



## Curriculum Vitae

### Personal data:

**Name** : Adil Omer Salih Abdel Rahim

Nationality : Sudanese

Place of Birth: White Nile State, Sudan

Marital status: married

Language: Arabic (mother tongue language), English and basic Germany.

### Education:

**Primary School** : White Nile, Sudan

**Secondary School** : Gezira Aba, White Nile, Sudan

**High secondary School**: Gezira Aba, White Nile Sudan

### Academic Qualifications:

**Ph.D.** in Horticulture (Reproductive physiology), University of Gezira, Sudan and University of Hohenheim, Germany, 2005.

**M.Sc.** in Crop production (Plant breeding), Faculty of Agricultural and Food Sciences, American University of Beirut, Beirut, Lebanon, 1996.

**B.Sc.** in Agriculture. Faculty of Agricultural Sciences, University of Khartoum, Sudan, 1991.

### Non Degree Training:

1. Molecular biology course organized by University of Gezira, Sudan, and University of California, Davis, USA, 22-27 March, 1997.
2. An in country training course on collection and conservation of plant genetic resources organized by the Agricultural Research Corporation (ARC), and IPGRI in Wad Medani, Feb. 22-26, 1998.

3. Training on peas improvement program at ICARDA, Aleppo, Syria, January 19-Feb. 9, 1998.
4. International training course on Vegetable Science and Technology at Beijing Vegetable Research Center, August 12- Sep. 10, 1999.
5. A sustainable production system for Africa high lands, Ethiopia, June, 2006.
6. Market oriented traits for Africa crops using mutation breeding, Ethiopia, May, 2007.
7. Sugar beet production and industry, Egyptian experience, Delta Sugar beet Production Company, Egypt. 2010 (Visit).
8. Sugar beet production in Iran, Sugar beet Seeds Institute, Karag, Iran. 2011 (Visit).
9. The Egyptian Center for International Cooperation in Agriculture. Sugar beet research and industry in Egypt. March, 2012
10. The Bulgarian Academy of Sciences. Scientific visit on Mutation breeding sponsored by IAEA, Oct., 2012

**Professional experience:**

1. Professor (Plant breeding and fruit trees physiology), ARC, 2013
2. Acting Director General, Agricultural Research Corporation, Feb.-Dec., 2012.
3. Deputy Director General, Agricultural Research Corporation, Jan., 2012-date
4. National Coordinator of Vegetables, Medicinal and Aromatic Plants Research Program, Oct., 2010- Jan., 2012.
5. Secretary of the National Crop Husbandry Committee, Oct., 2010- Jan., 2012.
6. National Coordinator of Sugar beet Research Program, May, 2010- Jan., 2012.
6. Associate Professor (Plant breeding and fruit trees physiology) 2008, Horticultural Research Center, Agricultural Research Corporation, Sudan.
7. Assistant Professor (Agro-breeder) at the Horticultural Research Program, Agricultural Research Corporation, Wad Medani, Sudan. 2001- 2007.
8. Head, Horticultural Research Department, Gezira Research Station, ARC, Wad Medani, Sudan. 1998-2002 and then Sep., 2005- August, 2008.

9. Graduate Student (Ph.D.), Sandwich program between University of Hohenheim, Germany and University of Gezira, Sudan and. Oct., 2002-March, 2005.
10. Research Scientist (Agro-breeder), Horticultural Research Program, Agricultural Research Corporation, Wad Medani, Sudan. 1996-2001.
11. Post graduate student (M.Sc.), the American University of Bierut, Beirut, Lebanon, 1993-1996.
12. Assistant Research Scientist, Hudieba Research Station, Agricultural Research Corporation, Edamer, Sudan, 1992-1993.

#### **Steering and Board Committees:**

1. A member of University of Gezira Senate, Sudan. Oct., 2012-Dec., 2012
2. A member and Vice President of the Association of Agricultural Research Institutes in Near East and North Africa (AARINENA). March, 2012-Dec., 2012.
3. A member Food Security Project in Arab countries Steering Committee. March, 2012-date
4. A member of the Board of Directors of the Association of Strengthening Agricultural Research in East and Central Africa (ASARECA). March, 2012-June, 2013.
5. A member of the University of Sudan Academy of Sciences and president of the Agricultural Research Council, March, 2012- Dec., 2012
6. A member of Gezira Scheme, Sudan Administration Council. April, 2012-Dec., 2012.
7. Consultant of the project "Supporting the Small-Scale Traditional Rainfed Producers in Sinnar State (SUSTAIN), IFAD, Jan., 2012-date (end 2014)

