooperative beginning in 1990. Since joining BIC Ed has hosted the BIC biennial meeting twice, first in Annapolis, MD in 1997 and then in Newark, DE in 2005.

Ed has been involved with research on all aspects of lima bean production: quality measurement, variety evaluation, flowering physiology, crop management, disease resistance, disease control, and mechanical harvest efficiency. When disease and other factors threatened the profitability of this crop in Delaware Ed brought together a diverse group of university faculty and extension staff to work on the problem. Ed has consistently encouraged faculty and graduate students to address the disease, production and mechanical harvest problems of lima beans. This research has kept Delaware lima bean growers and, in turn, regional vegetable processors competitive.

Ed’s research and close relationship with the processing industry has resulted in new opportunities for Delaware vegetable growers. Ed was instrumental in attracting two new vegetable processing facilities to Delaware. One is a pickling cucumber grading facility. The other is a vegetable freezing facility which came to Delaware to procure lima beans but has since begun contracting with growers for peas and sweet corn as well. Ed is frequently in contact with individuals from all of the regional vegetable processors concerning potential areas of research.

Ed teaches an excellent class, “Issues in Agriculture”, in which he takes students on day-long field trips to several farming operations and processing plants as well as brings in speakers on a range of topics, including: ag policy, environmental issues, land use, and international agriculture. Ed also teaches the University of Delaware’s “Vegetable Science”, and “Fruit Science” classes. His classes are hands-on and designed to give students a real taste of agriculture.

Ed is dedicated to supporting students. He enjoys interacting with students and has employed over 25 of them as summer workers in the vegetable research program and followed up by supporting them in their job search. In 2000 Ed and his wife Debbie established a scholarship to support students in the University of Delaware College of Agriculture and Natural Resources who are also athletes.

HANS HENNING MUENDEL

Dr. Hans Henning Muendel was born on March 31, 1942 in Kosten Germany (now part of Poland) and moved to Oliver, British Columbia in 1951. Henning was awarded a B.SA. in Plant Science from the University of British Columbia in 1964. In 1966, Henning received an M.Sc. degree from the University of California at Davis, in Agronomy and Plant Breeding under the guidance of Dr. E.H. Stanford. The same year, Henning received a second M.Sc. degree in International Agricultural Development. During 1966-69, Henning was employed by CUSO to work at the Paniya tribal settlement in India as the Farm Manager for the Nilgiris Adivasi Welfare Association and later as a safflower breeder at the Nimkar Agricultural Research Institute. From 1972-74, Henning was employed as a wheat breeder in Kenya by CIDA. In 1973, Henning was awarded a Ph.D. in plant breeding from the University of Manitoba based on what breeding research under the guidance of Dr. Len Shebeski. In 1978, Dr. Henning Muendel began a long and distinguished career at the Lethbridge Research Centre of Agriculture and Agri-Food Canada. Initially, Henning was employed in the breeding and development of new crops. Henning made major contributions to cultivar development in safflower, hard red spring wheat and corn.

In 1987-88 and again in 1996 until his retirement in 2007, Henning was in charge of the dry bean breeding program at the Lethbridge Research Centre. In 1996, no dry bean cultivars grown in western Canada had been bred in this region. However over an 11 year period, Henning developed 14 dry bean cultivars (7 bean classes) and co-developed 1 new bean cultivar. Henning’s bean breeding program concentrated on producing early maturing bean cultivars that are well suited to the short growing seasons of southern Alberta, Saskatchewan and Manitoba. Many of dry bean cultivars from Henning’s breeding program also had improved resistance to anthracnose, white mould and bacterial wilt, while maintaining high yield and quality. Dry bean cultivars from Henning’s breeding program now set the standard for small red, black and great northern cultivars in western Canada.

