

**Feed the Future Dry Grain Pulses Collaborative Research Support
Program (CRSP)**

Bibliography 2003 - 2012

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GENETIC IMPROVEMENT

Refereed Journal Articles

Agbicodo, E.M., C.A. Fatokun, R. Bandyopadhyay, K. Wydra, N.N. Diop, W. Muchero, J.D. Ehlers, P.A. Roberts, T.J. Close, R.G.F. Visser, and C.G. van der Linden. 2010. Identification of markers associated with bacterial blight resistance loci in cowpea [*Vigna unguiculata* (L.) Walp.]. *Euphytica*. DOI: 10.1007/s10681-010-0164-5.

Awale, H. E. Falconi, J. C. Villatoro and J.D. Kelly. 2008. Control y caracterización de aislamientos de *Colletotrichum lindemuthianum* de Ecuador y Guatemala. *Revista Agronomía Mesoamericana* 19: 1-6.

Barrera-Figueroa, B., Gao, L., Diop, N.-N., Wu Z., Ehlers, J., Roberts, P.A., Close, T.J., Zhu, J.-K. and Liu, R. 2011. Identification and comparative analysis of drought-associated microRNAs in two cowpea genotypes. *BMC Plant Biology* 2011, 11:127. doi:10.1186/1471-2229-11-127.

Beaver, J.S., M. Zapata, M. Alameda, T.G. Porch and J.C. Rosas. 2011. Registration of PR0401-259 and PR0650-31 dry bean germplasm lines. *J. Plant Reg. Reg.* doi: 10.3198/jpr2011.05.0283crg; Published online 9 Nov. 2010.

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Dorcinvil R, Sotomayor-Ramírez D, Beaver JS. 2010. Agronomic performance of common bean (*Phaseolus vulgaris* L.) lines in an Oxisol. *Field Crops Research.* 118:264-272.

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Ernest, E.G., E. Falconí, E. Peralta and J. D. Kelly. 2008. Uso de una encuesta a agricultores para orientar el fitomejoramiento de frijol en Ecuador. *Revista Agronomía Mesoamericana* 19: 7-18.

Guachambala MS and Rosas JC. 2010. Caracterización molecular de accesiones cultivadas y silvestres de frijol común de Honduras. *Agronomía Mesoamericana* 21(1):1-10.

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- Kwapata, K., R. Sabzikar, M. B. Sticklen, and J. D. Kelly. 2010. In vitro regeneration and morphogenesis studies in common bean. *Plant Cell Tiss Organ Cult: J. Plant Biotechnology*. 100:97–105.
- Lucas, M.R., N.-N. Diop, S. Wanamaker, J.D. Ehlers, P.A. Roberts, and T.J. Close. 2011. Cowpea-soybean synteny clarified through an improved genetic map. *The Plant Genome* 4:1-11.
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- Muchero, W., P.A. Roberts, Ndeye-Ndack Diop, I. Drabo, N. Cisse, T.J. Close, S. Muranaka, O. Boukar and J.D. Ehlers. 2011. Genetic architecture of delayed senescence, grain and biomass yield under drought stress in cowpea. *PLoS ONE* (in press).
- Muchero, W., J.D. Ehlers, T.J. Close and P.A. Roberts. 2011. Genic SNP markers and legume synteny reveal candidate genes underlying QTL for *Macrophomina phaseolina* resistance and maturity in cowpea [*Vigna unguiculata* (L) Walp.]. *BMC Genomics* 12:8.
- Muchero, W., J.D. Ehlers, T.J. Close, and P.A. Roberts. 2009a. Mapping QTL for drought stress-induced premature senescence and maturity in cowpea (*Vigna unguiculata* (L.) Walp). *Theoretical and Applied Genetics* 118:849-863.
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- Muchero, W., J.D. Ehlers, and P.A. Roberts. 2008. Seedling Stage Drought-Induced Phenotypes and Drought-Responsive Genes in Diverse Cowpea Genotypes. *Crop Science* 48:541-552.
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- Ohkura, M., Abawi, G. S., Smart, C. D., and Hodge, K. T. 2009. Diversity and aggressiveness of *Rhizoctonia solani* and *Rhizoctonia*-like fungi on vegetables in New York. *Plant Dis.* 93:615-624.
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Li. 2011. A SNP and SSR based genetic map of Asparagus Bean (*Vigna unguiculata* ssp *sesquipedialis*) and comparison with the broader species. PLoS One 6: e15952.

