

Curriculum Vitea

1- Biodata

Name: Eisa Ibrahim El Gaali

عيسى إبراهيم الجعيلي

Date of birth: 4/10/1957

Place of birth: Omdurman, Sudan

Nationality: Sudanese.

Marital Status: Married

Current Address: El Riyadh, block 18, House No 29 Khartoum, Sudan

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Languages

- Arabic (mother tongue).
- English (excellent).
- Japanese (good).
- German (basics).

2-Qualifications

2.1. Education

- **B.Sc. Agriculture:** August 1977- November **1982**
Dept. of Agricultural Biochemistry, Faculty of Agriculture
University of Khartoum, P. O. 13314. Khartoum, Sudan.
- **Master of Science in Botany:** August 1985-October 1987
Department of Botany, Faculty of Science, University of
Khartoum, P.O. Box 321, P. C. 11115, Khartoum, Sudan.
- **Japanese Studies:** April 1991- September **1991** Osaka
University for Foreign Studies, Minoh, Osaka 562, Japan.
- **Research Student:** October1991-March 1992
Tottori University, United Graduate School of Agricultural
Sciences, Minami 4-101, Koyama chu, Tottori 680, Japan

- **PhD.** : April 1992-March 1996
Tottori University, United Graduate School of Agricultural Sciences, Minami 4-101, Koyama chu, Tottori 680, Japan.
- **Post Doctor:** May 1997- May 1999
Department of Plant Physiology
National Institute of Agrobiological Resources
Kannondai 2-1-2, Tsukuba, Ibaraki 305, Japan.

2-2. Training

- First training workshop on the use of the central portal of Biosafety Clearance House, Khartoum, Sudan, June 24-29, **2007**.
- International workshop for Increasing Tolerance to Abiotic stress in Plant, Santiago, Chili, 19-21, June 2006.
- Workshop on "Phytochemical Analysis and Determination of Markers in Medicinal Plants", IMR, Kuala Lumpur, Malaysia, 16-20 February **2004**.
- Workshop of Biosafety in Agricultural Biotechnology, Damascus Syrian Arab Republic 30-August September **2003**.
- Inoculants Production and Quality Control, Microbiological Resource Center, Faculty of Agriculture, Ain Shams University, Cairo, Egypt Oct -December **1986**.
- Advanced Soil and Plant Analysis, International Institute for Tropical Agriculture (IITA) Ibadan, Nigeria, January. - Feb. **1991**.
- Safe Handling and Use of Radioisotope MAFF-Tokyo Nuclear Services Corporation, Tsukuba, Ibaraki Japan, May **1997**.

Training and workshops:

- Sudan South Africa Joint workshop in Biosafety . 30 31 may **2016**. Khartoum Sudan

- Biosafety Clearance House, Khartoum, Sudan, June 24-29, 2007.
- International workshop for Increasing Tolerance to Abiotic stress in Plant, Santiago, Chile, June 19-21 2006.
- Workshop on "Phytochemical Analysis and Determination of Markers in Medicinal Plants", IMR, Kuala Lumpur, Malaysia, 16-20, February **2004**.
- Inoculants Production and Quality Control, Microbiological Resource Center, Faculty of Agriculture, Ain Shams University, Cairo, Egypt Oct -Dec. **1986**.
- Advanced Soil and Plant Analysis, International Institute for Tropical Agriculture (IITA) Ibadan, Nigeria, Jan. - Feb. 1991.
- Safe Handling and Use of Radioisotopes MAFF-Tokyo Nuclear Services Corporation Tsukuba, Ibaraki Japan, May **1997**.

Organizing of Conferences and Workshops

1. Sudan South Africa Joint workshop in Biosafety . 30 31 may **2016**. Khartoum Sudan
2. GMOs Food safety assessment, Biosafety workshop 1 - 5 July **2013**. ICGEB Center, Trieste, Italy.
3. Principles of Biosafety Research for the Release of Genetically Engineered Crops 4 - 9 February **2007** Khartoum, Sudan Principal Organizer in Collaboration with International center for genetic engineering and Biotechnology (ICGEB)
4. The 7th Scientific Conference Biotechnology and Future Prospects. 13-15 December 2005 Sudan Khartoum. (Chairman of the Scientific Committee)
5. National Workshop on Biotechnology and Applications for Sustainable Development Khartoum, Sudan, 11 - 16 April **2005**. In Collaboration with the COMSTECH-ISESCO (Principal Organizer)

6. 2^{ed} National Workshop on Plant Cell and Tissue Culture 7-9 September 2003 Khartoum Sudan (Principal Organizer).

