# LIST OF SCIENTIFIC PUBLICATIONS BY RESEARCH SCIENTISTS OF

# CSIR = CROPS RESEARCH INSTITUTE

(1995 - 2020)



Volume 1 ( 1995 - 2010 )

Compiled by:

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### **PREFACE**

This compilation covers lists of Refereed Journal Papers, Conference Papers, Technical Reports, Books, Book Chapters, Newsletter articles, Production/Training Guides and Manuals, Research Briefs and others authored by Research Scientists of CSIR-Crops Research Institute (CSIR-CRI) and other collaborating scientists, from their research findings. It may not be a complete list but "Half a loaf is better than none".

For some of the Refereed Journal Papers the authors initially indicated that the manu scripts had been submitted to a Journal for publishing. Some were later found published and it is expected that the others may be found later. For some published journal papers the volume number and pages of the Journal cited were not indicated. In some cases only the list of authors, year and title were found. All these have been listed so that if the authors can be identified and located (possibly at conferences and other meetings or at CSIR-CRI) they may be consulted for the desired publication.

The Technical Reports listed include reports on donor-supported programmes, consultancies and reports submitted to the National Variety Release and Registration Committee, prior to the release of improved crop varieties developed at CSIR-CRI. Some Research reports submitted internally to the Director of CSIR-CRI as Annual Reports by the Research Scientists have also been listed.

Minimum editing was done during the compilation to avoid misrepresentation. For example for the same conference, details of the date and location varied among some participants. Effort was made to minimise duplication. For example where a conference paper was later published as a refereed journal paper the latter is listed with a note indicating where it had earlier been presented as a conference paper.

Among the Authors listed the names of the Research Scientists of CSIR-CRI are in **bold** letters for easy identification. If any of such names is not in bold letters it may be due to oversight. Some research scientists who had left the Institute but were co-authors with their colleagues at the .Institute have also been listed as CSIR-CRI staff for convenience.

It is expected that this work shall encourage research scientists to get their research findings published to debunk the old time notion that *research findings are gathering dust on the shelves*. Thus the contribution of CSIR-CRI Research Scientists to agricultural development globally, and in Ghana in particular, cannot be overlooked.

# **ACKNOWLEDGEMENT**

To God be the glory for endowing us with good health, wisdom and the spirit of persistence and cooperation needed to undertake this exercise.

The support from Professor M.B. Mochiah, Director of CSIR-Crops Research Institute, that made the dream a reality, is very much appreciated.

The kind gesture of all research scientists who voluntarily provided a list of their scientific publications is also appreciated.

The support from Mrs Lawrencia Donkor and Mr. Ransford Asamoah is also greatly appreciated.

# **OBJECTIVES**

This work was done with the following objectives:

- a. To make known the contribution to global Body of Knowledge by Research Scientists of CSIR-CRI, particularly in the area of Agricultural Research.
- b. To serve as a reference and a guide to "new and young" research scientists at CSIR-CRI and elsewhere, as to research activities (Titles) that have been carried out at the Institute, the scientists (Authors) who did the work, when (Year) the work was done and how the findings or results have been disseminated. This may help to identify areas for further investigations while avoiding "re-inventing the wheel" with limited resources.
- c. To make known the extent of collaboration between Research Scientists of CSIR -CRI and other Institutions (local and international) as reflected in the authorship of the various publications.
- d. To make known the communication channels / media used by CSIR-CRI research scientists to share and disseminate their research findings. Apart from the usual scientific publications (Refereed Journal Papers, Conference papers, etc) CSIR-CRI scientists occasionally organised programmes with Radio (FM) stations where research findings were disseminated. The scientists also gave lectures during training programmes organised for students and front line staff of the Ministry of Agriculture. Other channels of dissemination used by CSIR-CRI (not listed) include exhibitions attended to showcase research products and field demonstrations held with extension workers and farmers throughout the country.

# CSIR-CRI SCIENTIFIC PUBLICATIONS (1995 – 2010) 1995 PUBLICATIONS

#### **Refereed Journal Papers**

**Aflakpui, G.K.S.** (1995). Some Uses/Abuses of Statistics in Crop Experimentation. *Tropical Science 35: 347-353.* 

Morrison, I.M., **Asiedu, E.A.**, Stuchbury, T. and Powell, A.A. (1995). Determination of *Lignin* and *Tannin* Contents of Cowpea Seed Coats. *Annals of Botany*, *76*, *287-290*.

**Nkansah, G.O.** and Ito, T. (1995). Comparative studies on growth and development of heat tolerant tomato plants grown at different root-zone temperatures. *Journal of Japanese Society for Horticultural Science, Vol. 62 (4): 773-778.* 

**Nkansah, G.O.** and Ito, T. (1995). Comparison of mineral absorption and nutrient composition of heat-tolerant and non-heat-tolerant tomato plants grown at different root-zone temperatures. *Journal of Horticultural Science, Vol. 76 (3):453-460*.

**Sagoe, R.** and Osafo, D.M. (1995). Seedling Emergence of Two Soyabean Varieties under Different Management Systems. *Tropical Oilseeds Journal 2: pp. 28-36.* 

Sallah, P.Y.K., Badu -Apraku, B. and Twumasi-Afriyie, S. (1995). Comparison of Intermediate and Full-Season Maize Varieties for Grain Productivity in Ghana. *Legon Agric. Res. & Ext. J.* 4, 61-68.