#### **Current Research Activities:**

Involved in vegetables improvement program, with major emphasize on applied research in breeding for resistance/tolerance to diseases and insect pests of vegetables, viz., tomatoes, onions, egg plant, hot peppers, snake cucumber, sweet peppers and squash. More specifically, identification of resistance or tolerance

genes and their transfer to otherwise good genetic backgrounds is the core of our vegetable breeding program. Snap beans and fresh peas breeding and evaluation are among our current research activities. Another area of interest is the husbandry of vegetables and fruit trees. In this respect, vegetable and fruit trees nutrition and vegetable water requirement are currently among the main areas of interest.

Sugar beet adaptation to tropical conditions of Sudan is a new area in which we are heavily engaged.

### **Teaching experience:**

1. Multivariate analysis course for post graduate students, University of Gezira, Sudan, July, 2005 (21 hours).
2. Multivariate analysis course for research scientists and assistant research scientists at the plant genetic resource unit, Agricultural Research Corporation, August, 2005 (21 hours).
3. Fruit trees physiology, Faculty of Agricultural Sciences, University of Gezira, Semester 8, 2007- 2012.
4. Statistical analyses for Agricultural Research, Statistical software (GENSTAT, IRRISTAT, and MSTATC. May, 2011. Assistant Research Scientists, Agricultural Research Corporation.
5. **External examiner**, University of Gezira Sudan (6 M.Sc. thesis and 6 Ph.D. thesis).

### **Publications:**

1. Abdel Rahim, A.O.S., Elamin, O.M., Elkashif, M.A. and Bangerth, F.K. 2011. Effects of pacloburazol on floral induction and associated hormonal and metabolic changes of alternate bearing mango (*Mangifera indica*) cultivars during off year. Journal of Agricultural and Biological Sciences 6(2):1-13.
2. Abdel Rahim, A.O.S., Elamin, O.M., Elkashif, M.A. and Bangerth, F.K. 2011. Effect of growth retardants, paclobutrazol and prohexadione-Ca on floral induction of regular bearing mango (*Mangifera indica*) cultivars during off-season. Journal of Agricultural and Biological Sciences 6(3):1-9.

3. Alamin, A.M., Abdel Rahim, A.O.S, Khairy, A.I., and Abdelrahman, M. and Farrag, H.A. 2010. Evaluation of some promising fresh peas (*Pisum sativum* L.) genotypes for yield, yield components, quality and resistance to powdery mildew. Sudan J.Agric.Res. 16:19-29.
4. Alamin, A.M., Abdel Rahim, A.O.S, Abusara, A.F., and Hashim, G. 2009. A new dry peas (*Pisum sativum* L.) cultivar for central Sudan. Sudan J.Agric.Res. 13: 13-22.
5. Abdel Rahim, A.O.S, Elamin, O.M. and Bangerth, F.K. 2008. Effects of paclobutrazol on metabolic and nutritional changes of grafted mango (*Mangifera indica* L.) seedlings during floral induction. Sudan J.Agric.Res. 11:77-90.
6. Abdel Rahim, A.O.S, Elamin, O.M. and Bangerth, F.K. 2008. Effects of paclobutrazol on floral induction and correlated phyto-hormonal changes in grafted seedlings of different mango (*Mangifera indica* L.) cultivars. Sudan J.Agric.Res. 11:77-90.
7. Adil O.S. Abdel Rahim, Ali M. Ali, Gamal A. Elbadri, Suad A. Ahmed and Mohamed A. Eltayeb. 2010. Tomato mutants with high Tomato Yellow Leaf Curl Virus (TYLCV) disease tolerance, high yield and good fruit quality. International Horticultural Congress (IHC), Lisbon, August, 2010.

#### **Proceedings:**

1. **Abdel Rahim, A.O.S, Dannenberg, H.** 2010. Adaptation of sugar beet to tropical conditions of Sudan. Tropentag Symposium, 14-16 Sep., Zurich.
2. Awad M.M. Elzain and **Abdel Rahim, A.O.S.** 2009. Genetic studies on resistance to powdery mildew in snake cucumber (*Cucumis melo* L.). ISHS cucurbits Proceedings, China.
3. **Abdel Rahim, A.O.S.** 2009. Effect of girdling on floral induction of regular bearing mango cultivars. Tropentag Proceedings, Oct., 6-8, 2009, Hamburg.
4. Abd El gadir, H. and **Abdel Rahim, A.O.S.** 2000. First near East conference on improved weed management, 5-8 February, 2000, Cairo, Egypt. Abstract.

