

CURRICULUM VITAE ABDEL GABBAREL TAYEB BABIKER

- **Permanent Address:** Sudan University of Science and Technology, College of Agricultural Studies, Plant Protection Department, P.O. Box 71 Shambat, Khartoum North
- e-mail agbabiker@yahoo.com
- **Date of Birth:** January 1, 1949
- **Nationality :** Sudanese since birth

Marital status: Married with three children

- Rna, A. G. Babiker, daughter born Glasgow, UK 26/6/1973
- Linda, A.G. Babiker, daughter borne Khartoum 1/10/1979
- Ahmed A.G. Babiker, son borne, Wad Medani Sudan 2.1.1988.
- Salwa El Amin Humza, wife borne Wad Medani Sudan 21.1. 1956.

EDUCATION

- 1969 B. Sc. (Hons) Univ. of Khartoum; Part 1 Botany and Chemistry.
- 1970 B.Sc. (Hons) Univ. Khartoum; part 11 Upper second Chemistry.
- 1976 Ph.D. Univ. of Glasgow, Scotland; United Kingdom Agricultural Chemistry Thesis Title: "Behaviour and Fate of Pesticides in Plant - Soil - Water - System"
- Post doctorate (1983/84) U.S. Department of Agriculture, Bio-science Research Lab., Fargo, North Dakota, U.S.A. Research Topic: "Uptake and Metabolism of herbicides in plants" (12 months).

HONOURS

- 1969 Merits in Botany and Chemistry, University of Khartoum.
- 1969 United Arab Republic Prize, University of Khartoum.
- 1970 University Prize in Chemistry (University of Khartoum)
- 2008 Distinguished Researcher Prize, Sudan University of Science and Technology

RESEARCH ACTIVITIES

- 1970 Research Assistant, Agricultural Research Corporation.
- 1976 Weed Research Scientist, Agricultural Research Corporation.
*Chemical weed control in cotton, sorghum, rice, wheat and onions.
- 1981 Senior Scientist, Agricultural Research Corporation.

- * Cultural and Chemical methods of weed control in field and vegetable crops.
 - * Weeds biology with special reference to problematic weeds viz: *Striga hermonthica*, *Orobancha Spp.*, *Cuscuta* and perennial weeds.
 - * Herbicides dissipation (field and laboratory studies).
- 1985 Associate Professor of Weed Science , Agricultural Research Corporation.
- * Cultural and Chemical methods of weed control in field and vegetable crops.
 - Chemical and cultural control of *Striga* and *Orobancha*.
 - * Herbicides dissipation (field and laboratory studies).
 - * Weed seed biology and germination.
 - * Chemical and cultural manipulation of weed seed dormancy.
 - * Germination stimulants; mode of action and dissipation.
- 1988 Professor of Weed Science , Agricultural Research corporation.
- Cultural and Chemical methods of weed control including *Striga* and *Orobancha*, (an integrated approach).
 - * Weeds biology.
 - * Herbicides dissipation (from soil and aquatic environments).
 - * Germination stimulants. Efficacy and persistence.
- 2006 to the present: Professor of Weed Science Sudan University of Science and Technology
- 1- Noxious and root parasitic weeds biology and control
 - 2- Herbicides Efficacy, uptake and dissipation
 - 3- Allelopathic potentials and allelochemicals from selected native plants

Guidance of Research (Post Graduate students):

- 1982-1984: Inshrah Ali El Fahal, M.Sc. "*Effects of Application Time on Herbicidal Efficacy and persistence of Norflurazon*", University of Gezira.
- 1983-1984: Ali Eltayeb Shames Eldin, M.Sc., "*Some Soil Behavioral Aspects of the Herbicide Asulam*". University of Gezira.
- 1983-1985: Nadia Elamin Ibrahim, M.Sc., "*Biologically Active Substances in the Genus Euphorbia*". University of Gezira.
- 1983-1985: Osman Elsheikh, M.Sc., "*Biology and Control of Ischaemum afrum*", University of Gezira.
- 1985-1988: Mohamed Awad Marajan, M.Sc., "*Biology and Control of Xanthium stramonium*", University of Gezira.