Shoyinka, S.A., Thottappilly, G., Adebayo, G.G. and **Anno-Nyako, F.O.**, (1995). Survey of Cowpea Virus Incidence and Distribution in Nigeria. *International Journal of Pest Management, 1997, 43, 2, 127-132.* (Similar title was presented at the 2nd World Cowpea Research Conference held at the Accra International Conference Center, Accra, Ghana. September 4-8, 1995).

#### Conference Papers / Abstracts / Posters

**Adu-Dapaah, H.K.** and Asare, E.O. (1995). Cocoa pod ash as a source of potash fertilizer. In: *Proceedings of Seminar on Organic and Sedentary Agriculture. Accra, Ghana. November 1-3,* 1995. Pp 157 – 163. (Akita, V., Schodder, P. and Bemile, S.K., Eds).

**Adu-Dapaah, H.K.** and Asare, E.O. (1995). Response of Maize to Cocoa Pod Ash and Muriate of Potash. In: *Proceedings of a Regional Maize Workshop. IITA, Cotonou, Benin Republic. May 29 - June 2, 1995. (Badu-Apraku, B., Akoroda, M.O., Ouedraogo, M. and Quin, F.M., Eds.).* 

**Adu-Tutu K., Boa-Amponsem, K.** and **Bolfrey-Arku, G.** (1995). No-till Planting with Glyphosate Dry Formulation in Ghana. *Agronomy Abstracts: Division A-6, p. 45. American Society of Agronomy, Crop Science Society of America, Soil Science Society of America 1995 Annual Meetings. St. Louis, Missouri. (Similar title presented at the 2nd National Workshop on Food and Industrial Crops, Kumasi. October 24-26, 1995).* 

**Afun, J.V.K.**, Heinrichs, E.A., Johnson, D.E. and Russell-Smith, A. (1995). The influence of weeds in the natural control of upland rice insect pests in Cote d'Ivoire. *Brighton Crop Protection Conference – Weeds; 1995. pp. 181-186.* 

**Anchirinah, V.M., Apau, A.O.** and **Dankyi, A.A.** (1995). Seed Marketing. *Paper presented at the Seed Technology Training Course for Beninois, July 10-22, 1995.* 

Anno-Nyako, F.O., Owusu-Akyaw, M. and Twumasi, J.K. (1995). The Incidence of Rice Yellow Mottle Virus (RYMV) in some major Rice Producing Areas of Ghana. Paper presented at the 2<sup>nd</sup> National Workshop on Food and Industrial Crops. KTI, Kumasi, Ghana. October 24-26, 1995. (Similar title presented at the 5<sup>th</sup> Rice IPM Task Force Meeting at WARDA, Bouake, Cote d'Ivoire in 1996).

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Asafo-Adjei, B., Atuahene-Amankwa, G., Ennin-Kwabia, S., Adu-Dapaah, H.K., Hossain, M.A. and Soza, R.F. (1995). Grain Legumes Research and Production in Ghana. *In Agronomy Abstracts, Crop Science Society of America. pp. 45*.

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**Asafu-Agyei, J.N.** (1995). The Role of Legumes in Soil Fertility Improvement. Technological Interventions to Improve Soil Fertility. *Proc. Seminar on Organic and Sedentary Agriculture organized by Ministry of Food and Agriculture, Ghana and Deutsche Gesellschaft furTechnische Zusammenarbeit. Accra, Ghana. November 1-3, 1995. (Akita, V., Schroder, P., Bemile, S.K., Eds.)* 

Asafu-Agyei, J.N., Ahenkora, K., Banful, B. and Ennin-Kwabiah, S. (1995). Sustaining food production in Ghana: The role of cereal/legume-based cropping system. In: *Proc. Regional Workshop on Technology Options and Transfer Systems for Sustainable Agricultural Production in Sub-Saharan Africa, Cote d'Iviore, pp. 409-416.* (Bezuneh, T., Emechebe, A.M., Sedgo, J. and Ouedraogo, M., Eds).

**Ashun, M.D.** and Asante, B. (1995). *In vitro* conservation efforts in the Department of Botany, University of Ghana, Legon. *Paper presented at a Symposium organised by Ghana Academy of Arts and Sciences on Production of seed yam and propagales of other vegetatively propagated crops.* 

**Boa-Amponsem, K., Aflakpui, G.K.S., Asafo-Adjei, B.**, Hossain, M.A. and Soza, R.F. (1995). The On-farm Research Experience of the Ghana Grains Development Project (GGDP). *Agronomy Abstracts: Division A-5, p.45. American Society of Agronomy, 1995 Annual Meetings. St. Louis, Missouri. October 29 - Nov. 3, 1995.* 

**Bolfrey-Arku, G.E.** (1995). Stubble Mulching for Weed Control in Maize. In: Sedentary Agriculture by Organic Farming. *Proceedings of Seminar on Organic and Sedentary Agriculture. STEPRI, CSIR, Accra, Ghana. June 1-3, 1995. pp. 112-122. (Akita, V., Schroder, P. and Bemile, S.K., Eds).* 

**Dankyi, A.A., Anchirinah, V.M.** and **Apau, A.O.** (1995). The Agricultural Policies of the Industrial Countries and the Need for Efficient Production in the Third World. *Paper presented at the Second National Workshop on Food and Industrial Crops. Kumasi Technical Institute, Kumasi, Ghana. October 24-26, 1995.* 

**Dankyi, A.A., Anchirinah, V.M., Apau, A.O.** and Asuboteng, K.O. (1995). Survey of Female Rice Farmers in the Volta Region of Ghana. *Paper presented at 1<sup>st</sup> Scientific Workshop of the Inland Valley Consortium. WARDA, Bouake. November 6-10, 1995*.