Conferences and Symposia

- The 13th Annual Meeting of the STS forum was held from Sunday, October 2 to 5 **2016** Kyoto International Conference Center (ICC Kyoto) in Kyoto, - October.
- Turkish African Universities Collaboration Forum and Education May 25-27 **2016**, Ilgaz, Turkey.
- Turkish Sudanese Universities Collaboration Forum and Education May 25-27 **2016**, Ilgaz, Turkey.
- The 49th Conference of the Association of Arab Universities April 10-11 **2016** Al Ain United Arab Emirates.
- German-Sudanese Higher Education and Science Forum, March 7- 9 **2016** Khartoum, Sudan.
- The 48th Conference of the Association of Arab Universities March 25-26 **2015**, Beirut, Lebanon.
- The 18th Conference of Vice Chancellors, Presidents and Rectors (COREVIP) of African Universities 2 - 5 June **2015** Kigali, Rwanda.
- 38th CIG Joint FAO-WHO Food Standard Program CODEX Alimentarius Commission, Geneva, Switzerland 6-11 July **2015**.
- International Conference of International Association of Universities (IAU) Internationalization of Higher Education October 28-30 **2015** Siena, Italy.
- 2^{end} Annual Meeting, Innovation for Cool Earth (ICEF), 5-6 October, **2015** Tokyo, Japan
- The 12th Annual Meeting of the STS forum was held from Sunday, October 4 to 6 **2015** Kyoto International Conference Center (ICC Kyoto) in Kyoto, - October.

- Climate Change Adaptation and Disaster Risk Reduction, 3 October **2015**, Kyoto International Conference Center (ICC Kyoto) in Kyoto, Japan.
- The 10th Scientific Conference of the National Centre for Research “Research and Innovation Towards Knowledge-Based Economy” 1-3 December **2015**, Friendship Hall Khartoum, Sudan.
- 6th Annual Conference for The Arab Organization for quality Assurance in Education. 10-11 December **2014**. Masqat, Oman Sultanat.
- The 11th Annual Meeting of the STS forum was held from Sunday, October 6 to, October 8, **2014** Kyoto International Conference Center (ICC Kyoto) in Kyoto, Japan.
- FAO Technical Consultation on low levels of GM crops in international food and feed trade, FAO head qurtor, Rome, Italy, 20 and 21 March **2014**.
- The 10th Annual Meeting of the STS forum was held from Sunday, October 6 to October 8, **2013** Kyoto International Conference Center (ICC Kyoto) in Kyoto, Japan.
- GMOs Food safety assessment, Biosafety workshop 1 - 5 July **2013**. ICGEB Center, Trieste, Italy.
- Training Workshop on Science, Technology & Innovation (STI) Policy Development - Technology Management for Socio-Economic Transformation 11- 15 June **2012**, Kuala Lumpur, Malaysia
- International Forum for Science and Technology in society, 7-9 October, **2012**, Kyoto, Japan.
- The 4th International Conference in Nanotechnology Sciences, 12-14 March **2012**. Kish Island, Iran

- International Forum for Science and Technology in society, October 4-6, **2011**, Kyoto, Japan
- Project coordination meeting (Quality control), 11-15 October **2010**. Accra, Ghana.
- The 7th International Forum for Science and Technology in society, October 3-5, **2010**, Kyoto, Japan
- KOAFEC Ministerial conference 14-17 9/ **2010** Seoul, Korea
- The 2^{ed} Roundtable Meeting African Japan Ministers of Science and Technology 2 -10-**2010** Japan
- The 2^{ed} Symposium in Advanced Biotechnology and Bioengineering Beijing 4-7 July **2010** China.
- The 6th International Forum for Science and Technology in Society, October 2-4, **2009**, Kyoto, Japan
- The workshop on: Presidential Initiatives on Reform of the Science and Technology System in Sudan, September 5-6/ **2009** Khartoum, Sudan.
- Elexander von Humboldt Stiftung Foundation, New Trends in Science and Technology to Enhance Sustainable Development in Africa. 23-26 November, Khartoum Sudan.
- International Forum for Science and Technology in society, October 3-5, 2008, Kyoto, Japan.
- The 1st Japan African Meeting of Minster of Science and Technology 6 October 2007-Tokyo Japan.
- International Forum for Science and Technology in society, October 7-9, 2007, Kyoto, Japan.
- AAAID Organized the Third Seminar on Biotechnology and its Applications in Arab Agricultural Investment, 21-24 May 2007, Amman, Jordan.
- First Egyptian–Jordanian Conference on Biotech and Sustainable Development: Current Status and Future Scenarios Cairo, Egypt 11-14 December 2006.