Zapata, M., J.S. Beaver and T.G. Porch. 2011. Dominant gene for common bean resistance to common bacterial blight caused by *Xanthomonas axonopodis* pv. *Phaseoli*. Euphytica 179:373-382.

Other Publications (reports, conference papers, working papers, manuals, etc.)

Abawi, G. S., T. G. Porch, and J. D. Kelly. 2011. Field and greenhouse evaluation of bean germplasm for root rot and other diseases in New York, 2010. Bean Improvement Cooperative (BIC) 54: 142-143.

Beaver JS. 2010. Collaborative program for bean improvement in Haiti. Invited presentation made at the 25th Annual Conference of the American Society for the Advancement of Science (AAAS), Caribbean Division held in Rio Piedras, Puerto Rico on 24 & 25 September 2010.

Brisco, E.I., T. G. Porch, and J.D. Kelly. 2011. Comparison of choice versus no-choice tests of a dry bean IBL population for resistance to potato leafhopper. Annu. Rep. Bean Improv. Coop. 54:88-89.

Kelly, J.D., G.V. Varner, and E.M. Wright. 2010. Registration of 'Bellagio' cranberry bean. J. Plant Registrations 4: 171-174.

Kelly, J.D., G.V. Varner, and B. Long. 2010. Registration of 'Santa Fe' pinto bean. J. Plant Registrations 4:12-16.

LOS COMITÉES DE INVESTIGACIÓN AGRÍCOLA LOCAL (CIALs) EN LOS VALLES DE LOS RÍOS CHOTA Y MIRA (Imbabura y Carchi), Ecuador: Avances y Retos. Boletín Divulgativo. Agosto 2008. Mejore su nutrición, salud y alimentación...Consuma Fréjol. Hoja Divulgativa.

Mkwaila, W., and J. D. Kelly. 2011. Heritability estimates and phenotypic correlations for white mold resistance and agronomic traits in pinto bean. Annu. Rep. Bean Improv. Coop. 54:134-135.

Muchero, W., N.N. Diop, P.R. Bhat, R.D. Fenton, S. Wanamaker, M. Pottorff, S. Hearne, N. Cisse, C. Fatokun, J.D. Ehlers, P.A. Roberts, and T.J. Close. 2009d. A consensus genetic map of cowpea [*Vigna unguiculata* (L) Walp.] and synteny based on EST-derived SNPs. Proceedings of the National Academy of Sciences, USA 106:18159-18164.

Musoni, A., L. Butare, D. M.nkubana, E. Gasigwa, F. Nsanzabera, M. Blair, and R. Buruchara. 2009. Climbing beans for increased productivity: Participatory selection of new varieties adapted in semi-arid regions in Rwanda. In Proceedings of International Conference on Program for African Seed Systems. Alliance for a Green Revolution in Africa (AGRA). Bamaako, Mali. October, 2009.

- Rosas JC, Guachambala MS, Ramos RA. 2010. Guía ilustrada para la Descripción de las Características de Variedades de Frijol Común. EAP, Zamorano, Honduras, 22p.
- Rosas JC, Araya R, Ortega I. 2009. Variedades de Frijol Rojo obtenidas por Fitomejoramiento Participativo en Honduras y Nicaragua. Est. Exp. Agr. Fabio Baudrit Moreno, Heredia, Costa Rica, 40p.
- Ruiz L, Beaver JS, Rosas JC, Ernest E. 2010. Evaluation of Lima bean landraces from Puerto Rico. Ann. Rep. of the Bean Improvement Coop. 53:72-73.
- Singh, S.P., H. Terán and J.S. Beaver. 2009. Scarlet runner bean germplasm accessions G 35006 and G 35172 possess resistance to multiple diseases of common bean. Ann. Rep. of the Bean Improv. Coop. 52:22-23.

Other Types of Output (presentations, webpages, videos, equipment designs, etc.)