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Okai, E., Kissiedu, A.F.K., Otoo, J.A., Afuakwa, J.J., Asare-Bediako, A., Missah, A., Sagoe, R., Okoli, O.O. and Dixon, A.G. (1995). Yield Evaluation of Cassava Clones in Ghana using the Additive Main effect and Multiplicative Interaction (AMMI) Model. In: *Proc. Sixth Triennial Symposium of the International Society for Tropical Root Crops (ISTRC) - Africa Branch (AB). Lilongwe, Malawi. October 22-28, 1995. Pp. 231-235. (Akorada, M.O. and Ekanayake, I.J., Eds).* 

Opoku Asiama and **Owusu, E.O.** (1995). Effect of a Pest Complex of *Nesidiocoris tenuis, Bemisia tabaci* and Tomato Leaf Curl Virus on Growth and Yield of Tomato. *Paper presented at the 15<sup>th</sup> West African Science Association Conference in collaboration with the Ghana Science Association. University of Cape Coast, Ghana. Sept. 17-22, 1995.* 

**Osei-Bonsu, P.** (1995). Experience with zero tillage with roundup in the Transition zone. In: *Proceedings of Seminar on Organic and Sedentary Agriculture, held in Accra. Nov. 1-3, 1995.* (Akita, V., Schroder, P., Bemile, S.K., Eds).

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**Otoo, E.** and Asubonteng, K.O. (1995). Reconnaissance characterization of Inland Valleys in Southern Ghana. *Paper presented at the*  $1^{st}$  *Scientific Workshop of the Inland Valley Consortium. WARDA, Bouake.* 1995.

- **Otoo, J.A.** (1995). Multiplication of Root and Tuber Crops and other Vegetatively Propagated Crops. (*Invited paper*). GAAS/GAEC/CSIR National Symposium on Propagation of seed yam and other vegetatively propagated crops. Kwabenya, Accra.
- **Otoo, J.A.** et. al. (1995). Performance in Ghana (West Africa) of sweetpotato varie ties bred and selected in East and Southern Africa Environments. *Paper presented at the 6<sup>th</sup> TriennialSymposium of ISTRC-AB, Lilongwe, Malawi. October 22-28, 1995.*
- **Otoo, J.A.**, Al-Hassan, R., **Kissiedu, A.F.K.** and Alhassan, A.Y. (1995). Impact of Market Force s on Cassava Production in Ghana: Implication for Research. *Paper presented at the 6<sup>th</sup> Triennial Symposium of ISTRC-AB. Lilongwe, Malawi. October 22-28, 1995.*

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**Peprah, S.A.** and **Amankwatia, Y.O**. (1995), Growing yams on live stakes. *Paper presented at the Second National Workshop on Food and Industrial Crops. Kumasi, Ghana. October 24-26, 1995*.

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**Twumasi, J.K.** (1995). The Grain Discoloration Syndrome of Rice in Ghana. *Paper presented at the Fourth annual meeting of West Africa Rice Development Association Integrated Pest Management Task Force. Bouake, Cote d'Ivoire. March 15-17, 1995* 

**Twumasi, J.K.** and **Adu-Tutu, K.O.** (1995). Weeds and fungal diseases of rice in selected inland valleys in Ghana. *Paper presented at the Fourth annual meeting of WARDA IPM Task Force. Bouake, Cote d'Ivoire. March 15-17, 1995.* 

**Twumasi-Afriyie, S., Sallah, P.Y.K., Owusu -Akyaw, M., Ahenkora, K.,** Soza, R.F., Haag, W., **Dzah, B.D.**, Okai, D.B. and Akuamoah-Boateng, A. (1995). Development and promotion of quality protein maize in Ghana. In: *Contributing to food self-sufficiency: Maize Research and Development in West and Central Africa. Proceedings of a Regional Maize Workshop. IITA, Cotonou, Benin. May 29 - June 2, 1995. pp. 140-148. (Badu-Apraku, et al., Eds.).* 

#### **Technical Reports**

Ahenkora, S., Akpalu, E., Kerr, J., **Marfo, K.A.**, Izen-Appiah, F. (1995). Gender and the implementation of structural adjustment in Africa: Examining the micro-meso-macro linkages – The Ghana study. *Report on a Research Study under the Structural Adjustment and Gender in Africa (SAGA) Initiative, Canadian International Development Agency.* 

**Asafu-Agyei, J.N.** (1995). The Status of Cowpea Research and Development Work in Ghana. A Review of Research Work on Cowpea in Ghana. *Crops Research Institute, CSIR, Kumasi, Ghana. 24pp.* 

Dankyi, A.A., Anchirinah, V.M., Apau, A.O., Ansere-Bioh, F. and Asafo-Adjei, B. (1995). The Diffusion and

Impact of Cowpea Technologies in Ghana. A Survey Report.

Dankyi, A.A., Anchirinah, V.M., Apau, A.O., Ansere-Bioh, F. and Asafo-Adjei, B. (1995). Soybean Production, Marketing and Utilization in Ghana. *An Informal Survey Report*.