During his career, Henning also collaborated on a number of scientific studies to improve bean production in western Canada. Henning and Dr. H.C. Huang were the first to detect the presence of the three color variants of the bean bacterial wilt pathogen, Curtobacterium flaccumfaciens in western Canada. This led to the development of a new rapid method for screening dry beans for bacterial wilt resistance. Henning identified resistance to each of the variants of C. flaccumfaciens in dry bean cultivars and advanced breeding lines from western Canada. Together with his colleagues, Henning also launched a new study to investigate the inheritance of resistance to bacterial wilt in Canadian dry bean cultivars. Henning and his colleagues also were the first to identify Erwinia rhapontici as the pathogen responsible for the pink seed disease in dry beans. Henning participated in a national study to use a backcross program and marker-assisted selection to combine resistance to anthracnose, common bacterial blight and bean common mosaic virus in six different classes of dry bean. He identified physiologic resistance to Sclerotinia sclerotiorum and Botrytis cinerea in dry bean. In collaboration with Dr. R. Blackshaw, Henning also conducted agronomic studies on integrated cropping practices to improve weed control in dry beans.

The tremendous scope of Dr. Henning Muendel’s research accomplishments is best exemplified by his extensive record of publications in scientific journals and his leadership role on many national and international research committees and projects. To date, Henning has published 90 scientific publications, 3 books, 2 book chapters and 210 miscellaneous publications. Henning also served as an editor of the refereed proceedings of three scientific conferences. Henning has served in various roles in the variety registration process (Prairie Registration Recommending Committee for Grain). He was a director of the Alberta Pulse Growers Commission and also served on the local arrangements committee for the BIC meeting held in Calgary in 1999 and for the Canadian Pulse Research Workshop held in Edmonton in 2002.
MATTHEW W. BLAIR

Dr. Matthew W. Blair, Germplasm Specialist and Andean Bean Breeder at the International Center for Tropical Agriculture (CIAT), graduated from Cornell University with his B.S. degree in 1987. He obtained a wide range of experience in plant breeding working as an undergraduate assistant for the potato breeding program at Cornell and as an assistant for the amaranth breeding program at the Rodale Research Center in Pennsylvania. He also served as an intern for an Asgrow melon breeding program in California and an Asgrow winter nursery in Puerto Rico. Dr. Blair’s experience in international agriculture began in 1989 at the University of Puerto Rico where he refined his skills in Spanish and studied the inheritance of resistance to Bean Golden Yellow Mosaic (BGYM). A portion of his M.S. thesis research, which included first report the inheritance of the BGYM resistance gene bgm, was conducted in the Dominican Republic. During a semester at the University of Florida, Dr. Blair and collaborators made the first report of BGYM in southern Florida. He earned a Ph.D. in plant breeding from Cornell University in 1997. His dissertation research dealt with genetic fingerprinting of rice cultivars and the genomic location of the xas5 gene for bacterial blight resistance in rice. Dr. Blair spent 17 months at Cornell University as a Post-doctoral Research Fellow where he conducted map-based cloning of a recessive gene for resistance to bacterial leaf blight of rice. He returned to bean research in 1999 as a Germplam Specialist / Andean bean breeder at CIAT in Cali, Colombia. His responsibilities at CIAT range from laboratory-based basic research using the latest molecular techniques to the improvement of large-seeded beans for small-scale farmers in Africa and South America.

Dr. Blair has established an international reputation for achievements in common bean breeding, genetics and genomics. He currently collaborates with bean research programs in the Americas, Africa and Europe, covering a wide array of topics. A few of Dr. Blair’s research accomplishments documented in refereed journals include: the development of a microsatellite map for common bean; the mapping of genes for resistance to BGYM and the bean pod weevil; the QTL mapping of resistance to Thrips palmi Karny in common bean; QTL analysis of root traits related to adaptation to low soil fertility; studies of the phenotypic and genetic variability of common bean and tepary bean using microsatellite, AFLP and RAPD markers; the use of wild relatives to improve the seed yield potential and to broaden the genetic base of common bean; studies of the inheritance of climbing ability in common bean; and the development and release of improved climbing bean varieties and red mottled germplasm lines with resistance to BGYMV. Dr. Blair has been involved in an effort to generate and sequence 22,000 EST’s for Phaseolus vulgaris through a Phaseomics consortium collaboration. These sequences have now been entered into GenBank. Dr. Blair has written or co-authored several review articles and book chapters dealing with the use of molecular markers and genomics to improve common bean. He is also a frequent contributor to the Annual Report of the Bean Improvement Cooperative.