#### **Manuscripts for publication:**

1. Abdel Rahim, A.O.S., Celsio, S.K., Ali, H.K., Younis, D.I., Ibrahim, O.S., Bedri, K.A.M., Mohamed, A.E., Mohamed, H.A. and Elbadri, G.A. 2012. Adaptation of

sugar beet (*Beta vulgaris* var. *altissima* Doell) hybrids to tropical conditions of Sudan

2. Ali, M.A., Abdel Rahim, A.O.S. and Mohamedm G.H. 2012. Yield and quality response of two onion cultivars to inter and intra row spacing under Sudan Kassala and Gash conditions

3. Abdel Rahim, A.O.S., Baalbaki, R. and Malhotra, R.S. 2011. Genotype environment interaction for protein contents in field peas (*Pisum sativum* L.)

4. Abdel Rahim, A.O.S., Elkhalfifa, G.A. 2011. Selection for yield components in common beans (*Phaseolus vulgaris* L.)

5. Abdel Rahim, A.O.S. 2011. A review on breeding and genetics research of vegetables in the Sudan – Achievement, present situation and future plans. Submitted for colloquium on Horticultural crops, National Horticultural Research Program.

#### **Released recommendations:**

1. Elamin A.A, **Abdel Rahim A. O.S.**, Eljack A. E., Dafalla G. A. ; Daubeze, A.M. and Palloix A. 2012. Sweet pepper (*Capsicum annuum* L.) Breeding lines resistant to Tobacco Mosaic Virus (TMV), cucumber mosaic virus (CMV) and Potato virus Y (PVY). Proceedings of the National Pest and Diseases Committee, Agricultural Research Corporation, Sudan (June, 2012)
2. **Abdel Rahim, A.O.S.**, Ali, M.A., Elbadri, G.A., Mohamed, S. and Eltayeb, A.M. 2011. A proposal for release of tomato mutant varieties with high Tomato Yellow Leaf Curl Virus (TYLCV) disease tolerance, high yield and good fruit quality. Proceedings of the National Variety Release Committee, Ministry of Agriculture, Sudan (Dec., 2011)
3. Alamin, A.M., **Abdel Rahim, A.O.S.**, Khairy, A.I.H., Adam, A.M., Abdelrahman, G.H., Abdelrahman, N.M., Ahmed, M.A., Abdelrahman, S.H. and Babikir, I.H. 2011. A proposal for release of two promising dry pea

(*Pisum sativum* L.) genotypes for yield, quality and tolerance to powdery mildew. Proceedings of the National Variety Release Committee, Ministry of Agriculture, Sudan (Dec., 2011)

4. **Abdel Rahim, A.O.S.** Celsio, S.K., Hassan, M.K., Younis, I.D., Ibrahim, O.H., Bedri, K.A.M., Ali, H.K., Mohamed, A.E. Mohamed, Mohamed, H.A. and Elbadri, G.A. 2011. A proposal for release of some sugar beet hybrids for tropical conditions of Sudan. 2011. Proceedings of the National Variety Release Committee, Ministry of Agriculture, Sudan (July, 2011).
5. Ali, M.A., **Abdel Rahim A. O.S.** and Mohamedali, G.H. 2010. Effects of inter and intra row spacing on yield and quality of two onion cultivars grown under Kassala and Gash conditions. Proceedings of the 48<sup>th</sup> National Crop Husbandry committee, Agricultural Research Corporation, June, 2010
6. Ahmed, E.A., **Abdel Rahim, A.O.S.** and Eljak, A.E. 2008. A proposal for release of F1 hybrid of squash resistant to Zucchini Yellow Mosaic Virus (ZYMV) and powdery mildew diseases. Proceedings of the National Variety Release committee, Sudan (Dec., 2008).
7. Alamin, A.M., **Abdel Rahim, A.O.S.** and Hashim, G. 2008. A proposal for release of high yield good quality fresh peas varieties. Proceedings of the National Variety Release committee, Sudan (Dec., 2008).
8. Elhassan, A. A. M., **Abdel Rahim, A.O.S.**, Mohamed, A.S.I, Nour, S.M.N., and Elamin, A.E.M. Response of Tomato to Ecoquel, a micronutrient Fertilizer, under Gezira conditions. 2008. Proceedings of the 45<sup>th</sup> National Crop Husbandry committee, Agricultural Research Corporation, Dec, 2008.
9. Mohamed, S.K, **Abdel Rahim, A.O.S.**, Mohamed, M.B. 2008. Effect of intra-row spacing on growth and yield of three okra (*Abelmoschus esculentus* L.) cultivars grown in kharif season under Gezira conditions. Proceedings of the National Crop Husbandry committee, Agricultural Research Corporation, Sudan (Dec., 2008).
10. Alamin, M.A., Hashim, G., Ahmed, M.S., Ali, A.E., Abu-Sarra, A.F., **Abdel Rahim, A.O.S.**, Efahal, E.M.A., Khashmelmous, A.E. 2003. A new dry pea (*Pisum sativum* L.) cultivar. Proceedings of the National Variety Release committee (Oct., 2003).
11. Abu-Sarra, A.F., Khashmelmous, A.E., **Abdel Rahim, A.O.S.**, Hashim,