Gerner, H., Asante, E.O., Owusu-Bennoah, E. and Marfo, K.A. (1995). Ghana fertilizer privatization scheme: Private sector roles and Public sector responsibilities in meeting the needs of farmers. Fertilizer Sector Studies in Africa Vol. 5. International Fertilizer Development Center, Muscle Shoals, Alabama.

**Hemeng, O.B., Asafo-Adjei, B., Otoo, E.** and **Banful, B**. (1995). Mid Term Review of NARP Special projects. *Report submitted to the National Agricultural Research Project (NARP) Secretariat, CSIR, Accra. 27 pp.* 

**Hemeng, O.B.**, Oduro, K.A., Ofori, I. and **Banful, B.** (1995). Plantain Production in Ghana. *Final Report on a Field Survey submitted to National Agricultural Research Project (NARP) Secretariat, CSIR, Accra, Ghana. 63 pp.* 

Kasei, C.N., Mercer-Quarshie, H. and **Sallah, P.Y.K.** (1995). Identifying Probable Dry Periods in Maize Production under a Monomodal Rainfall Regime in Northern Ghana. In: Contributing to Food Self-sufficiency: Maize Research and Development in West and Central Africa. Proceedings of a Regional Maize Workshop. IITA, Cotonou, Benin. May 29 - June 2, 1995, pp. 255-263. (Badu-Apraku, et al., Eds.).

Marfo, K.A., Ntow Afua, Ohemeng-Dapaah, S. and Osei-Yeboah, S. (1995). Socio-Economic Survey of Farming Systems in Ghana.

**Owusu-Akyaw, M.** and **Afun, J.V.K.** (1995). Towards Environmentally -safe Control of Cowpea, Maize and Rice Insect Pests. *Document submitted to National Agricultural Research Programme (NARP) Secretariat, CSIR, Accra. (To be considered for the Best National Agricultural Research Award, 1995; 81 pages).* 

**Peprah, S.A.** (1995). Effects of planting sequence and time on yields in cowpea/cassava intercrop systems. *Annual Report submitted to the Director of CRI, Kumasi.* 

Safo-Kantanka, O., Owusu-Nipah, J., Aquistucci, R., Osei Minta, M., **Aubyn, A.** and Quansah, C. (1995). Contribution to the Understanding of Cooking Quality of Cassava (*Manihot esculenta* L. Crautz).

**Twumasi, J.K.** (1995). Survey Report on the Identities, Importance, Distribution, Control/Management Options of Diseases Affecting Vegetable Production in Brong-Ahafo Region of Ghana – Dry season 1994, and major (wet) season, 1995.

**Twumasi-Afriyie, S.** and **Owusu-Akyaw, M.** (1995). Achievements of Crops Research Institute. *Information compiled for the Director, Crops Research Institute. Kumasi. February,* 1995.

#### Handbooks / Manuals

**Adu-Mensah, J**. (1995). Insect and Mite Pests of Root and Tuber Crops. *CRI Crop Management Research Training Guide*. *No. 58. CRI, Kumasi, Ghana*.

**Afuakwa, J.J.** (1995). Root Crops Improvement. *CRI Crop Management Research Training Guide, No. 56. CRI, Kumasi, Ghana.* 

**Anno-Nyako, F.O.** (1995). Important Virus Diseases of Some Legumes in Ghana and their Control. *CRI Crop Management Research Training Guide*. *CRI, Kumasi, Ghana*.

**Anno-Nyako, F.O.** (1995). Important Virus Diseases of Some Root and Tuber Crops in Africa . *CRI Crop Management Research Training Guide, No. 66. CRI, Kumasi, Ghana.* 

**Asafu-Agyei, J.N.** and **Asare-Bediako, A.** (1995). Cropping Systems and Sustainable Agricultural Production. *CRI Crop Management Research Training Guide. CRI, Kumasi, Ghana.* 

**Bolfrey-Arku, G.** and **Adu-Tutu, K.O.** (1995). Weed Management in Root and Tuber Crops. *CRI Crop Management Training Guide. No. 57. CRI, Kumasi, Ghana.* 

**Osei-Bonsu, P.** (1995). Past and Present links between Agricultural Research and Production. *Training manual updated annually for the Annual Soil and Water Management Course held in Kumasi (from 1995 to 2000).* 

**Sagoe, R.** (1995). Agronomy of Cocoyam. *CRI Crop Management Research Training Guide. No. 3. (Ashiamah, S.R.K. and Ansah, I.O.O., Eds).* 

**Sallah, P.Y.K**. and **Twumasi-Afriyie, S**. (1995). Development and Seed Production of Open-Pollinated Maize Variety. *CRI Crop Management Research Training Guide No.48. CRI, Kumasi.* 40 pp.

**Twumasi, J.K.** (1995). Diseases of Root and Tuber Crops. *CRI Crop Management Research Training Guide. CRI, Kumasi, Ghana.* 

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# **1996 PUBLICATIONS**

#### **Refereed Journal Papers**

**Aflakpui, G.K.S.** (1996). Constant temperatures and the rate of seed germination in maize (*Zea mays* L.) of contrasting endosperms. *Ghana Journal of Agricultural Science 1996, 29 (2) 33-38.* 

Ahenkora, K., Kyei, M.A., Marfo, K.A. and Banful, B. (1996). Nutritional composition of false horn (*Apantu pa*) plantain during ripening and processing. *African Crop Science Journal, Vol. 4. No.2: 243-247.* 

**Asafu-Agyei, J.N., Marfo, K.A.** and **Ahenkora. K.** (1996). Sustaining Cassava Production in Ghana: Future Prospects. *Submitted to West African Farming Systems Research Network (WAFSRN) Journal, P.M.B.* 1044, ABU, Zaria, Nigeria.