- 1987-90: Azam Izzeldin, M.Sc., "*Efficacy and Economic of Chemical weed Control in Cotton*", Uniniversity of Gezira.
- 1988-1993: Abdel Salam El Amin, M.Sc., "*Biology and Control of Rhynchosio memnonia*". University of Gezira.
- 1994-1996: Kamal Abdella M.Sc. '*Weeds in wheat (Triticum aestivum L.): Importance and Control*'. University of Khartoum.
- 1997-2004: Hassan Abdel Gader Mubarak Ph.D. '*An Integrated Weed Control Strategy in Groundnuts (Arachis hypogea)*'. University of Gezira.
- 1997-2004: Nadia El Amin Ibrahim Ph.D. '*The herbicide Oxyfluorfen in Cotton: Efficacy and Persistence*'. University of Gezira.
- 1997-1999: Ameira Omer El Badawie M.Sc. '*Efficacy and Economic of Some Selected Herbicides in Cotton*'. University of Khartoum.
- 1998-2001 Abdel Bagi Abdel Fattah Mohmed M.Sc. '*Some Aspects of the Germination, Dormancy and Allelophthy of Prosopis juliflora (Mesquite)*'. M.Sc. University of Gezira
- 1994-1998 Duria Mubarak Eltyeb Ph.D. *Study on the Biology, Economic Importance and Control of Bromrape (Orobanche ramosa L) on Solanaceous Crops in the Sudan.* University of Gezira
- 1999-2002-Abd Alla Ibrahim Mohamed Ph.D '*Studies on the Biology and Control of Some Selected Weeds in Sorghum*'. Univerity of Gezira.
- 2002-2002 ElFatih A. A. Mohamed M.Sc. '*Evaluation of Fusarium Sp. (Abu Haraz isolate) as a Biocontrol Agent for Striga hermonthica (Del.) Benth. on sorghum bicolor (L.)*'. University of Gezira.
- 2002- 2012 Abdel Salam El Amin Ph.D '*Biology and Economic Importance of Some Selected Wild Plants in Pastures*'. University of Gezira
- 2004-2008 Naser El Deen Khairy Abdella Ph.D. '*Integrated Weed Management in Direct Seeded Onion*'. Sudan Academy of Sciences
- 2005-2009 El Fatih Abdel Aziz Ahmed Ph.D. '*Biology and Control of Mesquite (Prosopis juliflora: Swartz)*'. Sudan Academy of Sciences.
- 2005 -2010 Amani Hamad El Tayeb Ph.D. '*Some Biological and Ecological Aspects of Orobanche crenata a Parasitic Weed on Faba Bean*'. Sudan University of Science and Technology.
- 2005-2007 Awad Alla Billal Dafalla '*Effects of 2,4-D on Germination and Parasitism of Sorghum (Sorghum bicolor L.) by Striga hermonthica*'. University of

Gezira

- 2004-Amira Omer El Badawie mohammed Ph. D. '*Molecular Biological Aspects of the Association Between Cuscuta compastris and its Host-Plants*'. University of Gezira
- 2005- 2007 Rasha Ali '*Host Specificity in Striga hermonthica*' M.Sc. University Of Khartoum
- 2005 -2008 Mohamed Magoub Ph.D. '*Bacterial Suppression of Striga Parasitism on Sghum*'. Sudan Academy of Science
- 2006-2009 Khogali A. Idris Ph.D. '*Striga Suppressive Ability and Drought Tolerance of some Desmodium species*'. University of Gezira
- 2007- 2011Ahmed Hamud El Neil Ph.D. '*Integración of Cultural Practices for Striga Control*'. Sudan University of Science and Technology
- 2009-Rashida AbuSin . Ph.D '*Integration of Cultural and Chemical methods for Striga hermonthica Management*' Juba University
- 2009-2011 Ala Yassin M.Sc. '*Herbicidal Efficacy of Atrazine on Sorghum as Influenced by Timing of Application*' Sudan University of Science and Technology
- 2010-2012 Nahid Ismaeil M.Sc. '*Thidizuron a Striga hermonthica (Del.)Benth. Germination Stimulants*'. Sudan University of Science and Technology
- 2008-Abdel Salam Abdeen Ph.D '*Wild Oats (Avena fatua L.) in the Northern State: Distribution, Impotance and Control*'. Sudan University of Science and Technology
- 2008- Swasan Abdel Wahab. Ph.D. '*Integración of Cultural and Chemical methods for Orobanche crenata Management*'. Sudan University of Science and Technology.
- 2009-Ibrahim Mohamed Ibrahim Ph.D. '*Integration of Cultural and Chemical methods for Mesquite (Prosopis juliflora Swartz) Management*. Sudan University of Science and Technology
- 2010 Mohanad Zakaria M.Sc. '*Allelopathic Potentials of Mesquite (Prosopis Juliflora Swartz)*'. Sudan University of Science and Technology
- 2010-2013 Khalid Al Sayed Abd Allah Khalfallah M.Sc. '*Allelopathic Potentials of Selected Sudanese Plants and Spices*'. Sudan University of Science and Technology