Dr. Blair has provided numerous opportunities for post-doctorates and for graduate and undergraduate students from Colombia and many other countries to work in his laboratory. He currently serves on the Dissertation Committees or as the thesis advisor for many of these students. In addition, Dr. Blair has provided short to medium term training at CIAT in bean breeding and biotechnology to scientists from the Caribbean, South America and Africa.

Dr. Blair serves on the Steering Committee of Phaseomics and is a member of the Technical Committee of the Bean/Cowpea CRSP. He has served on the Genetics Committee of the Bean Improvement Committee and has participated in the review of grant proposals for the NSF Plant Genome Program. Dr. Blair serves as an external reviewer for several refereed journals.
IN MEMORY OF DONALD HAGEDORN

The bean community is saddened by the death of Donald J. Hagedorn who passed away on April 11, 2007. Don was born on May 18, 1919, and he received his undergraduate degree at the University of Idaho, and his Masters and PhD at the University of Wisconsin, Madison. Dr. Hagedorn was an internationally known plant pathologist and professor of plant pathology at the University of Wisconsin, Madison from 1948 until the time of his retirement in 1987. His dedication to field research led to the development of disease resistant peas and beans. A popular teacher and advisor, he provided a nurturing environment for the 48 graduate students who studied under his direction. Dr. Hagedorn published 320 scientific papers, many of which he presented at meetings and conferences in every area of the globe. His contributions to the field earned him many awards and recognitions, including the CIBA-Geigy Award in Plant Pathology, Meritorious Service Award from the Bean Improvement Cooperative in 1979, the National Pea Improvement Association, and the Forty-Niners Service Award for outstanding service to the canning industries, the APS Fellow Award from the American Phytopathological Society, and an Honorary Doctor of Science from his alma mater, the University of Idaho. In addition to his membership in several professional associations, Dr. Hagedorn was the co-organizer of both the International Working Group on Legume Viruses and the National Pea Improvement Association, and appointed to the US Plant Variety Protection Board in 1978 by the Secretary of Agriculture. Don was an avid fisherman, fishing the lakes and streams of Canada, Alaska, Idaho, and Montana. The Hagedorn Scholarship was established at the University of Wisconsin, and the University of Idaho in his memory.
2007 BIC MEMBERSHIP LIST