- International Forum for Science and Technology in society, September 4-7, 2006, Kyoto, Japan.
- International Forum for Science and Technology in society, September 9-11, 2005, Kyoto, Japan.
- The Second Tissue Culture Workshop, June 12 - 14, 2005, Al Ain University, United Arab Emirates.
- Inter-ministerial Meeting of the Organization of Islamic Conference (OIC) Standing Committee on Biotechnological Cooperation COMSTECH December 7-8, 2004 Islamabad Pakistan.
- International Forum for Science and Technology, November 14-16, 2004, Kyoto, Japan
- International Center for genetic Engineering (ICGEB Liaison) Officers' Meeting, 2 - 4 June 2004 Trieste , Italy
- Inter Islamic Network for Genetic Engineering & Biotechnology (CMSTECH-IDB-INPGE) Workshop on Genetically Modified Organisms Guide lines for Biosafety in Handling, 22 -24 June 2004 Ismailieye, Egypt.
- CMSTECH-INTROM-IMR Workshop on Herbal Medicine 16 -20 February 2004 Kuala Lumpur, Malaysia.
- Eleventh Meeting of the Organization of Islamic Conference (OIC) Standing Committee on Scientific and Technological Cooperation COMSTECH December 25-27, 2003 Islamabad Pakistan.
- Workshop of Bio-safety in Agricultural Biotechnology 30 August - 1 September 2003, Damascus Syria
- A High Level Conference on Science and Technology (Group 77), Dubai, United Arab Emirates 27-30 October 2002.

- 20th Meeting of Committee of Experts of Intergovernmental Authority on Development (IGAD) 18- 20 November 2000, Khartoum, Republic of Sudan.
- 20th Annual Meeting of the Japanese Society of Plant Physiologists. 28-30 March 1999, Sendai, Japan.
- International Conference of Plant Microbe Interaction, 7-9 July, 1999, Amsterdam, Netherlands
- 8th Annual Meeting for the Japanese Society of Plant-Microbe Interactions, 25-26 September 1998, Mie, Japan.
- 205th Annual Meeting of the Japanese Society of Crop Science. 2-3 April 1998, Tsukuba, Japan.
- 7th Annual Meeting for the Japanese Society of Plant Microbe Interaction 21-23 September 1997, Obihiro, Japan
- The Second Conference for African Association of Biological Nitrogen Fixation, 15-18 December 1986, Cairo Egypt.
- 2^{ed} Meeting African Association of Plant and Soil Analysis Laboratories, 2 - 4 February, 1991, Ibadan, Nigeria.

3- Research Experience

- 3-1.** Research fellow reading for M Sc. August, 1985 -October 1987.
- 3.2.** Senior Assistant Researcher: 1987-1991 National Council for Research, Agricultural research council, Sudan.
- 3.2.** Research fellow, reading for PhD April 1992-March 1996
Tottori University Japan
- 3-3.** Scientific researcher May 1996- April1997 National Center for Research. Environment and Natural Resources Research Institute
- 3.4.** Research Fellow, for post doctorate. April 1997-april 1999,
National Institute of Agro-biological Resources, Japan.

3-5. Project leaders for the following research programs

- Nitrogen Fixation, National Council for Research Agricultural Research Council, 1987-1990
- Economically Important Microorganism, National Center for Research, Commission for Biotechnology and genetic Engineering. 2002-2009.
- Insulin production from camels pancreatic cells. National Center for Research, Commission for Biotechnology and Genetic Engineering. 2002-2009.
- Molecular Studies on Sudanese varieties of date palm trees (*Phoenix dactylifera*) 2003-2007.