Administrative activities and positions held (National)

- Head Botany and Plant Pathology Section. Agricultural Research Corporation 1990 to 1991
- Head of the Weed Research Unit Agricultural Research Corporation 1996 to 1997
- Head of Crop Production Committee for Sorghum and fodder crops for both rain fed and irrigated agriculture 1997 to 2000.
- National Co-ordinator Sorghum Research in Sudan 1997-2000
- National expert TCP/TNT/2004 (FAO project) on *Orobanche crenata* management in Faba bean) 2004-2006
- Deputy Director General Agricultural Research Corporation for programmes and International Affairs 2003-2006
- 2006 to the present: Professor of Weed Science College of Agricultural Studies, Sudan University of Science and Technology
- In-country co-ordinator Integrated *Striga* Management for Improved Sorghum Productivity in ECA 2006/2007- 2009 to 2011 (Fuded by ASARECA)
- Co-ordinator
- Coordinator “ A study of Human Subsistence Ecosystems among Arab Societies: To Combat Livelihood Degradation for the Post-oil area” A joint project between the Sudan University of Science and Technology and the Institute of Humanity and Nature Kyoto Japan 2010-2012

International activities and positions held:-

- Chairman Pan Africa *Striga* Control Network Steering Committee 1986 to 1993
- Regional Co-ordinator *Striga* Research East Africa 1986 to 1991
- Co-ordinator INTSORMIL (International Sorghum and Millet Research) funded by USAID (1996-1998). 1992/93
- Visiting Professor, Department of Agronomy, Purdue University USA (12 months conducting research on *Striga*).
- 1994/96 Visiting professor Arid land Research Center, Tottori University. Japan (15 months conducting research on *Striga*).
- 1997/98 Visiting Professor Arid Land Research Center , Tottori Unversity. Japan (12 months conducting research on *Striga*).
- 2000/2001 Visiting Professor University of Hohenheim, Germany (12 months conducting research on *Striga*)
- Co-chair of All Africa Asia Platform Programme (Water management and parasitic weeds) funded by the JSPS 2003-2006
- Co-chair of All Africa Asia platform programme (Parasitic weeds). Funded by JSPS 2008-2011

- 2006/2009 Associate editor- in chief of the American Eurasian Journal of scientific Research (2006 to 2009)
- 2009 Member editorial board Journal of Plant Breeding and Crop Science (Published by Academic Journals)
- Co-ordinator Sudan University of Science and Technology Scientific Journals (2011- 2013)

Consultancies:-

- **1994 IFAD Consultant on Weed Management on Fruit Trees in the Northern Region of Sudan**
- **2004/2006 FAO National Expert on *Orobanche crenata* on Faba bean TCP/INT/3004 -**
- **2008 Afro-Asian Rural Development organization (AARDO) Registration and Analysis of Agricultural Chemicals and Improved Seeds In Yemen**
- **2006- till present Co- Ex consultant group for weed control**
- **Arab organization for Agricultural Development Mesquite in Oman status and possible management measures.**

OTHER PROFESSIONAL ACTIVITIES

Teaching Experience:

- 1997/1987 Undergraduate teaching of basic as well as analytical chemistry. Preparatory College University of Gezira.
- 1982/1985 Undergraduate teaching of chemistry, physiology of herbicides, Faculty of Agricultural Sciences, University of Gezira.
- 1984-87 Undergraduate teaching of chemistry, Faculty of Science and Technology, University of Gezira. 1982/1985
- Postgraduate teaching: Behavior and Fate of Herbicides in Plants and Soils, Faculty of Agricultural Sciences, University of Gezira
- **1999/2000 Post graduate teaching Organic Chemistry Faculty of Science and Technology. University of Gezira**
- **2006 to the present Principals of Weed management Colege of Agricultural Studies Sudan University of Science and technology**
- **2011 to the present Weed Science: Advanced course**

PROFESSIONAL MEMBERSHIPS (National)