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Greenhouse & Processing Crops Res. Centre
Harrow, Ontario NOR 1G0 CANADA
Phone: 519-738-1264
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E:mail: kokpark@sympatico.ca
<table>
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<tr>
<th>Name</th>
<th>Organization</th>
<th>Address</th>
<th>Phone</th>
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<tbody>
<tr>
<td>Soon O. Park</td>
<td>Texas Agricultural Res. Center</td>
<td>2415 East Highway 83 Weslaco, TX 78596-8399</td>
<td>956-969-5610</td>
<td>956-969-5620</td>
<td><a href="mailto:so-park@tamu.edu">so-park@tamu.edu</a></td>
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<tr>
<td>Parks Library</td>
<td>Acquisitions Department</td>
<td>Iowa State University Ames, IA 50011-2140</td>
<td>515-294-2749</td>
<td>515-294-7411</td>
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<tr>
<td>Marcial A Pastor-Corrales</td>
<td>USDA-ARS-Vegetable Lab</td>
<td>Bldg. 010A Rm. 240 BARC-West Beltsville, MD 20705</td>
<td>301-504-6600</td>
<td>301-504-5555</td>
<td><a href="mailto:pastorm@ba.ars.usda.gov">pastorm@ba.ars.usda.gov</a></td>
</tr>
<tr>
<td>Calvin H. Pearson</td>
<td>Fruita Research Center</td>
<td>1910 L Road Fruita, CO 81521</td>
<td>970-858-3629</td>
<td>970-858-0461</td>
<td><a href="mailto:calvin.pearson@colostate.edu">calvin.pearson@colostate.edu</a></td>
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<tr>
<td>Eduardo Peralta Ildrovo</td>
<td>Panamerican Sur km 14</td>
<td>Estacion Experimental Santa Catalina Quito, ECUADOR</td>
<td>59322693360</td>
<td>59322693360</td>
<td><a href="mailto:Legumin@pi.pro.ec">Legumin@pi.pro.ec</a></td>
</tr>
<tr>
<td>Florence Picard</td>
<td>Ets Vilmorin</td>
<td>49250 La Menitre, FRANCE</td>
<td>02-61-79-41-79</td>
<td>02-61-79-41-21</td>
<td><a href="mailto:florence.picard@vilmorin.com">florence.picard@vilmorin.com</a></td>
</tr>
<tr>
<td>Vicki J. Pierce</td>
<td>Del Monte Corporation</td>
<td>6580 Furlong Avenue Gilroy, CA 95020</td>
<td>408-842-4180</td>
<td>408-847-2768</td>
<td></td>
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<tr>
<td>Angela Rosa Piergiovanni</td>
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<td><a href="mailto:Angelarosa.piergiovanni@igv.cnr.it">Angelarosa.piergiovanni@igv.cnr.it</a></td>
</tr>
<tr>
<td>K. N. Pillay</td>
<td>Pannar Research Services Pty LTD</td>
<td>P. O. Box 19 Greytown, 3250 SOUTH AFRICA</td>
<td>27-33-4139645</td>
<td>27-33-4171208</td>
<td><a href="mailto:kiru.piUay@pannar.co.za">kiru.piUay@pannar.co.za</a></td>
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<tr>
<td>Pop Vriend Seeds B.V.</td>
<td></td>
<td>P. O. Box 5 1619 ZG Andijk NETHERLANDS</td>
<td>31-22859-1462</td>
<td>31-22859-3534</td>
<td><a href="mailto:rcdkroon@popvriendseeds.nl">rcdkroon@popvriendseeds.nl</a></td>
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<tr>
<td>Tim Porch</td>
<td>USDA ARS SAA TARS</td>
<td>2200 P.A. campos Ave., Suite 201 Mayaguez, PR 00680</td>
<td>787-831-3435</td>
<td>787-831-3386</td>
<td><a href="mailto:timothy.porch@ars.usda.gov">timothy.porch@ars.usda.gov</a></td>
</tr>
<tr>
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<td>330-263-3887</td>
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<tr>
<td>Emmanuel Prophete</td>
<td>Ministry of Agriculture</td>
<td>PO Box 2363 Port-au-Prince, HAITI</td>
<td>509-404-2193</td>
<td>509-404-2193</td>
<td><a href="mailto:eprophete@hotmail.com">eprophete@hotmail.com</a></td>
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<td>Rosario Provvidenti</td>
<td>NYS Agr. Exp. Station</td>
<td>Geneva, NY 14456</td>
<td>315-787-2316</td>
<td>315-787-2389</td>
<td><a href="mailto:rpl3@cornell.edu">rpl3@cornell.edu</a></td>
</tr>
<tr>
<td>Magno Antonio Patto Ramalho</td>
<td>Dept. de Biologia - UFLA</td>
<td>Cx. Pos. 3037 37200-000 Lavras, M.G BRAZIL</td>
<td>035-829-1352</td>
<td>035-829-1341</td>
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</tr>
<tr>
<td>Robert E. Rand</td>
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<td>608-263-2626</td>
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<tr>
<td>Thomas Randgaard</td>
<td>Faribault Foods Inc.</td>
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</tr>
<tr>
<td>John Rayapati</td>
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</tr>
<tr>
<td>Ron Riley</td>
<td>Basin Seed Co.</td>
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<tr>
<td>A Paula Rodino</td>
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### BEAN IMPROVEMENT COOPERATIVE
#### 2007 FINANCIAL STATEMENT

**BALANCE ON HAND January 1, 2007**

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**TOTAL INCOME** 4,960.86

**EXPENSE**

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**TOTAL EXPENSE** 6,058.67

**BALANCE ON HAND December 31, 2007**

11,722.36
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<td>Coccineus</td>
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<td>Common Bacterial Blight, Xanthomonas</td>
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<td>Cooking, Canning, Extrusion, Quality</td>
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<td>Drought, Water Stress</td>
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