Curriculum Vitae Lekgari Aatshwaelwe Lekgari

Name, Academic degree	Lekgari Aatshwaelwe Lekgari, Ph.D
Date and Place of birth	20 – 11 -1972 in Ghanzi, Botswana
Nationality	Botswana
Military/National service	Tirelo Sechaba (1990)
Address	**P O Box 324** **Metsimotlhabe, BOTSWANA**
Telephone	**(+267) 366 – 8119/8100 (office) ; (+267) 72935546 (mobile)**
Fax	**(+267) 319 – 0783/392-8965**
E- MAIL:	**laxlek@gmail.com; llekgari@gov.bw**

Studies and Academic Achievements

1991 - 1995	Bachelor of Science in Agriculture, UNIVERSITY OF BOTSWANA/BOTSWANA COLLEGE OF AGRICULTURE,
2004 - 2006	MS (Plant Breeding and Genetics) UNIVERSITY OF NEBRASKA – LINCOLN
2006 - 2010	Ph.D (Plant Breeding and Genetics; Statistics) UNIVERSITY OF NEBRASKA – LINCOLN

Professional development

1995−1996	**Agricultural Science Teacher** at Gaborone West Community Junior Secondary School responsible for teaching theory of agriculture production and conduction practical work with students. Also a Class teacher in charge of monitoring and mentoring students of the class assigned to me.
1996 – 1999	**Assistant Agricultural Research Officer** in the Department of Agricultural Research responsible for cereal breeding in particular maize.
1999 – 2002	**Agricultural Research Officer II** in the Department of Agricultural Research responsible for breeding of maize.
2002 – 2003	**Agricultural Research Officer I** in the Department of Agricultural Research responsible for maize breeding.
2004 – 2010	**Graduate Research Assistant** at the University of Nebraska – Lincoln, USA responsible for Barley breeding, sorghum breeding and running of the small grains molecular laboratory.
2010 – 2011	**Senior Agricultural Research Officer** in the Department of Agricultural Research responsible for plant breeding activities.
2011 – 2014	**Principal Agricultural Research Officer II** in the Department of Agricultural Research responsible for plant breeding activities.
2017 – 2019	**Acting Chief Agricultural Research Officer – Crops** responsible for heading the Crop Research Division in the Department which included overall supervision of the research activities of the division, guiding division finances, and representing department management in several fora.
Since 2014	**Principal Agricultural Research Officer I** in the Department of Agricultural Research responsible for plant breeding activities.

Qualification / Activities / Awards

- Member of Sigma Xi, American Society of Agronomy, Crop Science Society of America, Soil Science Society of America
- Treasurer/secretary of the Agronomy and Horticulture Graduate Student Association of

University of Nebraska – Lincoln (2005/06)

- Worked on Identifying QTL associated with bioenergy related traits in sweet sorghum. Cloning and sequencing of Sucrose Phosphate Synthase gene in sweet sorghum.
- Involved in drafting of Protocols on Protection of New Varieties of Plants (PVP) at SADC and African Regional Intellectual Property Organization (ARIPO) level as part of the technical team from Botswana.
- Involved in drafting the National PVP and Seed Bills.

Awards

- Moseman International Agriculture Fellowship (2009/10)
- Technical Excellence Award (2016)
- Public Service Excellence Award (2016)

Achievements

- Co-developed and released Winter Barley Variety P-845 in Nebraska, USA.
- Co-released four maize varieties in Botswana (BWM 309, BWM 401, BWM 523, and BMH 0623).
- Co-released four sorghum varieties (Sephala, BWS 5028, BWS 5050, and BSH-2).

In-service Training:

- Labour Management Relations (2017)
- Agricultural Biotechnology Application (2017)
- General Course on Intellectual Property (2016)
- Patent Search and Strategies, and Establishing Technology and Innovation Support Centres in Botswana (2016)
- Customer Service course (2015)
- Mutation Breeding Techniques (2013)
- Teaching Methods course (1996)
- Breeding for drought and low nitrogen tolerance in maize, CIMMYT – Zimbabwe (1997)
- Visiting scientist with CIMMYT- Zimbabwe: Breeding methods and selection techniques (1997)

Projects and Important publications (peer-reviewed)

Major collaborative Projects

(1) Southern African Drought and Low Soil Fertility Project (SADLF) (1996 – 2003): The goal was to develop maize varieties that can perform well and withstand the stress conditions faced by farmers in Southern Africa. The project was in collaboration with CIMMYT and SADC countries. Resulted in parental lines for maize variety BWM 309.

(2) New Seed Initiative for Maize in Africa (NSIMA) (2010 -2016): The goal was to avail improved maize varieties to farmers in Africa at an affordable cost. The project covered Southern and Eastern Africa. The products of this project are four maize varieties (BWM309, BWM401, BWM523 and BMH0623).

(3) Sustainable Intensification of Maize Legume Farming Systems for Food and Nutrition Security in Eastern and Southern Africa (SIMLESA) (2014 -2018): The goal was to promote conservation agriculture based sustainable intensification of maize-legume cropping systems in Botswana.

(4) Using Radiation Technology and Biotechnology to Develop Mutant Lines of Important Crops with Increased Yield and Improved Nutritional and Hygienic Qualities (2011 – 2019): An IAEA Technical Cooperation Project intended to take advantage of mutagenesis to enhance the yield and nutritional quality of important crops in Botswana. The project is in collaboration with the IAEA, University of Botswana and mutated cowpeas are at M4 generation.