- Crop Husbandry Committee till 2006
- Pests and Diseases Committee till 2006
- Pesticides Stocking Committee till 2006
- Pesticides Technical Committee till 2006
- Pesticides Joint Committee till 2006
- Member national pesticide council 1982-1983, 2003-2004.
- Member advisory Council Director General Agricultural Research Corporation (1999 to 2003).
- Member of the research council, College of Agricultural Studies Sudan University of Science and Technology 2006- to present.
- Member of the research council, Sudan University of Science and Technology 2006 to present
- Head of the Agricultural research Committee Sudan University of Science and Technology 2006 -2010
- Member of the Senate Sudan University of Science and Technology 2006 to present.
- Member national mesquite management Committee 2013- up to the present

PROFESSIONAL MEMBERSHIPS (International)

- Weed Science Society of East Africa 1977 to 1994
- Weed Science Society of America. 1983 to the 1986
- International Weed Science Society 1988 to the present
- Plant parasitic Weeds Society 2001 to the present

PUBLICATIONS

- M. Hamdoun and A.G.T. Babiker (1972) Some weed problems of the Sudan and their control. In: *Proceedings of the Arab Regional Symposium on Aspects of Development in the Arab Countries*, pp. 242-245, Khartoum.
- A. M. Hamdoun and A.G.T. Babiker (1972) Persistence of some soil- acting herbicides in the Sudan. In: *Proceedings of the Arab Regional Symposium on Aspects of Development in the Arab Countries*, pp. 356-363, Khartoum.
- A. G. T. Babiker and H.J. Duncan (1974) Penetration of braken fronds by asulam as influenced by addition of surfactants to the spray solution and pH. *Weed Res.* 14,

375-378.

- A. G. T. Babiker and H.J. Duncan (1975) Mobility and breakdown of asulam in soil and possible impact on the environment. *Bio. Conserv.* **8**, 97-104.
- A. G. T. Babiker and H.J. Duncan (1975) Penetration of bean leaves by asulam as influenced by adjuvants and humidity. *Pesticide Sci.* **6**, 655-664.
- A. G. T. Babiker and H.J. Duncan (1975) Penetration of bracken fronds by amitrole as influenced by pre-spraying conditions, surfactants and other additives. *Weed Res.* **15**, 123-127.
- A. G. T. Babiker, G.T. Cook and H.J. Duncan (1976) Further studies on the influence of adjuvants and humidity on the penetration of bean leaves (*Phaseolus vulgaris*) by amitrole. In: *Herbicides and fungicides: Factors affecting Their Activity*. (McForlane, ed.) pp. 93-98.
- A. G. T. Babiker and H.J. Duncan (1977) Influence of soil depth on asulam adsorption and degradation. *Soil Biol. Biochem.* **9**, 197-201.
- G. T. Cook, A. G. T. Babiker and H.J. Duncan (1977) Penetration of beans leaves by aminotriazole as influenced by adjuvants and humidity. *Pesticide Sci.* **8**, 137-146.
- A. M. Hamdoun and A.G.T. Babiker (1978) Effects of some herbicides on cotton weeds in the Sudan Gezira. *Expl. Agric.* **24**, 137-144.
- A. G. T. Babiker (1979) Herbicides in the clay soil of central Sudan. In *Weed Research in the Sudan, Proceedings of a symposium* (M..E.Bashir and W. Koch, eds.), 1, 61-67.
- A. M. Hamdoun and A. G. T. Babiker (1981) Effects of Fluoridone and oxyfluorfen on cotton, groundnut and onions weeds in the Sudan In: *Proceedings of the 8th East African Weed Science Society Conference* (Michieka, R.W. and Ngugi, D.N.,eds.) pp. 343-361. Nairobi, Kenya.
- A. M. Yassin, A. G. T. Babiker and Ahmed, M. K. (1982) First report of Pink root rot of onion in Sudan. *Plant Diseases*, 141.
- A. G. T. Babiker (1982) chemical weed control in irrigated direct- seeded rice in the Sudan Gezira. *Weed Res.* **22**, 117-121.
- A. G. T. Babiker and A. M. Hamdoun (1982) Factors affecting activity of GR7 in stimulating germination of *Striga hermonthica* (Del.) Benth. *Weed Res.* **22**, 111-115.
- A. G. T. Babiker and A. M. Hamdoun (1983) Factors affecting activity of ethephon in stimulating seed germination of *Striga hermonthica* (Del.) Benth. *Weed Res.* **23**, 125-131.