3-6. Project member of the following research programs

- Genome Map of *Lotus Japonicus*. National Institute of Agrobiological Resources, Tsukuba Japan, 1997-1999.
- Synthesis *In vitro* production of novel bioactive compound from local plant materials that specific to Sudan 2003-up-to-date.
- Marker Assistant for some important Sudanese Plant 2003- up-to-date.
- Effective better utilization of Nile Valley. Medicinal Plants: biodiversity and bio-industry. **2007** up-to-date. (Cooperative Egypt Sudan and Pakistan).
- Environmental Biotechnology, Alternative to chemicals (bio-pesticides, bio-fertilizers, Industrial enzymes, Bio-remidation).

3.6. Supervising: the following students reading for B Sc. Graduation project:

- Fatima Ahmed El Bakri, Department of Botany Faculty of Science University of Khartoum. **2002**.
- Aymen Ibrahim Abbas, Department of Microbiology, Faculty of Applied Science International University of Africa, **2002**.

- Khalid Haj Majid, Department of Microbiology, Faculty of Applied Science International University of Africa, **2002**.
- Omima Ahmed Abdulla, Department of Biotechnology, Faculty of Science, University of Juba, **2003**.

3.7. Supervising: the following students reading for M Sc.

- Khalid Haj Majid. M.Sc Degree Program, Rapid method for detection of pathogenic pollutant of processed food products, Sudan Academy of Science, (main supervisor) **2012-15**.
- Nuha Ahmed Abdella, M.Sc Degree Program. Spider webs as Bio-monitors for microbial pollution, Sudan Academy of Science, (main supervisor) **2011-2013**.
- Amel Arabi Amhmed, (main supervisor), M.Sc Degree Program, Plant Enzymes Biotechnology. Sudan Academy of Science **2010-2012**.
- Safa Mahmoud (Co- supervisor), M. Sc Degree Program, Water purification using aluminum nano-tubes (Nano-Biotechnology). Faculty of Science University of Khartoum **2011-2013**.
- Badawi Ahmed Badawi Zalkaria: Assessment of the Physicochemical properties of Sider (*Zizyphus spina-christi*) Oil. Sudan Academy of Sciences (Main Supervisor MSc.) **2011-2013**.
- Aalaa Hasan , Sudan Academy of Science, (main supervisor for.). Extraction Potential of Metabolites with Nutritional And Functional Properties From Lactic Acid Bacteria **2008-2010**.
- Afaf Adam, Sudan Academy of Science, (Co- supervisor for M.Sc.) Potentials production of diabetic's regenerative medicine from camel pancreatic cells **2009-2012**.

- Nahid Misbah, University of Khartoum, Faculty of Science, Master Degree Program in Botany (CO-Supervisor) , Characterization of Some Yeasts Isolates from Indigenous Sudanese Fermented Foods and Drinks, **2005-2007**.
- Hanaa Abelaziz, Elatyp (CO-Supervisor) Sudan Academy of Science, Master Degree Program on Extraction and purification of Insulin from camel's pancreatic cells **2005-2007**.
- Rami Sir Elkhatim, (main supervisor), Master degree., Sudan Academy of Science Optimization of Technological Properties of Gum Arabic, **2005-2007**.
- Ibtihag Mukhtar, Sudan Academy of Science, Master Degree Program on Extraction of Anti biotic Secondary Metabolite of *Azadarichitac indica*, **2005-2007**.
- Aymen Ibrahim Ashmaig, Sudan Academy of Science, master degree Isolation and Molecular Characterization of bacteria used in camel milk products. **2006-2009**.
- Mona Satti, (Main Supervisor MSc.) Faculty animal production, Sudan University of Technology., Bred biodiversity of Sudanese goats **2010-2012**.

3.8. Supervising: the following students reading for PhD.

- Ibtihaj Muhktar, Doctor Degree Program, Environmental Biotechnology, Sudan Academy of Scienc. Cellulose enzymes for industry, **2015-**.
- Nahid Abdelnabi, Doctor Degree Program, Environmental Biotechnology, Sudan Academy of Scienc.. Probiotics from natural sources **2014-**.
- Aymen Ashmeg. (Main Supervisor) Optimizing the potentiality of locally isolated yeast strains for production of ethanol: Sudan Academy of Sciences. **2012-**.