A.A., and Idris, M.A. 2001. Yield response of onion to different forms of nitrogen fertilizers in the central clay plain of Sudan. Proceedings of the National Crop Husbandry committee, Agricultural Research Corporation, Oct., 2001.

12. Abu-Sarra, A.F., **Abdel Rahim, A.O.S.**, Hashim, A.A., and Idris, M.A. 2001. Yield response of tomato to different forms of nitrogen fertilizers in the central clay plain of Sudan. Proceedings of the National Crop Husbandry committee, Agricultural Research Corporation, Oct., 2001.

### **Supervision:**

1. Main supervisor. Sarra K.M. Bakheit. M.Sc. thesis. 2005-2008. Effects of variety, spacing and season on okra growth and yield. Sudan Academy of Science, Ministry of Sciences and Technology.
2. Main supervisor. Abdelkhalig Younis Mohamdai. M.Sc. thesis. 2007-2010. Evaluation of okra (*Abelmoschus* spp) Sudanese Genetic resources for yield and other quality attributes under Gezira conditions. Sudan Academy of Science, Ministry of Sciences and Technology.
3. Main supervisor. Mohamed A.A. Hamadelneil. M.Sc. thesis. 2007-2009. Genetic studies for inheritance of leaf miner (*Liriomyza spp.*) resistance in tomato (*Lycopersicon esculentum* L.). Sudan Academy of Science, Ministry of Sciences and Technology.
4. Main supervisor. Awad M.M. Elzain. M.Sc. thesis. 2007-2009. Genetic studies on resistance to powdery mildew in snake melon (*Cucumis melo* L. var. *flexosus*). Sudan Academy of Science, Ministry of Sciences and Technology.
5. Main supervisor. Faiha Ibrahim Hassan. M.Sc. thesis. 2009-date. Genetic studies on tolerance to jassid in egg plant (*Solanum melogena* L.). Sudan Academy of Science, Ministry of Sciences and Technology.

### **Technical Reports and Workshops:**

1. Abdel Rahim, A.O.S. 1998. On farm adaptive research on horticultural and field crops. Technical report. White Nile Agricultural Services Project (WNASP) and Agricultural Research Corporation (ARC). pp: 12-14.
2. Abdel Rahim, A.O.S. 1999. On farm adaptive research on horticultural



crops. Technical report. White Nile Agricultural Services Project (WNASP) and Agricultural Research Corporation (ARC). pp: 1-17.

3. Abdel Rahim, A.O.S and Elhassan, A.A.M. 1999. Effects of new N-fertilizers on tomato and onion yields in Gezira soils. Technical report. DANASDCO and Agricultural Research Corporation.
4. Abdel Rahim, A.O.S. 1999. Fundamentals of vegetables crops production. White Nile Agricultural Services Project (WNASP), Workshop, Kosti, White Nile State.
5. Abdel Rahim, A.O.S. 2000. Fundamentals of vegetables and fruit trees production. Workshop on promotion of horticultural production, Gedarif, Gedarif State (in Arabic).

**Other activities:**

1. Member of the International Society of Horticultural Sciences (ISHS).
2. Member of Sudanese Society for environment protection.
3. Head of the ARC labors Charity Fund.
4. Secretary of ARC Research Scientists' Society. 1998-2012.

**Address:**

Agricultural Research Corporation

P.O. Box 126

Wad Medani, Sudan.

E-mail: abdelrahimadil@yahoo.com

Mobile: +249 918263743.