- A. M. Hamdoun, A. G. T. Babiker and A. A. Hamada (1983) Effects of some soil-acting herbicides on weed control in groundnuts in the Sudan. In: *Proceedings of the 9th African Weed Science Society Conference*. (R.W. Michieka and L. Numera, eds), pp. 281-297.
- I. A. Fahal, A. G. T. Babiker and Y. Gamar (1985) Adsorption, leaching and persistence of norflurazone in some selected soils. In: *Proceedings of the 10th East African Weed Science Society Conference*, pp. 140-144.
- N. E. Ibrahim, A. G. T. Babiker, W. G. Edwards and C. Parker (1985) Activity of extracts from *Euphorbia* species on the germination of *Striga* species. *Weed Res.* **25**, 135-14.
- A. G. T. Babiker, N. E. Ibrahim, K. H. Abadi and M. G. Mansi (1986) Effects of application time on herbicidal efficacy of oxadizon on cotton in the Sudan Gezira. *Weed Res.* **26**, 51-57.
- A. G. T. Babiker and M. H. Ahmed (1986) Chemical weed control in transplanted onions (*Allium cepa* L.) in Sudan Gezira. *Weed Res.* **26**, 133-137.
- A. G. T. Babiker, A. M. Hamdoun, A. Rudwan, M. G. Mansi and H. H. Faki (1987) Influence of soil moisture on activity and persistence of the strigol analogue GR24. *Weed Res.* **27**, 173 - 178.
- A. G. T. Babiker, A. M. Hamdoun and M. G. Mansi (1987) Influence of some soil and environmental factors on response of *Striga hermonthica* (Del.) Benth. seeds to selected germination stimulants. In *Proceedings of the 4th International Symposium on Parasitic Flowering plants* (H.C.Weber and W.Forstuter, eds) pp. 53-66, Marburg, West Germany.
- A. G. T. Babiker, N. E. Ibrahim and W. G. Edwards (1988) Persistence of GR7 and *Striga* germination stimulant (s) from *Euphorbia aegyptiaca* in soils and in solutions. *Weed Res.* **28**, 1-6.
- O. E. T. ayalla, A. G. T. Babiker, M. G. Mansi and N. H. H. Beshir (1988) Influence of glumes, soil and environmental conditions on germination of *Ischaemum afrum* (J.F.Gmel.) Dandy seeds. *Weed Res.* **28**, 237-241.
- A. M. Hamdoun and A. G. T. Babiker (1988) *Striga* in the Sudan. In. *Striga Improved Management in Africa. Proceedings of the FAO/OAU All-Africa Government consultation on Striga control* (T.O.Robson and H.R. Broad, eds.) Marcua, Cameroon, PP.80- 92.
- A. M. T. Ismail, F. M. Khalifa and A. G. T. Babiker (1990) Age, environmental

factors, germination and seedling emergence of *Ocimum basilicum* L. Qatar Univ. Sci. Bull. **10**, 155-166.