- Amel Ahmed Amin, Faculty, Doctor Degree Program of Agriculture, University of Khartoum, (Co- Supervisor), Novel Proteins fro *Bacillus therongeneis* **2008-2011**.
- Fatima Misbah Abbas, (Co-supervisor), Doctor Degree Program, Plant Biotechnology. Faculty of Science university of Khartoum. **2008-2012**.
- Yasir Mohamed Abdel Rahim, (Main Supervisor) Doctor Degree Program, Plant Biotechnology. Faculty of Agriculture, Jazira University. Phytochemical and biotechnological evaluation of *Cordia africana* and its use in termite control. **2010-2013**.
- Suzan Makawi, (Co-supervisor), Doctor Degree Program, (Bees Honey) Biochemistry Biotechnology. Sudan Academy of Science. **2011- 2014**.
- Nahid Misbah, (main supervisor), Doctor Degree Program, microbial Biotechnology. Sudan Academy of Science Khartoum.. Production of highly thermophilic alkaline protease enzyme from local bacteria, **2012 -2015**.
- Mahmoud Mohamed El Tahir El Hassan (Main Supervisor), Doctor Degree Program, Environmental Biotechnology, (work place pollution) Sudan Academy of Scienc. **2013-2016**.

3.9. External Examiner for the following M Sc. Students

- **Samah Mahjobb Hasan Saad**, Institute of Endemic Disease, Faculty of Medicine, University of Khartoum, 2007.
- **Yasir Abdella**, Sudan Academy of Science, Agricultural Research Corporation, 2008.
- **Nisreen Ahmed Kamal**, Sudan Academy of Science, Agricultural Research Corporation, 2009.

- **Zahra Mohammed Ibrahim**, Department of Botany, Faculty of Science University of Khartoum, 2009.
- **Ilham Ibrahim Mahmoud**: Department of Biological Science, Faculty of Engineering and technology, University of Gazira, 2009.
- **Shaza Ahmed**. Department of Biological Science, Faculty of Engineering and technology, University of Gazira, **2011**.
- **Sawsan Abdealgader Tawkaz: Biotechnology of Anther Culture**, Biotechnology and Biosafety Agricultural Research Corporation, Sudan Academy of Science, **2010**.
- **Mohamed Saleh Humad**. Microbial Biotechnology, Industrial Research Center, Sudan Academy of Sciences. **2011**.
- **Hind Emad Fadul: Genetic engineering of Wheat**, Botany, Faculty of Science, University of Khartoum, **2011**.
- **Abdeljaber Musharaf Ahmed**: Forest Biotechnology, Agricultural Research Corporation, Sudan Academy of Science, **2012**.
- **Batoul Ali**: Molecular studies in sorghum biocolor, Faculty of Agriculture University of Khartoum **2010**.

4. Promotion Status

- Senior Research Assistant: November **1987**- March **1991** Agricultural. Research Council, National Council for Research Khartoum, Sudan.
- Post Doctor Researcher: May **1997** - May, **1999**, Dept. of Plant Physiology, National Institute of Aerobiological Resource, National Center for Research. Tsukuba, Japan.

- Associate Professor, **1999-2002**, Environment and Natural Resource Research Institute, National Center for Research, Ministry of Science and Technology, Khartoum, Sudan.
- Director of the Commission for Biotechnology and Genetic Engineering July **2002**. June **2007** up to date. National Center for Research, Ministry of Science and Technology, Khartoum, Sudan.
- Senior Research Scientist (Associate Professor) National Center for Research National Center for Research, Ministry of Science and Technology, Khartoum, Sudan. June **2007**- February **2010**.
- Director Central Laboratory (Professor): Ministry of Science and Technology March **2010-2011**.
- Vice President: Sudan Academy of Science March **2011** - February **2014**.

Current Occupation: President: Sudan Academy of Science

5- Research Institution Management

- Director Commission for biotechnology and Genetic Engineering, National Center for Research, Ministry of Science and Technology **2002-2007**.
- Director Central Laboratory: Ministry of Science and Technology **2010**.
- Head of information technology sector, 2010-2012
Ministry of Science and Technology
- Vice President: Sudan Academy of Sciences 2011 up-to-date.

6- Teaching Experience

- **Teaching assistant** University of Khartoum, Faculty of Science, Dept. of Botany, 1983-1991; (General Microbiology, Mycology, Bacteriology, Plant Pathology and Plant Diseases).
- **Teaching Assistant:** University of Juba, Faculty of Natural Resources Dept. of Botany, **1990**; (General Microbiology).