- Beaver, J.S. and D.P. Maxwell. 2011. A legacy of bean-breeding against whitefly transmitted viruses in the Caribbean. Invited presentation at a session entitled "Whitefly-transmitted geminiviruses: a Caribbean legacy in honor and appreciation of Dr. Julio Bird. 2011 Annual Meeting of the American Phytopathological Society, Caribbean Division held in San Juan, Puerto Rico. 19-22 March 2011.
- Beaver, J.S. 2010. Contributions of genetic diversity to the improvement of dry edible beans. Invited presentation made at the C-08 Symposium 'Using genetic resources: Does it have a role in increasing yield?' 2010. ASA-CSSA-SSSA Annual Meeting. Long Beach, CA. 2 Nov. 2010.
- ? Estévez de Jensen, C., T.G. Porch, J.S. Beaver, A. Chicapa Dovala., L. Baptista. 2011. Disease incidence in *Phaseolus vulgaris* in the regions of Chianga, Cuanza.
- Godoy-Lutz G, Beaver JS, Rosas JC, Steadman JR. 2010. Web blight research techniques posted on the web site of the Bean Improvement Cooperative.
http://www.css.msu.edu/bic/_pdf/Web_Blight.pdf.
- Sul and Malange, Angola. Presentation made at the 2011 Annual Meeting of the American Phytopathological Society, Caribbean Division held in San Juan, Puerto Rico. 19-22 March 2011.
- ? Hócdé H., J.C. Rosas y R. Araya. 2010. Co-desarrollo de variedades entre agricultores, científicos y profesionales, biodiversidad y otras cosas. ISDA 2010, Montpellier, France, 13 p.
- Mbui Martins, M., C. Estévez de Jensen, T.G. Porch, J.S. Beaver. 2011. Response of *Phaseolus vulgaris* lines to angular leaf spot. Presentation made at the 2011 Annual Meeting of the American Phytopathological Society, Caribbean Division held in San Juan, Puerto Rico. 19-22 March 2011.

- Mejía, P.Z., M.Pavon and J.C. Rosas. 2011. Avances en la producción orgánica de frijol en la región del Lago Yojoa, Honduras. Presentation made at the LVI PCCMCA Annual Meeting, April 25-29, Sonsonate, El Salvador.
- Roman-Avilés, B., J.M. Lewis and J.D. Kelly. 2011. Fusarium Genetic Control: A Long Term Strategy. In: Control of Fusarium Diseases, In Editors: Fernando M. Alves-Santos and Julio J. Diez. Control of Fusarium Diseases. 2011:000-000 ISBN: 978-81-308-0470-5.
- Rosas, J.C., A.G. Vargas, R. Ramos, S. Beebe, A. Llano, A. Clara, D. Escoto and J.C. Hernandez. 2010. Resultados del SISTEVER 2010 de Frijol de Grano Rojo. Presentation made at the LVI PCCMCA Annual Meeting, April 25-29, Sonsonate, El Salvador.
- Rosas, J.C., A.G. Vargas, R. Ramos, J.S. Beaver, S. Beebe, A. Llano, D. Escoto, E. Prophete, J.C. Hernandez and J.C. Villatoro. 2011. Resultados del SISTEVER 2010 de Frijol de Grano Negro. Presentation made at the LVI PCCMCA Annual Meeting, April 25-29, Sonsonate, El Salvador.
- Rosas, J.C. and A.G. Vargas. 2011. Variaciones fenotípicas de la respuesta de genotipos de frijol a la inoculación con cepas de Rhizobium. Presentation made at the LVI PCCMCA Annual Meeting, April 25-29, Sonsonate, El Salvador.
- Rosas, J.S. and A.G. Vargas. 2011. Caracteres fenotípicos asociados con la tolerancia a la sequía y baja fertilidad de líneas endogámicas recombinantes de frijol. Presentation made at the LVI PCCMCA Annual Meeting, April 25-29, Sonsonate, El Salvador.
- Rosas, J.C., J.S. Beaver, A.G. Vargas and R. Ramos. 2011. Evaluación agronomica de germoplasma de caupí. Presentation made at the LVI PCCMCA Annual Meeting, April 25-29, Sonsonate, El Salvador.

Scholarly Activities and Accomplishments

- Heilig, J.A. 2010. Evaluation of dry bean genotypes for performance under organic production systems; Evaluation of early nitrogen fixation in dry bean. M.S. thesis, Michigan State University, East Lansing MI. 139pp.
- Kelly, J.D., G.V.Varner, P. O'Boyle, and B. Long. 2009. Registration of 'Zorro' black bean. J. Plant Registrations 3:226-230.
- Kelly, J.D., G.V.Varner, B. Roman, and B. Long. 2009. Registration of 'Fuji' Otebo bean. J. Plant Registrations 3:223-225.
- Mbui Martins, M. 2011. Desarrollo de líneas de frijol (*Phaseolus vulgaris* L.) con mayores niveles de resistencia a las enfermedades. M.S. Thesis. University of Puerto Rico, Mayaguez Campus.

