



UNIVERSITY OF EMBU

STAFF PROFILE

Name: Njoka, Fredrick M.

Title/Qualification: Prof.

Position: Dean: School of Agriculture
Department: Agricultural Resource Management

School: Agriculture

Area of Specialization: Plant Breeding and Genetics

Contact Address: Box 147, Chuka

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Short Biography:

Research Interests: Heterosis breeding in maize and wheat

On going Research Projects:

Genetic and epigenetic diversity of Gooseberry (*Physallis peruviana*) in selected Counties of Kenya.

Marker assisted breeding to improve drought tolerance in selected chickpea (*Cicer arietinum L.*) germplasm in Arid and Semi-arid areas of Kenya.



Publications in Journals:

1. Name of Journal: Journal of Advances in Biology & Biotechnology
Year of Publication: 2018
Authors: Jackline, Tubei E.; **Njoka, Fredrick M.**; Ombori, Omwoyo; Njau, Peter N.
Title: Introgression of Stem Rust Resistance into Popular Kenyan Wheat Varieties to Improve Production, Vol. 17(1): 1-11
2. Name of Journal: IOSR Journal of Agriculture and Veterinary Science (IOSR-JAVS)
Year of Publication: 2017
Authors: Tubei, Jackline E.; Ombori, Omwoyo; Njau, Peter N.; **Njoka, Fredrick M.**
Title: Determination of Stem Rust Ug99 Disease Severity in Selected Wheat Backcrosses in Kenya, Volume 10, Issue 5 Ver. I pages, 66-71
3. Name of Journal: Journal of Global Agriculture and Ecology
Year of Publication: 2017
Authors: Diana W. Manene and **Njoka, Fredrick M.**
Title: Determination of Post *Striga* Attachment Resistance in Selected Resistant Sorghum Lines in Kenya, Volume 7, Issue 1: 36-42, 2017.
4. Name of Journal: International Journal of Science and Research (IJSR)
Year of publication: 2017
Authors: **Njoka, Fredrick M.**, Owaka Margaret, Chrispine Omondi and Elijah Kathurima
Title: Pathogenicity of *Colletotrichum kahawae* in Kenya, Volume 6, Issue 5, 491-494, 2017.
5. Name of Journal: Journal of Applied Life Sciences International
Year of publication: 2017
Authors: Njagi Anthony Kiranga, **Njoka, Fredrick M.** and Charles W. Nderito
Title: Physiological and Agronomic Performance of Domesticated and Wild Cotton Germplasm from Selected Regions of Kenya, Volume 11, Issue 3: 1-7, 2017.
6. Name: International Journal of Plant and Soil Sciences
Year of publication: 2016
Authors: Kariuki J.M., **Njoka, Fredrick M.**, Leley P.K. and Manene D.W.
Title: Combining ability of inbred lines of maize (*Zea mays* L.) in Kiambu and Embu Counties, Kenya, Volume 12, Issue 4: 1-8, 2016.
7. Name: Journal of Forests, Trees and Livelihoods
Year of publication: 2015
Authors: Robert Kariba Kithure, Alice Muchugi, Ramni Jamnadass, **Njoka, Fredrick M.**, Lucy Mwaura.
Title: Genetic diversity of *Faidherbia albida*(Del.) A. Chev accessions held at the World Agroforestry Centre. Vol (1): 1-12.

8. Name: International Journal of Life Sciences Research.
Year of publication: 2014
Authors: Sande F. O., **Njoka, Fredrick M.**, Mgtutu J. A., Anami E. A.
Title: Screening for water deficit tolerance, relative growth analysis and *Agrobacterium*-infectivity in Tropical maize (*Zea mays* L.) inbred lines in Nairobi, Kenya. Vol. 2 (4): 218-224.

9. Name: Agriculture Science Developments
Year of publication: 2013
Authors: Grace K., **Njoka, Fredrick M.**
Identifying morpho-physiological characteristics associated with drought tolerance in selected Chickpea germplasms in Nakuru and Baringo Counties, Kenya, 2(11):106-115.

10. Name: Journal of Plant Breeding and Genetics
Year of publication: 2013
Authors: Melil K. Charles, **Njoka, Fredrick M.**, Ombakho A. George, Omari M. Odongo
Title: Genetic variability analysis for growth and yield parameters in double cross maize (*Zea mays* L.) genotypes in Kitale County, Kenya, Issue 01(2013): 7-11.

11. Name: African Journal of Plant Science
Year of publication: 2010
Authors: **Njoka, Fredrick M.**, Okwany Z.A., Githui E.K.
Title: Molecular genotyping of selected soybean (*Glycine max* L.) genotypes grown in different regions of East Africa. Vol. 4:128- 134.