- A. G. T. Babiker and F. Redda (1991) Recent advances in *Striga* research in Sudan and Ethiopia. In: *Proceedings of the 5th International Symposium on Parasitic Weeds* (J.K. Ransom, L.J Musselman, A.D. Worsham and C. Parker, eds.) pp. 180-189. Nairobi, Kenya
- A. G. T. Babiker, C. Parker and J. C. Suttle (1992) Induction of *Striga* seed germination by thidiazuron. *Weed Res.* **32**, 243-248.
- A. G. T. Babiker, G. Ejeta, L. G. Butler and R.W. Woodson (1993) Ethylene biosynthesis and strigol induced germination of *Striga asiatica*. *Physiol. plant.*, **88**, 359-365.
- A. G. T. Babiker, L. G. Butler, G. Ejeta and W. R. Woodson (1993) Enhancement of ethylene biosynthesis and germination with cytokinins and 1-aminocyclopropane-1-carboxylic acid in *Striga asiatica* seeds. *Physiol. Plant.*, **89**, 21-26.
- T. Cai, A. G. T. Babiker, G. Ejeta and L. G. Butler (1993) Morphological response of witchweed (*Striga asiatica*) to in vitro culture. *J. Exp. Bot.* **44**, 1377-1384.
- G. Ejeta, L. G. Butler and A. G. T. Babiker (1993) New approaches to the control of *Striga*. *Striga Research at Purdue*. Agricultural Experimental Station, *Purdue University Research Bulletin* **991**, pp. 27.
- A. G. T. Babiker, Ahmed N.E, Mohamed A.H. Elmana M.E. and ElTayeb S.M. (1993) *Striga hermonthica* on sorghum: chemical and cultural control. *Brighton Crop Protection Conference-Weeds*. 907-911.
- A. G. T. Babiker, Cai T., Ejeta G., Butler, L.G and Woodson W. R. (1994.) Enhancement of ethylene biosynthesis and germination with thidiazuron and some selected auxins in *Striga asiatica* seeds - *Physiol Plant.*, **91** 529-536.
- A. G. T. Babiker, El Mana, M., Ejeta, G., Butler L.G. Cai, T. and Woodson W. R. (1994). Ethylene biosynthesis and its possible use as a probe for germination stimulants. In *Biology and Management of Orobanche. Proceedings of the 3rd International Workshop on Orobanche and related Striga research*. (Pieterse A.H, Verkleij, J.A.C and ter borg S.J. eds) pp. 215-224 Amsterdam, The Netherlands, Royal Tropical Institute.
- A. G. T. Babiker, Mohamed, E. S. and El Mana M. E. (1994) *Orobanche* problem and management in the Sudan. In: *Biology and Management of Orobanche. Proceeding of the 3rd International Workshop on Orobanche and related Striga research* (Pieterse A.H,

Verkleij, J.A.C and ter borg S.J. eds) pp 672-676. Amesterdam, The Netherlands, Royal Tropical Institute.

- G. T. Babiker, Ma, Y. Q., Sugimoto, Y. and Inanaga, S.(1995). *Striga hermonthica* (Del) Benth: A potent germination stimulant(s) from *Menispermum dauricum* root culture. In: *Proceedings of the 2nd Asian Crop Science Conference* (R.Ishii and T. Horic eds) pp. 568-569. Fukui, Japan.
- Mohammed, E. S. I, A. G. T. Babiker and A. M. Baghdadi (1995) Broomrape, *Orobanche ramosa* in Khrtoum State. Broomrape-Halouk (*Orobanche* spp.) in the Sudan. *Report on the First National workshop on Control Methods of Broomrape, Orobanche in the Sudan* (Dabrowski, Z.T. and A. M. Hamdoun eds) pp. 20-25. FAO/ARC IPM Project Wad Medani
- A. G. T. Babiker, Ahmed N. E, Ejeta, G. Butler, L. G. Mohamed, A. Elmana, E. L., ElTayeb, M. T. and Abdelrahman B. E. (1996) Chemical control of *Striga hermonthica* on sorghum. In the *Proceedings of the Sixth International Parasitic Weed Symposium* (Moreno, M.T., Cubero, J.I., Berner, D., Joel, D Musselman L.J. and Parker,C. Eds.) pp. 769-776. Cordoba Spain.
- Y. Ma, Babiker, A.G.T, Ali I. A., Sugimoto,Y. and Inanaga, S.(1996). *Striga hermonthica* (Del.) Benth germination stimulant(s) from *Meispermum dauricum* (DC.) root culture. *J. Agric. Food chem.*, **44**,1010-1015.
- A. G. T. Babiker (1997) Integrated use of *Striga*-resistant sorghum varieties with cultural and chemical control. In: *Proceedings of the International Conference on Genetic Improvement of Sorghum and Pearl Millet*. Pp.517-524. September 22-27, 1996. Lubbock, Texas.
- L. Butler, G. Ejeta, A. G. Babiker and D.E. Hess (1997). *Striga*-host relationship and their role in defining resistance. In: *Proceedings of the International Conference on Genetic Improvement of Sorghum and Pearl Millet*. Pp.490-502. September 22-27, 1996. Lubbock, Texas.
- Y. Ma, Babiker A. G. T., Sugimoto, Y and Inanaga S. (1998). Effect of medium composition on production of *Striga hermonthica* (Del.) Benth germination stimulant(s) by *Menispermum dauricum* (DC) root cultures, *J. Agric. Food Chem.* **46**: 1587-1592.
- Babiker, A. G. T. Ma, Y, Sugimoto, Y and Inanaga S. (2000) Conditioning period, CO₂ and GR24 Influence ethylene biosynthesis and germination of *Striga hermonthica*, *Physiol. Plant.* **109**: 75-80.