**Asiedu, E.A.** and Powell, A.A. (1996). Comparison of the storage potential of cultivars of cowpea (*Vigna unguiculata*) differing in seed coat pigmentation. *Seed Science and Technology*, 26, 211-221.

Carson, A.G. and **Otoo, E.** (1996). Application of Soil Solarization to Control Root Knot Nematodes and Weeds in Transplanted Tomato. *Ghana Journal of Agricultural Science. Vol. 29. Part 2. pp 91-98.* 

Sarfo-Kantanka, O., Quansah, C. and **Aubyn, A**. (1996). Effects of mulching on the yield and cooking quality of cassava (*Manihot esculenta* L. *Crantz*). Submitted to Journal of University of Science and Technology.

#### **Newsletter Publications**

**Osei-Bonsu,** P., Buckles, D., Soza F.R., and **Asibuo J.Y.** (1996). Traditional food uses of *Mucuna pruriens* and *Canavalia ensiformis* in Ghana. *ILEIA Newsletter* 12 (2) pp. 30-31.

**Osei-Bonsu, P.**, Buckles, D., Soza, F.R. and **Asibuo, J.Y.** (1996). Edible Cover Crops. *ILEIA Newsletter for Ecologically Sound Agriculture. ILEIA Leusden, The Netherlands.* 

#### **Conference Papers/Abstracts**

**Adu-Mensah, J.** (1996). Biological control of variegated grasshoppers (*Zonocerus variegatus*): The use of fungal pathogens.

**Adu-Tutu, K.O., Bolfrey-Arku, G.** and **Kwarteng, A.Y**. (1996). A Survey of Weeds in Rice Fields in Southern Ghana. *Paper presented at the 5<sup>th</sup> Annual Meeting of WARDA Integrated Pest Management Task Force. Bouake, Cote d'Ivoire. March 20-22, 1996.* 

**Aflakpui, G.K.S.**, Gregory, P.J. and Froud-Williams, R.J. (1996). Germination of *Striga hermonthica* seed at constant temperatures. In: *Advances in Parasitic Plant Research. Direccion General de Investigacion Agraria, Cordoba, Spain. pp 434-440.* (*Moreno, M.T., Cubero, J.I., Berner, D., Joel, D., Musselman, L.J. and Parker, C., Eds*).

**Anchirinah, V.M.** (1996). Participation in Research: A new fashion or a needed change? *Paper presented at a seminar at Crops Research Institute, Kumasi.* 

**Asafo-Adjei, B.,** Marfo, K.O. and **Adu-Dapaah, H.K.** (1996). Groundnut Production Constraints in Ghana. A challenge to research. *Paper presented at the 5<sup>th</sup> Regional Workshop on Groundnut for West and Central Africa. Accra, Ghana. November, 1996.* 

**Bolfrey-Arku, G. E-K.** (1996). Farming systems in the Coastal Savannah Zone of Ghana. Paper presented at the International Training Course on Farming Systems Development. Feldafing and Witzenhausen, Germany. April 3 – May 2, 1996.

**Dartey, K.** (1996). Screening for Drought Tolerant Rice Varieties for Rainfed Lowlands. Report presented at the West African Lowland Rice Breeders Task Force Meeting. Bouake, Cote d'Ivoire.

**Dartey, K.** (1996). Screening of Rice Varieties for Tolerance to the African Rice Gall Midge. Report presented at the West African Lowland Rice Breeders Task Force Meeting. Bouake, Cote d'Ivoire.

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# 2010 PUBLICATIONS

# Refereed Journal Papers

**Afriyie-Debrah, C.**, Obiri-Danso, K. and Ephriam, J.H. (2010). Effect of Acid Mine Drainage on Creeks or Streams in a Mining Community in Ghana and Treatment Options. *International Journal of Environmental Science and Development, Vol.1, No.5, December 2010. ISSN: 2010-0264.* (Similar title was presented at the International Conference on Environmental Engineering and Applications (ICEEA 2010). 978-1-4244-8620-5/10/\$26.00 ©2010 IEEE pp 285 – 290).

Antwi, C., Osafo, E.L.K., Fisher, D.S., Yacout, H.M., Hassan, A.A. and **Adu-Dapaah, H**. (2010). Storage practices and their effect on nutrient and haulm availability of four dual-purpose cultivars of cowpea (<u>Vigna unguiculata</u> (L).Walp) haulm. *Ghanaian Journal of Animal Science*, 5(2): 32-40.

**Asante, M.D.**, Kovach, M., Huang, L., Harrington, S., **Dartey, P.K.**, Akromah, R., Semon, M. and McCouch, S. (2010). The genetic origin of fragrance in NERICA 1. *Molecular Breeding (3)* 26, 419 -424. (online). DOI 10.1007/s11032-009-9382-8. PDF.

**Asibuo, J.Y.**, He, G., Akromah, R., Safo-Kantaka, O., **Adu-Dapaah, H.K.** and **Quain, M.D.** (2010). Genetic diversity of groundnut botanical varieties using simple sequence repeats. *Aspects of Applied Biology 96: 375-379.* 

**Badu-Apraku, B.**, Menkir, A., Ajala, S.O., Akinwale, R.O. Oyekunle, M. and **Obeng-Antwi, K.** (2010). Performance of tropical early-maturing maize cultivars in multiple stress environments. *Canadian Journal of Plant Science* (90): 831-852.