- **Teaching Assistant:** The Military College, 1986; (Applied Microbiology).
- **External Examiner:** University of Juba, Faculty of Science 2004.
- **Lecturer:** University of Juba, Faculty of Science, Department of Biotechnology 2005.
- **Sudan Academy of Science,** Post Graduate Advisor (Supervisor) 2004 up to date.
- **Omdurman Public University, Faculty of Environmental Sciences:** Master degree student Teaching the course of Environmental biotechnology 2012.
- **Africa City for Technology:** Master Degree course student, Industrial Biotechnology, Fermentations 2012- 2016

7- Organized: the following Workshops and Conferences

7. International Conference in Applied Biotechnology, Africa City of Technology, Khartoum Sudan. 29-30 September 2009.
(Member of the editorial committee).
8. Principles of Biosafety Research for the Release of Genetically Engineered Crops 4-9 February 2007 Khartoum, Sudan Principal Organizer in Collaboration with (ICGEB) International center for genetic engineering and Biotechnology (Principal organizer).
9. The 7th Scientific Conference Biotechnology and Future Prospects. 13-15 December 2005 Sudan Khartoum. (Chairman of the Scientific Committee)
10. National Workshop on Biotechnology and Applications for Sustainable Development Khartoum, Sudan, 11 – 16 April 2005. In Collaboration with the COMSTECH-ISESCO (Principal Organizer).
11. 2^{ed} National Workshop on Plant Cell and Tissue Culture 7-9 September 2003 Khartoum Sudan (Principal Organizer).

8- Member of Expertise Committee

- National Coordinator: of the Sudanese Plant and Soil Analysis Laboratories, April **1990- April 1991**.
- Member of Expertise of the Intergovernmental Authority Development (IGAD) **2000**.
- Lesion officer of the CODEX Alimentarius Commission for the FAO GM Foods Platform, March **2013** up to date.
- Lesion officer for the International Center for Genetic Engineering and Biotechnology (ICGEB) in Sudan, July **2002-2010**.
- Lesion officer for the Inter-Islamic Network on Genetic Engineering and Biotechnology (INOGE) in Sudan, March **2002- 2011**.
- Sudan National Biosafety Committee **2003** up-to-date
- Sudan National Consumer protection Committee **2008-**uptodate.
- National Committee for evaluation Risks and Hazards Associated With Genetically Modified Foods Sudanese Standardization and Metrology Organization **2005** up-to-date,
- National Committee for Scientific Equipment **2010**.
- National Committee for Total Technological Restoration **2010**.
- National Committee for Biotechnology **2010**.

9- Practical Experience and Skills

- DNA isolation, purification, digestion, restriction, ligation and PCR amplification techniques.
- DNA markers Assistance Techniques (RAPD, AFLP, SSR).
- Microbial isolation, purification, biochemical characterization and Molecular Identification Biotechnology and Pollution Bioremediation.
- Molecular Signs Plant-Microbe Interactions.

- Induction of mutation, gene marking by antibiotic resistance, Auxotrophic markers, and *gusA* marking.
- Microbial and plant protoplast formation, regeneration and cell fusion.
- Plant cell and tissue culture
- Phytochemistry
- Extraction purification Plant Secondary Metabolites
- Computer skills: Windows and Macintosh operations: Type writing, statistical analysis, graphics, chemical drawing and power point for slide making and presentation.
- Computer analysis of genetic relatedness
- Laboratory management and writing of progress reports and annual reports.

10- On Going Research

- Synthesis *In vitro* production of novel bioactive compound from local plant materials that specific to Sudan
- Isolation and Characterization of novel enzymes and their production at low cost from microorganisms.
- Molecular Studies on Sudanese varieties of date palm trees (*Phoenix dactylifera*).
- Purification & characterization of antimicrobial substance – Saponins, from *in vivo* and *in vitro* grown plant
- Studies on local breeds of Sudanese goats under molecular bases.
- Utilization of microorganisms for bioremediation of industrial and oil product and Polychlorinated diphenyls.
- Optimization of Technological Properties of Gum Arabic.
- Improvement of Lactic Acid Bacteria of the Sudanese Traditional Dairy Products.