- N.E. Ahmed, Sugimoto, Y., Babiker A. G. T., Mohamed, O. E., Yongqing MA, Inanaga, S. and Nakajima, H. (2001). Effects of *Fusarium solani* isolates and metabolites on *Striga* germination. *Weed Science*, **49**: 354 – 358.
- Babiker A. G. T. (2002) *Striga* control in Sudan: An integrated approach. In : *Sorghum and Millet Diseases* (Leslie, J.F.ed.)pp. 157-163. Iowa State Press.USA
- Dawoud D. A., Ahmed E. A.,Khalid, H. and Babiker, A.G.T. (2003) Modulation of seed dormancy in *Ocimum basilicum* by light, gibberellins (GA3) and abscisic acid (ABA). In: *Proceedings of the British Crop Protection Council International Congress*. Pp.1047-1052.
- Elsadig S. Mohammed, A. G. T. Babiker, M. E. K. Ali, G. E. Mohammed, and A.. T. Ahmed (2004) Chemical Weed control in Faba bean in northern Sudan. *Sudan Journal of Agricultural Research*, **4**: 27 – 36
- Babiker, A. G. T. (2006) Mesquite (*Prosopis* spp) in Sudan: History, distribution and control. In: *Problems Posed by Prosopis spp. in Selected Countries* (Labrada, R ed)pp. 11-20. Plant Production and protection Division, Food and Agriculture organization of the united Nations, Rome
- Babiker, A.G.T. (2007) *Striga*: The Spreading Scourage in Africa. *Regulation of Plant growth and Development*, **42**: 74-87
- Ransom, J, A. G. T. Babiker (2007) Integrating Crop Management Practices for *Striga* Control. In " Gressel J. (ed) *Proceedings of the International Symposium on Integrating New Technologies for Striga Control: Towards Ending the Witch-Hunt* 203-228 World Science London
- Hassan, M. M., Gani M. E. and Babiker, A. G. T. (2007) Potentials of bacteria and nitrogen in reduction of *Striga hermonthica* (Del.) Benth. And sorghum growth. *ElBuhuth*, **12**: 96-111
- Babiker, A.G.T., Ahmed, E.A., **Dawoud**, D.A. and Abdalla, N.K. (2007). *Orobanche* species in Sudan: History, Distribution and Management. *Sudan Journal of Agricultural Research* **10**: 107 – 114
- Dawoud, D. A., Ahmed, E. A., N. K. Abdalla, Sauerborn, J. and Babiker, A. G. T. (2007) Influence of intercropping of sorghum (*Sorghum bicolor* L. Moench) with hyacinth bean (*Lablab purpureus* L.) on *Striga hermonthica* and sorghum growth and yield. *Sudan Journal of Agricultural Research* **10**: 101-106.
- Babiker, A. G. T. (2008) *Orobanche* species in Sudan: History, distribution and management. In: *Progress on Farmer Training in Parasitic Weed Management*

(labrada, R.) Pp 69-78. FAO Rome

- Dafaallah A, B., Hamdoun, A. M. and Babiker, A. G. T. (2008) Effects of 2,4-D and nitrogen on incidence of witchweed (*Striga hermonthica* (Del.) Benth and sorghum (*S. Bicolor* L.) Monech) growth. *Gez. J. of Agric. Science*, 6: 1-16
- Dafaallah A, B., Hamdoun, A. M. and Babiker, A. G. T. (2008) Effects of 2,4-D and GR24 on seed germination of witchweed (*Striga hermonthica* (Del.) Benth. *Gez. J. of Agric. Science*, 6: 17-30
- Hassan, M. M., Gani M. E. and Babiker, A. G. T. (2009) Management of *Striga hermonthica* in Sorghum using soil rhizosphere bacteria and host plant resistance. *International Journal of Agriculture and Biology*, 11: 365-373
- Rasha, A. M. A., Adil Hussein, K. I. and A. G. T. Babiker (2009) Specificity and genetic relatedness among *Striga* strains in the Sudan. *Life Sci. Int.* 3: 1159-1166
- Abdelgadir, H., Dawoud, D. A., Abdelaziz, E. Hamada, A. A and Babiker, A. G. T., (2009). Effects of Dual Gold 96%EC (S metolachlor) alone and in mixtures with atrazine on pr-emergence weed control in sorghum. *Sudan Journal of Agricultural Research*, 14: 81-94
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