Baidoo, P.K., **Mochiah, M.B.** and **Owusu-Akyaw M.** (2010). Levels of infestation on three different portions of maize cob by the weevil, *Sitophilus zeamais* (Motshulsky). *Journal of Science and Technology, Vol. 30 (3): 21 -26.* 

Baidoo, P.K., **Mochiah, M.B.** and **Owusu-Akyaw, M.** (2010). The effect of time of harvest on the damage caused by the cowpea weevil, *Callosobruchus maculatus* (Fab.) (Coleoptera: bruchidae). *Journal of Stored Products and Postharvest Research, Vol. 1 (13): 24-28*.

**Berchie J.N.**, Sarkodie-Addo J., **Adu-Dapaah H., Agyemang, A., Addy, S.**, Asare, E. and **Donkor, J.** (2010). Effect of Seed Priming on Seedling Emergence and Establishment of Four Bambara Groundnut (*Vigna subterranean* L. Verdc) Landraces at the CSIR-Crops Research Institute, Fumesua-Kumasi, Ghana. *Journal of Agronomy. 9 (4): 180 -183. ISSN 1812-5379: 4 pp.* 

- Berchie J.N., Sarkodie-Addo J., Adu-Dapaah, H., Agyeman, A., Addy, S., Asare, E. and Donkor, J. (2010). Yield Evaluation of Three Early Maturing Bambara Groundnut (*Vigna subterranean* L. Verdc) Landraces at the CSIR-Crops Research Institute, Fumesua-Kumasi, Ghana. *Journal of Agronomy. 9 (4):175-179. ISSN 1812-5379: 5 pp.*
- Berchie, J.N., Adu-Dapaah, H.K., Dankyi, A. A., Plaha, W.A., Nelson Quartey, F., Haleegoah, J., Asafu-Agyei, J.N. and Addo, J.K. (2010). Practices and Constraints in Bambara Groundnuts Production, Marketing and Consumption in the Brong-Ahafo and Upper East Regions of Ghana. *Journal of Agronomy*, 9 (3) 111 118.
- **Braimah, H.** and Van Emden, H.F. (2010). Prospects and Challenges for Sustainable Management of the Mango Stone Weevil, (*Sternochetus mangiferae*) (F). (Coleoptera: Curculionidae) in West Africa: A Review. *International Journal of Pest Management, 56 (2) 91-101.*
- Derkyi, N.S.A., Acquah, S.O. and **Owusu-Akyaw, M.** (2010). Bioactivity of Some Natural Products against the Cowpea Storage Weevil, (*Callosobruchus maculatus* L.). *Int. J. Biological Chemistry Science, 4* (3): 616-623.
- **Dzomeku, B.M.,** Armo-Annor, F. and Adjei –Gyan, K. (2010). Smallholder farmers' attitude towards biotechnologically developed *Musa* hybrids in Ghana. *Aspects of Applied Biology,* 96: 225-231.
- Oladele, O.I., **Bam R.K.**, Buri, M.M. and Wakatsuki, T. (2010). Missing Pre -requisites for Green Revolution in Africa: Lessons and Challenges of Sawah Ecotechnology Development and Dissemination in Nigeria and Ghana. *Jnl. of Food, Agriculture and Environment, Vol. 8(2):* 1014 1018.
- **Osei, K.**, Fenning, J.O., Gowen, S.R. and Jama, A. (2010). The Potential of Four Non-traditional Legumes in Suppressing the Population of Nematodes in Two Ghana ian Soils. *Journal of Soil Science and Environmental Management*, 1 (4) 63-68.
- **Osei, K.** Gowen, S.R., Pembroke B., Bradenburg R.L. and Jordan D.L. (2010). Potential of Leguminous cover crops in management of a mixed population of rootknot nematodes (*Meloidogyne* spp). *Journal of Nematology*, 42(3) 173 178. (2010).
- **Osei, M.K.,** Akromah, R., Shilh, S.L. and Green, S.K. (2010). Evaluation of some Tomato Germplasm for Resistance to Tomato Yellow Leaf Curl Virus disease (TYLCV) in Ghana. *Aspects of Applied Biology, Vol. 96, pp. 315 323.*
- Osei, M.K., Banful, B., Osei, C.K. and Oluoch, M.O. (2010). Morphological Characterization of Some African eggplants in Africa. *Journal of Agricultural Science and Technology, Vol.4 Number 3. pp. 33-37.*

**Otoo, E.** (2010). Farmer Participatory Breeding – The Foster Parent in the Breeding of Dioscorea spp in Ghana. Journal of Agricultural Science and Technology. USA. (SPPSSD Ps 1-29). (Similar title was presented at a Workshop on New Approaches to Plant Breeding of Orphan Crops in Africa. Bern, Switzerland. September 19 - 21, 2007).

Quain, M.D., Adofo-Boateng, P., Dzomeku and Agyeman, A. (2010). Multiple Shoot Generation Media for *Musa sapientum* L. (False Horn, Intermediate French Plantain and Hybrid Tetraploid French Plantain) Cultivars in Ghana. *The African Journal of Plant Science and Biotechnology*, 4: 102-106.