Ndengoloka David, A. 2011. Estudio de la diversidad genética de germoplasma de caupí [*Vigna unguiculata* (L.) Walp.] de Angola y un grupo de germoplasma que representa otras regiones del mundo. M.S. Thesis. University of Puerto Rico, Mayaguez Campus.

? Plant Variety Protection Certificate No. 201000268 was issued for 'Zorro' black bean variety on 8/18/2011.

? Plant Variety Protection Certificate No. 201000269 was issued for 'Santa Fe' pinto bean variety on 8/18/2011.

? Plant Variety Protection Certificate No. 200700410, was issued for 'Sedona' pink bean variety on 4/7/2008;

? Plant Variety Protection Certificate No. 200700411 was issued for 'Capri' cranberry bean variety on 4/7/2008.

Ruíz Quiles, L.A. 2011. Desarrollo de líneas de habichuela (*Phaseolus vulgaris* L.) con resistencia a BCMV, BGYMV y mejor adaptación en suelos bajos en nitrógeno. M.S. Thesis. University of Puerto Rico, Mayaguez Campus.

Professional Recognition, Awards, and Accomplishments

Beaver: James Beaver was selected as a 2011 Fellow of the Crop Science Society of America.

Cisse: Dr. Ndiaga Cisse was appointed as Director of the ISRA/CERAAS regional laboratory in 2011.

Cisse: Dr. Ndiaga Cisse was promoted as director of the ISRA/CNRA Bambey Research Station in 2009.

Drabo: Dr. Issa Issa Drabo, [of] INERA, Burkina Faso, was awarded on October 5, 2008 "Chevalier de l'Ordre des Palmes Academiques" for his outstanding work on cowpea in Burkina Faso by the Minister of Higher Education and Research on behalf of the Chief of State.

Ehlers: Dr. Jeff Ehlers, UC-Riverside, was awarded the UC-Riverside campus "Distinguished Research Award (Non-Senate) for 2007-2008" in recognition of his research work on cowpea genetic improvement.

Kelly: Project PI, Kelly was recognized as 2008 Fellow of Crop Science Society of America;

Mbui Martins: Monica Mbui Martins received recognition for her poster presented at the 2011 Annual Meeting of the American Phytopathological Society, Caribbean Division held in San Juan, Puerto Rico. 19-22 March 2011.

Roberts: Dr. Philip Roberts was appointed Chair of the Department of Nematology, UC-R, in 2011.

Snapp: Dr. Sieglinde Snapp was recognized as Fellow of the American Society of Agronomy – 2010.

The President of El Salvador, Elías Antonio Saca, participated in an official ceremony where seed (10 kg sacks) of small red bean varieties CENTA Pipil, CENTA San Andrés e INTA Rojo were distributed to farmers. The program has distributed approximately 30,000 hwt of seed to 120,000 farmers in El Salvador. The contribution of the Bean/Cowpea and Dry Grain Pulse CRSPs were recognized at the ceremony.

<http://www.mag.gob.sv/main/index.php?id=1066&mostrar=full&secc=98&nivel=&tabs=4&pivote=1&ids=97>.

INTEGRATED CROP MANAGEMENT CITATIONS

Refereed Journal Articles

Agunbiade, T.A., B. S. Coates, D. Forgacs, V. M. Margam, L. L. Murdock, M. N. Ba, C. L. Binso-Dabire, I. Baoua, M. F. Ishiyaku, M. Tamò, B. R. Pittendrigh. The spatial genetic differentiation of the legume pod borer, *Maruca vitrata* F. (Lepidoptera: Pyralidae) populations in West Africa. *Journal of Heredity*. In review.

Ba, N.M., Margam V. M., Dabire-Binso C. L., Sanon A., McNeil J., Murdock, L.L. and B. R. Pittendrigh. 2009. Seasonal and regional distribution of the cowpea pod borer, *Maruca vitrata* Fabricius (Lepidoptera: Crambidae), in Burkina Faso. *International Journal of Tropical Insect Science*, 29(3). 29(3): 109-113.