- Genetic Engineering Studies on Sudanese Yeast Cultures isolated from traditional food products.
- Effect of ion bean mutagenesis on some famous varieties of *Hibiscus sabdarifa* (Karakde).
- Functional food (Sidir, Date palm, Pumpkin, Mango etc..)
- Water purification using nano- biotechnology.
- Natural monitors and Monitoring of Workplace pollution with volatile organic compounds.

11- Professional Affiliation:

- African Association of Biological Nitrogen Fixation.
- African Association of Soil and Plant Analytical Laboratories.
- African Association of plant biotechnology
- Japanese Society of Crop Sciences.
- Japanese Society of Plant-Microbe Interaction.
- Japanese Society of Plant Cell Physiologist.
- International Association of Molecular Plant-Microbe Interactions.

12- Publications

Scientific Journals

- 1- Yasir M Abdelrahim, Hind A A Babiker, Mutaman A Abdelgader, Elnur E Abdelrahman, **El Gaali E Ibrahim (2016)**. Evaluation of the Effeciency of Different Extracts of GumbailPars(*Cordia africana* Lam.) for Termite Control. Global Journal of biology Agriculture and Health Sciences, 5:88-92.
- 2- Amel Ali and **Eisa El Gaali (2015)**. Physiologicla properties of mango (*Mangifera indica* L.) seed kernels oil. Sudan Academy of Sciences Journal. Vol. 10; 80- 92.
- 3- Yasir M Abdelrahim, Hind A A Babiker, Mutaman A Abdelgader, Elnur E Abdelrahman, **El Gaali E Ibrahim (2015)**. Assessment of Genetic Variation in

Cordia Tree (*Cordia africana* Lam) in Sudan using Random Amplified Polymorphic DNA Marker Sudan Academy of Sciences Journal, 10:27-33.

- 4- Makawi, S.Z. **E. I. El Gaali** E. I. Gadkareem. (2015). Physiochemical properties of some Sudanese honey. The Rabat Journal of Medical Sciences. (accepted for publication).
- 5- Makawi, S. Z. **El Gaali E. I.** Gadkareem E. I. (2015). Evaluation of some Sudanese of antibacterial activity of pure honey and phenolic compounds extracted from some Sudanese honey samples. The Rabat Journal of Medical Sciences. (Accepted for publication).
- 6- Eisa El Gaali (2014). The role of deplomatic relationship in science and technology advancement, Journal of economic and social estudies,(in press)
- 7- Nuha A, **El Gaali Eisa** (2013). Usage of Spider Silk as Bio-Monitors. African Journal for Scientific Research (accepted for Publication).
- 8- Faisal Hammad Mekky Koua, Fatima Misbah Abbas, **Eisa Ibrahim El Gaali**, Mutasim Mohammed Khalafallah, Hind Ahmed Ali Babiker (2011). In vitro host-free seed culture, callus development and organogenesis of an obligatory root-parasite *Striga hermonthica* (Del.) Benth: the witch-weed and medicinal plant. International Journal of Plant Biology 2:34-39.
- 9- Faisal Hammad Mekky Koua, , Hind Ahmed Ali Babiker¹, Asim Halfawi, Rabie Osman Ibrahim, Fatima Misbah Abbas **Eisa Ibrahim Elgaali**, and Mutasim Mohammed Khalafallah, (2011): Phytochemical and biological study of *Striga hermonthica* (Del.) Benth callus and intact plant. Research In Pharmaceutical Biotechnology 3(7): 85-92.
- 10- Fatima Musbah Abbas; ElBushra ElSheikh Elnur; Normah Mohd Noor; Eisa Al Gaali; Zainon Mohd Ali; Roohaida Othman (2011). An effective protocol for callus induction with milk clotting activity from *Solanum dubium* seeds. Sains Malaysiana; 40(4):339-343.
- 11- Rami S. Habeballa, Nada B. Hamza **and Eisa I. El Gaali** (2010) Genetic variability in Sudanese *Acacia senegal* (L.) assessed by random amplified polymorphic DNA African Journal of Biotechnology, Vol. 9 (30), pp. 4655-4660.