Quain, M.D., Dzomeku, B.M., Thompson, R., Asibuo, J.Y., Boateng, P.A. and Appiah-Kubi, D. (2010). Genetic Diversity of Elite *Musa* Cultivars and Introduced Hybrids in Ghana using SSR Markers. *Aspects of Applied Biology, 96: 277-281*.

Quain, M.D., Thompson, R., Omenyo, E.L., Asibuo, J.Y., Appiah -Kubi, D., Adofo-Boateng, P. (2010). Assessing transferability of sweetpotato EST SSR primers to cocoyam and micropropagation of nine elite cocoyam varieties in Ghana. *Aspects of Applied Biology, 96: 269-276.* 

**Tengan, K.M.L.,** Akromah, R., **Obeng-Antwi, K.** and **Agyeman, A.** (2010). Enhancing the Nutritional Status of "Okomasa", a Normal Open Pollinated Maize Variety Using the Backcross Approach. <u>www.ijsat.com</u> *Vol.* 1 (8) October, 2011.

Tschakert, P., **Regina Sagoe**, **Gifty O-Darko** and **Samuel N.A. Codjoe** (2010). Floods in the Sahel: An analysis of anomalies, memory and anticipatory learning. *Climate Change Vol.* 103. No. 3-4, 471-502 published on line <u>www. Springerlink.com</u>

# <u>Conference Papers / Abstracts / Poster Presentations</u>

Acheampong, G.K., Bam, R.K., Annan-Afful, E. and Wakatsuki, T. (2010). Enhancing rice productivity in the Sawah system: The influence of genotype and weeding regime. *Poster presented at the 2010 Africa Rice Congress. Bamako, Mali. March 22 – 26, 2010.* 

**Acheampong, G.K., Bam, R.K., Annan-Afful, E.** and Wakatsuki, T. (2010). The Sawah Technology: A Rice Production System for Effecti ve Weed Management and Crop Productivity. *Poster presented at the 28th International Rice Research Conference. Hanoi, Vietnam. November 8 – 12, 2010.* 

**Acheampong, P.P.**, **Dankyi, A.A.**, **Adu-Dapaah**, **H., Frimpong, B.**, **Osei Adu, N.J.** and **Asante, B.O.** (2010). Cluster Initiatives in Ghana: The Way Forward for Economic Development and Poverty Alleviation. *Proceedings of the 2<sup>nd</sup> Annual Conference of the Pan African Competitiveness Forum. Elmina, Ghana. Feb. 2010.* 

**Adu-Dapaah, H.K., Addy, S.N.T.T., Lamptey, J.N.L.** and **Asibuo, J.Y.** (2010). Farmer participatory development of *Cercospora* leaf spot tolerant cowpea varieties in Ghana. *Presented at 28<sup>th</sup> International Horticultural Congress, Lisbon, Portugal.* 

**Adu-Dapaah, H.K., Addy, S.N.T.T., Asibuo, J.Y.** and **Berchie, J.N.** (2010). Current activities in Bambara Groundnut breeding in Ghana. *Abstract No. 2563; 28<sup>th</sup> International Horticultural Congress, Lisboa-Portugal, August 22-27, 2010. Genetic Resources.* 

**Adu-Kwarteng, E., Addo, J.K., Akuamoah-Boateng, M., Asamoah-Obeng, N.** and **Nyarko, F.** (2010). Root and Tuber Crop Postharvest Research in a Developing Economy. *Poster presented at the 5<sup>th</sup> African Agriculture Science Week & General Assembly of the Forum for Agricultural Research in Africa (FARA). July 19 - 24, 2010.* 

Adu-Kwarteng, E., Otoo, E., Dzomeku, B.M., Quain, M.D. and Aubyn, A. (2010). Mini-tuber Production from Yam (*Dioscorea rotundata*) Vines: Application of Cabbage Extracts. In: Proceedings, International Conference on Biological Science and Engineering, World Academy of Science, Engineering and Technology, Italy. Year 6, issue 71, ISSN 1307-6892, pp 1446-1457.

**Braimah, H., Ekyem, S.O., Issa, U.S.** and **Mochiah, M.B.** (2010). Social Perceptions and Ecological Impacts of Biological Control of *Chromolaena odorata* (Aseraceae: Eupatorieae) by *Pareuchaetes pseudoinsulata* (Lepidoptera: Arctiideae) on the Forest Ecology of Ghana. In: *Programme and Abstracts of Combined Workshops: 8<sup>th</sup> IOBC International Workshop on Biological Control and Management of Parthenium hysterosphorus. Nairobi, Kenya. November 1-5, 2010.* 

**Dartey, P.K.A.** (2010). Using opaque instead of transparent bags after artificial pollination increases rice seed size. In: *Book of Abstracts, AfricaRice Congress. Bamako, Mali. March 22-26, 2010. 205 pp. Publisher: AfricaRice. (Kiepe, P., Diatta, M., Miller, D., Eds.)* 

**Gyasi-Boakye, S., Offei Bonsu, K., Adu-Dapaah, H., Osei, M.K., Owusu-Akyaw, M.** and **Manu-Aduening, J.** (2010). Promotion of Positive Business Attitudes among Smallholder Farmers in Ghana: Impacts from the Southern Horticultural Zone. In: *Proceedings of the 28<sup>th</sup> International Horticulture Congress (Vol.2). Lisbon Congress Centre, Portugal. August 22-27, 2010.* 