Baoua, I., Ba, M., Dabire, C., Tamò, M., Ishiyaku, M. Margam, V., and B.R. Pittendrigh. Infestations of insect pests on cultivated cowpeas in Niger, Burkina Faso, and Northern Nigeria. *International Journal of Tropical Insect Science*. In press.

Baoua, I., N. M. Ba, T. A. Agunbiade, V. Margam, C. L. Binso-Dabiré, S. Antoine, and B. R. Pittendrigh. 2011. Potential use of *Sesbania pachyca* DC (Fabaceae: Papilionoideae) as a refugia for the legume pod borer, *Maruca vitrata* Fabricius (Lepidoptera: Crambidae). *International Journal of Tropical Insect Science*.

Bello-Bravo, J., Diaz, R., Venugopal, S., Viswanathan, M., and B. R. Pittendrigh. 2010. Expanding the impact of practical scientific concepts for low-literate learners through an inclusive and participatory virtual knowledge ecosystem. *Journal of the World Universities Forum*. 3(4):147-164.

Bello-Bravo, J., F. Seufferheld, L. D. Steele, T. Agunbiade, D. Guillot, G. Cutz, & B. R. Pittendrigh. 2011. Scientific Animations without Borders: an international online approach for building applicable scientific educational materials for use on cell phones, portable devices, and the Internet in developing nations. *The International Journal of Science in Society*. 2.4: 49-62.

Blair M.W., A.C. Fernandez, F. Pedraza, M.C. Muñoz-Torres, N. Sella Kapu, K.M. Brown, J.P. Lynch. 2011. Parallel sequencing of ESTs from two cDNA libraries for high and low phosphorus adaptation in common beans. *The Plant Genome* 4 (3): 1-14.

Burton A.L., M Williams, J.P. Lynch, K.M. Brown. RootScan: Software for high-throughput analysis of root anatomical traits. *Plant and Soil*. In press.

Butler, L.M. & R.E. Mazur. 2007. "Principles and Processes for Enhancing Sustainable Rural Livelihoods: Collaborative Learning in Uganda" *International Journal of Sustainable Development & World Ecology* 14(6):604-617.

Cevdet and, Gökgöz. 2007. Effects of traditional cooking methods on some antinutrients and in vitro protein digestibility of dry bean varieties (*Phaseolus vulgaris* L.) grown in Turkey. *International Journal of Food Science & Technology* 42 (7), 868–873.

Dannon, E., Tamò, M., Huis, A., Dicke, M. 2010. Functional response and life history parameters of *Apanteles taragamae*, a larval parasitoid of *Maruca vitrata*. *BioControl*, 55: 363-378.

Dannon, E., Tamò, M., Huis, A., Dicke, M., 2010. Effects of volatiles from *Maruca vitrata* larvae and caterpillar-infested flowers of their host plant *Vigna unguiculata* on the foraging behavior of the parasitoid *Apanteles taragamae*. *J Chem Ecol.* 2010 Oct; 36(10):1083-91. Epub 2010 Sep 15.

Ganyo, K.K., Tounou, A.K., Agboton, C., Dannon, E.A., Pittendrigh, B.R., and M. Tamo. Interactions between the aphid parasitoid *Lysiphlebus testaceipes* Cresson (Hymenoptera: Aphidiidae) and its hyperparasitoid *Syrphophagus africanus* Gahan (Hymenoptera: Encyrtidae). *International Journal of Tropical Insect Science*. In press.

Gassmann, A.J., Onstad D. W. and B. R. Pittendrigh. 2009. Evolutionary Analysis of Herbivorous Insects in Natural and Agricultural Environments. *Pest Manag. Sci.* 65(11): 1174 – 1181.

Henry, A, P Kleinman, JP Lynch. 2009. Phosphorus runoff from a phosphorus deficient soil under common bean (*Phaseolus vulgaris* L.) and soybean (*Glycine max* L.) genotypes with contrasting root architecture. *Plant and Soil* 317:1-16.

Henry, A, JC Rosas, JS Beaver, JP Lynch. 2010. Root architectural multilines: effects on resource acquisition under stress and belowground competition. *Field Crops Research*, 117:209-218.

Henry, A, NF Chaves, PJA Kleinman, JP Lynch. 2010. Will nutrient-efficient genotypes mine the soil? Effects of genetic differences in root architecture in common bean (*Phaseolus vulgaris*, L.) on soil phosphorus depletion in a low-input agro-ecosystem in Central America. *Field Crops Research*, 115.1: 67-68.