- 12- Rami S. Habiballa and **Eisa I. El Gaali (2009)**. Phylogenetic relationship in *Acacia senegal* populations across the Gum Arabic belt in Sudan. African Journal for Biotechnology, 8 (19) 4817-4823.
- 13- Abdelhalim A. Hamza, **Eisa I. El Gaali** and Ahmed A. Mahdi (2009). Use of the RAPD-PCR fingerprinting and API system for clustering lactic acid bacteria isolated from traditional Sudanese sour milk (Roab). African Journal of Biotechnology Vol. 8 (15), 3399-3404
- 14- **Eisa El Gaali** and Mona Satti (2009). Genetic characterization of two Sudanese goat breeds (*Capra hircus*) using RAPD molecular markers African Journal of Biotechnology Vol. 8 (10), 2083-2087.
- 15- Aymen Ashmaig, Alaa Hasan and **Eisa E.L Gaali (2009)** Identification of lactic acid bacteria isolated from traditional Sudanese fermented camel's milk (*Gariss*) African Journal of Microbiology Research. 3 (7) 451-457.
- 16- **El Gaali Eisa** and Ibthaj Mukhtar (2009). *In vitro* Assay of The Inhibitory Effect of Neem Callus and Leaf Extracts on Some Phytopathogenes. El Buhooth. 12 (1) :1-11.
- 17- **El Gaali Eisa** and Ibthaj Mukhtar (2007). Antimicrobial Activity of Neem (*Azadirachta indica*) Callus and Leaf Extracts. El Buhooth 11: 53-61.
- 18- Mutasim Mohamed Khalafalla **Eisa Ibraheem El Gaali**, Magda Mohamed Ahmed (2007). In vitro Multiple Shoot Regeneration from Nodal Explants of *Vernonia amygdalina* -An important medicinal plant. The Event-Proceeding papers of the 8th African Crop Science Society Conference. African Crop Science Journal: 8: 747-752.
- 19- Mutasim M. Khalafalla, **Eisa I. El Gaali**, Fatima M. Abbas and Hind A. A Babiker (2007) Neem (*Azadirachta Indica* A. Juss) callus induction and its larvaecidal activity against Anopheles mosquito. International Journal of Biotechnology and Biochemistry, 3 (1):85-94.
- 20- **El Gaali Eisa** and Fatima El Bakri (2003). Assessment of Endophytic Bacteria Isolated from Sugarcane for their efficiency to Fix Nitrogen with Sorghum plants. Journal of Science and Technology 4:98-107.

- 21- El Gaali Eisa**, and Yutaka Kitamoto (**2002**), A Note in Extending the Host Specificity of *Bradyrhizobium japonicum* and *Rhizobium leguminosarum* through Inter-Generic Protoplast Fusion, University of Khartoum. Journal of Agricultural Science 10: 131-135.
- 22- Vladimir Tchebotar**, Yasuji Nakayama, Ui Gum Kang, **EL Gaali Eisa** and Shoichiro Akao, (**1999**), The Use of Reporter *Gus*-Gene to Study the Colonization of Rice Roots by *Azospirillum lipoferum*, Soil Microorganisms. 53:13-18.
- 23- El Gaali Eisa**, Masayoshi Kawaguchi, Shoichiro Akao, and Shiji Kawasaki, **1998** Comparison of AFLP (Amplified Fragment Length Polymorphism) Patterns of Among 8 Japanese Ecotypes of *Lotus japonicus* and *L. fillicaulis* Journal of Crop Science 67:164-165.
- 24- El Gaali Eisa**, Kazihiko Maeta, Nobuhiro Mori and Yutaka Kitamoto, (**1996**), Factor Affecting Nodulation of Soybean by Rhizobia in Axenic Culture (in Japanese) Japanese Journal of Crop Science 65: 141-142.
- 25- El Gaali Eisa**, Kazihiko Maeta, Nobuhiro Mori and Yutaka Kitamoto, (**1995**), Enhanced Nitrogen Fixation Capabilities of Soybean Rhizobia by Intra- and Inter -specific Cell Fusion, Japanese Journal of Crop Science, vol. 64: 2273-2280.

Papers in Conferences

- 26- El Gaali Eisa**, (**2007**). Application of Biotechnology for Conservation and Improvement Medicinal Plants. Proceedings of Third Seminar on Biotechnology and its Applications in Arab Agricultural Investment, Amman, Jordan, 22-24 May **2007**.
- 27- EL Gaali Eisa** (**2006**). Current status of Biotechnology in Sudan.. Proceeding of the first Jordanian Egyptian Biotechnology workshop Cairo Egypt Nov 4- Nov 9 2006. 71-73.
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