Kawano, N., Bam, R.K., Acheampong, G.K., Annan Afful, E., Buri, M.M., Asubonteng, K.O., Issaka, R.N., Hirose, C. and Fugimoto, N. (2010). Costs and returns analysis for the development of inland valleys for rice production in Ghana. *Poster presented at the 2010 AfricaRice Congress, Bamako, Mali.* 

Oppong-Sekyere, D., Akromah, R., **Asibuo, J.Y.** and **Osei, M.K.** (2010). Morphological Characterization of Okra (*Abelmoschus esculentus* L.) Germplasm in Ghana. In: *Proceedings of the 28<sup>th</sup> International Horticulture Congress (Vol.2). Lisbon Congress Centre, Portugal. August 22-27, 2010.* 

Oppong-Sekyere, D., Akromah, R., **Osei, M.K.** and **Asibuo, J.Y.** (2010) Agronomic Evaluation of Okra (*Abelmoschus esculentus* L.) germplasm in Ghana. In: *Proceedings of the 28<sup>th</sup> International Horticulture Congress, (Vol.2). Lisbon Congress Centre, Portugal. August 22-27, 2010.* 

**Osei, K., Agyeman, A., Asante, J.S.**, Moss, R. and Nafeo, A. (2010). Nematode suppression and yield improvement potential of organic amendment in pineapple production. In: *Proceedings 7<sup>th</sup> Int'l Pineapple Symposium. Persada Johor International Convention Centre, Johor Bahru, Malaysia. July 13-15, 2010. (Abdullah, H. et al Eds.). Also in Acta Horticulturae 902: 367-371.* 

# Technical (including Consultancy) Reports

Bam, R.K., Acheampong, G.K., Annan-Afful, E., Dartey, P.K.A., Asante, M.D., Narteh, L.T., Moses, E., Tetteh, F.M., Addo, J.K., Dankyi, A.A., Frimpong, B.N. and Agyeman, A.A. (2010). Release of Lowland Rice Varieties. *Report submitted to the National Variety Release Committee, Ghana*.

**Bolfrey-Arku, G.** (2010). Evaluation of the efficacy of Focus Ultra EC (Cycloxy dim 100g/l) for control of annual and perennial grass weeds. *Herbicide Registration Report submitted to Dizengoff, Ghana Ltd for certification by the Environmental Protection Agency (EPA), Accra, Ghana. CSIR-CRI Technical Document CSIR-CRI/ER/BAEG/2010/010.* 

**Bolfrey-Arku, G.** (2010). Evaluation of the efficacy of LUMAX 537.5 SE (Mesotrione 37.5 g/L, S. metolachlor 375 g/L + Terbuthylazine 125 g/L) for weed control. *Herbicide Registration Report submitted to Wienco, Ghana Ltd. (RMG) for certification by the Environmental Protection Agency (EPA), Accra, Ghana. CSIR-CRI Technical Document CSIR-CRI/ER/BAEG/2010/011.* 

**Bonsu, K.O.**, Antwi, B.O., Honger, J. and **Moses, E.** (2010). Preliminary Investigation of Pineapple Rot Diseases in Central Region. *Report submitted to the Project Coordination Unit of The Export Quality and Marketing Awareness Project.* 

Manu-Aduening, J.A., Ampong Mensah, G., Lamptey, J.N.L., Moses, E., Dankyi, A.A., Afuakwa, J.J., Adu-Kwarteng, E., Ohene Djan, O., Lamboll, R.I. and Gibson, R.W. (2010). Release of cassava varieties. CSIR-CRI, Kumasi. 12pp. *Document submitted to the National Variety Release Committee*.

Mochiah, M.B., et al. (2010). Consultancy Report on CRI / Millennium Development Authority (MiDA) Project for Commercial Development of Farmer-Based Organizations at the Southern Horticultural Zone in Hohoe District of Volta region (October, 2008 - 2010). Helped six (6) Farmer-Based Organizations to develop business plans for bank loans. *Report submitted to Millennium Development Authority*.

**Moses, E.** (2010). Seedborne Pathogens of Tomato, Pepper and Cowpea and their Control in the Forest and Forest -Savanna Transitional Zones of Ghana. *Technical Report submitted to the Danish Seed Health Center*.

**Obeng-Antwi, K.** and **Martin Tengan**. (2010). Final Report. Maize Variety Evaluation in Ghana. Submitted to ACDI/VOCA ADVANCE (USAID) and other stakeholders including WIENCO, Pioneer Hi-Bred Company, and Seedco Zimbabwe. 23pp.

**Obeng-Antwi, K., Ewool, M.B., Danso, F.C., Martin Tengan** and **Abdulai, M.S.** (2010). Development of extra-early, early and intermediate maturing drought tolerant maize varieties in Ghana in 2009. *Progress Report submitted to the Drought Tolerant Maize for Africa Project, IITA, Ibadan, Nigeria, March, 2010, 15 pp.* 

#### **Book Chapter**

Quain, M.D., Thompson, R., Omenyo, E.L., Asibuo, J.Y., Appiah -Kubi, D. and Adofo-Boateng, P. (2010). Assessing Transferability of Sweetpotato EST SSR primers to cocoyam and micropropagation of nine elite cocoyam varieties in Ghana. Aspects of Applied Biology 96, Agriculture: Africa Engine for Growth - Plant science and biotechnology the key. pp. 269-276.