(5) Information-based Optimization of Jatropha Biomass Energy Production in the Frost-and Drought Prone Regions of Botswana Project (2012 -2017). The objective was to develop Jatropha caracass genotypes for stress tolerance, improved yield and oil content as a biofuel crop. A collaborative project between Botswana and Japan institutions.

Publications

(1) Mashiqa P., Moatshe O., Tiroesele B., **Lekgari L.**, Molosiwa O. 2019. Response of common bean (Phaseolus vulgaris L.) genotypes to varying planting dates in Botswana. J. of Agric. And Crop Research 7(2), 26 – 30.

(2) Moatshe O., Mashiqa P., **Lekgari L.**, Ngwako S. 2015. Effect of planting date on yield of maize varieties grown in the north-east region of Botswana. Crop Research (0970-4884), Vol. 49 Issue 1-3, p8-11.

(3) **Lekgari L A** and I Dweikat. 2014. Assessment of Genetic Variability of 142 Sweet Sorghum Germplasm of Diverse Origin with Molecular and Morphological Markers. Open Journ. of Ecology 4(7):371-393.

(4) Inafuku-Teramoto, Sayuri, C. Mazereku, T. Coetzee, C. Gwafila**, L. A. Lekgari**, D. Ketumile, Y. Fukuzawa, S. Yabuta, M. Masukujane, D. G. M. George, S. M. Chite, M. Ueno, Y. Kawamitsu, K. Akashi. 2013. Production Approaches to Establish Effective Cultivation Methods for Jatropha (Jatropha curcas L.) under Cold and Semi-arid Climate Conditions. Int. Journ. of Agronomy and Plant Prod. Vol. 4 (S), 3804-3815.

(5) Mashiqa P., **Lekgari L.**, and Ngwako S. 2013. Effect of Plant Density on Yield and Yield Components of Maize in Botswana. World of Science Journal 1(7): 173 – 179.

(6) **Lekgari L. A.,** P.S. Baenziger, K.P. Vogel, and D.D. Baltensperger. 2008. Identifying Winter Forage Triticale (X Triticosecale Wittmack) Strains for the Central Great Plains. Crop Sci. 48: 2040 - 2048.

(7) Madibela O. R and **Lekgari L.A.** 2005. The Possibilities for Enhancing the Commercial Value of Sorghum in Botswana. Journal of Food Technology Vol.3 Number 3. Grace Publications.

(8) **Lekgari L. A**., P.S. Baenziger, K.P Vogel, and D.D. Baltensperger. 2006. Seeding Rate: its contribution to the performance and quality of triticale (X Triticosecale Wittmack) blends for forage production. In W.C. Botes, D. Boros, N. Darvey, P. Gustafson, R. Jessop, G.F. Marais, G. Oettler, and D. Salmon (eds.). 2006. Proceedings of the 6th International Triticale Symposium, Stellenbosch, South Africa, 3-7 September, 2006.[ABSTRACT]

(9) **Lekgari L. A**. and Setimela P.S. 2004. Selection of Suitable Maize Cultivars in Botswana. In D.K. Friesen and A.F.E. Palmer (eds.) 2004. Integrated Approaches to Higher Maize Productivity in the New Millennium: Proceedings of 7th Eastern and Southern Africa Regional Maize Conference, February 11 – 15, 2002. Nairobi, Kenya.: CIMMYT and KARI

(10) Setimela P.S., Makore J., Banziger M., and **Lekgari L. A.** 2004. Stratification of Maize Growing Sites in Botswana Based on Yield Performance. In D.K. Friesen and A.F.E. Palmer (eds.) 2004. Integrated Approaches to Higher Maize Productivity in the New Millennium: Proceedings of 7th Eastern and Southern Africa Regional Maize Conference, February 11 – 15, 2002. Nairobi, Kenya.: CIMMYT and KARI.

(11) Setimela P.S. and **Lekgari L.** 2000. Development of Potential Sorghum Hybrids in Botswana. First Botswana Symposium on Harnessing of Science and Technology for Economic Development. June 28 – July 1, 2000. Gaborone Botswana.

(12) Setimela P.S. and **Lekgari L**. 2000. Strategies for Sorghum and Millet Improvement in Botswana. A paper presented at sub group meeting for SADC Regional needs and strategies for Sorghum and Millets Crop Improvement Workshop October 13 – 14, 2000. ICRISAT – Bulawayo, Zimbabwe.

REFEREES

DR. P. STEPHEN BAENZIGER
UNIVERSITY OF NEBRASKA - LINCOLN
DEPARTMENT OF AGRONOMY & HORT.
362D PLANT SCIENCE HALL
LINCOLN NE 68583 - 0915
USA
EMAIL: PBAENZIGER1@UNL.EDU
TEL: +1 402 525-6072

DR. ISMAIL DWEIKAT
UNIVERSITY OF NEBRASKA - LINCOLN
DEPARTMENT OF AGRONOMY & HORT.
365 KEIM HALL
LINCOLN, NE 68583 - 0915
USA
EMAIL: IDWEIKAT2@UNL.EDU
TEL: +1 402 472-5328

DR. P. S. Setimela
CIMMYT – ZIMBABWE
P O Box MP163
MOUNT PLEASANT
HARARE
ZIMBABWE
EMAIL. P.SETIMELA@CGIAR.ORG
TEL: +263 772 963436

DR Stephen Chite
TEL : +267 71664628