International Center for Tropical Agriculture (CIAT). 2008. "The impact of improved bush bean varieties in Uganda." *Highlights - CIAT in Africa*. No. 43. Kampala, Uganda.

Kimetu, J.M., J. Lehmann, S.O. Ngoze, D.N. Mugendi, J.M. Kinyangi, S. Riha, L. Verchot, J.W. Recha and A.N. Pell. 2008. Reversibility of soil productivity decline with organic matter of differing quality along a degradation gradient. *Ecosystems* 11: 726–739.

Lukac RJ, Aluru MR, Reddy MB. 2009. Quantification of ferritin from staple food crops. *J Agric Food Chem.* 57:2155-61.

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Reyes, Byron. 2011. "Economic Impact Evaluation of Improved Bean Varieties in Central America." Presentation made at the Symposium "Diminishing Latin America's Inequalities: Land, Food and Human Health Strategies" April 2011.

Professional Recognition, Awards, and Accomplishments

Bernsten, Richard: In April 2011 Richard Bernsten (co-PI of this project) received The Ralph H. Smuckler Award for Advancing International Studies and Programs at MSU. The award recognizes and rewards a faculty member each year for his/her significant and lasting impact on the advancement of international scholarship, teaching, and public service.

Ojwang, Leonard: Leonnard Ojwang, PhD candidate, Texas A&M University. Best graduate research award. Presented at American Association of Cereal Chemists International annual meeting, Palm Springs, CA, October 15 – 18. Title of presentation: Anti-inflammatory properties of cowpea phenotypes with different phenolic profiles.

Published Abstracts

Archana Gawde, B. B. Singh, J. Ehlers, J. M. Awika. 2011. Associating *Vigna unguiculata* phenotypes with composition of bioactive compounds. CFW, 56, A41-A42.

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VALUE CHAIN CITATIONS LIST FOR ALL YEARS

Dolito Longanemio. 2011. Feijao manteiga e oportunidades de Mercado. MP4 film. Ministry of Agriculture, Agricultural Market Information System (SIMA).

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Chaves, Estevao. 2011. Interdependência dos Preços de Feijão-Vulgar entre Cinco dos Principais Mercados em Moçambique. (Interdependence of common bean prices among markets in Mozambique). MS Thesis for University of Vicosa, Brazil.

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Paulino, Artur. 2011. "Potencial comercial de feijão macunde em Angola" (Commercial potential for Cowpeas in Angola). B.S. Thesis for University Jose Eduardo dos Santos, Angola.

Samboko, Chimuka. 2011. [An Assessment of Factors Influencing the Profitability of Bean Production in Zambian](#). B.Sc. Thesis, Department of Agricultural Economics, University of Zambia.

Sunga, Chalwe. 2011. [Market Information in the Bean and Cowpea Supply Chain in Zambia](#). B.Sc. Thesis, Department of Agricultural Economics, University of Zambia.

Zulu, Esther. 2011. [Profitability of Smallholder Cowpea Production in Zambia](#). B.Sc. Thesis, Department of Agricultural Economics, University of Zambia.

Professional Recognition, Awards, and Accomplishments

Bernsten, Richard: In April 2011, PI Richard Bernsten received The Ralph H. Smuckler Award for Advancing International Studies and Programs at MSU, The award recognizes and rewards a faculty member each year for his/her significant and lasting impact on the advancement of international scholarship, teaching, and public service

Findeis, Jill: Jill Findeis was named University Distinguished Professor at Penn State.

Impact Assessment Citation List

Maredia, M.K. 2011. M&E and Impact Evaluation of Agricultural Research: Challenges and Best Practices. Presentation made at the USAID/USDA/APLU organized “Feed the Future” Planning Workshop, Purdue University, January 12-13, 2011.

Reyes, Byron. 2011. “Economic Impact Evaluation of Improved Bean Varieties in Central America.” Presentation made at the Symposium “Diminishing Latin America’s Inequalities: Land, Food and Human Health Strategies” April 2011.

Professional Recognition, Awards, and Accomplishments

Bernsten, Richard: In April 2011 Richard Bernsten (co-PI of this project) received The Ralph H. Smuckler Award for Advancing International Studies and Programs at MSU, The award recognizes and rewards a faculty member each year for his/her significant and lasting impact on the advancement of international scholarship, teaching, and public service.