12. Name: Journal of Applied Biosciences
Year of publication: 2010
Authors: Anunda H., **Njoka, Fredrick M.**, Shauri H
Title: Assessment of Kenyan public perception on genetic engineering of crops and their products. 33: 2027 -2036.

13. Name of Journal: Aspects of Applied Biology
Year of Publication: 2010
Authors: Okwany, Zedekiah A.; **Njoka, Fredrick M.**; Githui, Elijah
Title: Genotype variant of soybean cultivars around Lake Victoria region, East Africa. Aspects of Applied Biology 96, 2010

14. Name of Journal: Journal of Applied Biosciences
Year of Publication: 2009
Authors: Anunda, H.; **Njoka, Fredrick M.**; Shauri, H.
Title: Public perceptions towards genetically modified crops and foods in Kenya

15. Name: Journal of the Russian Academy of Agricultural Sciences
Year of publication: 2005

Authors: Semionov O.G., Tretiakov N.N., Yakovlev A.F., **Njoka, Fredrick M.**
Title: The effect of nucleo-cytoplasmic interaction on adaptive reaction to stress factors in hybrids of spring wheat (*T. aestivum*). Vol.1(4): 352-364.

16. Name: Journal Agronomy Faculty, PFUR
Year of publication: January, 2002.
Authors: **Njoka, Fredrick M.**, Semionov O.G
Title: Comparative studies of allo-cytoplasmic wheat hybrids on their productivity and its elements, Moscow, pages. 51-53.
17. Name: Refereed Bulletin of the Agrarian Faculty of the Peoples' Friendship University
Year of publication: January, 2000
Authors: **Njoka, Fredrick M.**, Semionov, O.G., Durga, N. M.
Title: The problem of fixing heterosis within generations. Moscow, 4: 70-71.
18. Name: Journal of the Agrarian Faculty of the Peoples' Friendship University
Year of publication: January, 1999
Authors: **Njoka, Fredrick M.**, Durga, N. M.
Title: The peculiarities of heterosis appearance in the third filial generation (F₃) in alloctoplasmic wheat hybrids. Moscow, 1: 25-26.
19. Name: Journal of Russian Academy of Sciences, Moscow.
Year of publication: 2005
Authors: Semionov O.G., Tretiakov N.N., Yakovlev A.F., **Njoka, Fredrick M.**
Title: The effects of nucleo-cytoplasmic interaction depending on the type of combination in spring wheat hybrids. 152: 1- 9.
20. Name: Journal of the Russian Academy of Agricultural Sciences
Year of publication: 2001
Authors: Semionov O.G., Tretiakov N.N., Yakovlev A.F., **Njoka, Fredrick M.**
Title: The effect of light duration on biometrical parameters and production in spring wheat. *Ariol* City, Russia. Vol. 2 (1): 35-39.
21. Name: International Conference of Arid Farming, Salionoe Zaimishe (Astrakhan region).
Year of publication: 2001
Authors: **Njoka, Fredrick M.**, Semionov O. G.
Title: Nucleo-cytoplasmic heterotic effect in alloctoplasmic hybrids of spring wheat *T. aestivum* L. P. 349 –357.
22. Name: Journal of Moscow State Academy of Agriculture
Year of publication: 1999
Authors: **Njoka, Fredrick M.**
Title: Heterosis effect of alloctoplasmic wheats hybrids of different types of cytoplasm in the first filial generation (F₁). 4: 21-25.

Presentation of Papers at Academic and Professional Conferences

- 11th –July 2016. Decolonising the Spirit Conference, Embu University College. (Presented a paper titled: “Factors affecting acceptability and production of soybean in Lake Victoria Region” and submitted for publication in November 2016). Chaired two plenary sessions.
- 11th – 12th May 2016. 28th International Conference on Science, Technology, Engineering and Management (ICSTEM). Melbourne-Australia (presented a paper titled: Genotype x environment interaction of inbred lines of maize (*Zea mays* L.) and stability of crosses in Kiambu and Embu Counties, Kenya” and submitted for publication in June 2016).
- 16th – 17th September 2015. Conference on effective teaching of Agricultural Sciences in Higher Institutions of Learning. The Kenya Forestry Research Institute, Kitui Regional Research Center. (Presented a paper titled “Quality Assurance in Agricultural Education in Embu University College”). Chaired two plenary sessions.
- 14th –16th April, 2003. An International Symposium on: Building Agricultural Resources capacity in Africa: Quality and relevance of tertiary education, Kenyatta University, Nairobi, Kenya.
- 2nd – 5th August 2006 1st National Biological Postgraduate Scientific Conference, Biological Research for achieving the Millennium Development goals, Kenyatta University.

Books/Book Chapters Published

Introduction to Plant breeding – Book under publication