



**RESEARCHER ID:**

**SCOPUS ID**

**ORCHID:**

**Position:** Principal Research Officer (Genetics and Tree Breeding)

## **1. PERSONAL INFORMATION**

- 1.1. NAME: Jason G Kariuki
- 1.2. ADDRESS: Box 20412-Nairobi-00200
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- 1.4. EMAIL ADDRESS: [jkariuki@kefri.org](mailto:jkariuki@kefri.org) or [kariukijason@yahoo.com](mailto:kariukijason@yahoo.com)
- 1.5. NATIONALITY: Kenyan
- 1.6. GENDER: Male

## **2. QUALIFICATIONS**

### **2.1. Academic Qualifications:**

- 1992-1994: MSc Forestry. The Australian National University  
1991-1991: PostGrad Diploma. The Australian National University  
1984-1987: BSc Forestry. Moi University

### **2.2. Key Competencies**

### **2.3. Other Courses**

- Training in Forest and farm forestry extension methods June –August, 2007, Okinawa, Japan Agroforestry training course, 9 - 20 January 1995, ICRAF Headquarters, Nairobi.
- Modular Course on Management and teamwork building: Nov., Dec. 1996, Feb., March 1997. KEFRI HQs
- Environmental Impact assessment and Audit Course. Kenya Institute of Administration. May 2010
- Breeding Methods – July-August 2012. Forest Tree Breeding Centre, Japan

### 3. EMPLOYMENT HISTORY

- 2011 - Present: Principal Research Scientist
- 2003-2011: Research Officer, Kenya Forestry Research Institute, Nairobi
- 1994 - 2003: Research Officer II, Kenya Forestry Research Institute: Promotion of Sustainable Forest Management (PSFM) project.
- 1991-1994: On Post Graduate training - The Australian National University
- 1989 - 1991: Officer-In Charge, Turbo National Forestry Research Centre, Turbo
- 1987 - 1988: Assistant Research Officer, Silviculture, Kenya Forestry Research Institute

### 4. ADMINISTRATIVE RESPONSIBILITY

- 2012-2017: Assistant Project Manager, Project on development of drought tolerant trees in the drylands of Kenya
- 1989 - 1991: Officer-In Charge, Turbo National Forestry Research Centre, Turbo

### 5. PUBLICATIONS

1. So Hanaoka, Mineko Ohira, Michinari Matsushita and Jason Kariuki (2016). Optimizing the size of root cutting in *Melia volkensii* for improving clonal propagation and production of quality stock. *African Journal of Biotechnology* Vol 15(29) pp. 1551-1558. July 2016
2. So Hanaoka, Norio Nakawa, Norihisa Okubo, Stephen Omondi and **Jason Kariuki** (2014). Seed Pre-treatment methods for Improving germination of *Acacia tortilis*. *African Journal of Biotechnology* Vol 13(50) pp. 4557-4561. December 2014.
3. Muturi GM, Kariuki JG and Omondi SF: (2018). KEFRI's drought tolerant trees for adaptation to climate change and enhancing biomass supply in Kenya: Paper **presented at the** International Workshop: Sustainable Rural Bioenergy Solutions in Africa to be held in ICRAF, Nairobi on 19 January 2018
4. **J. G. Kariuki**, G.M Muturi and J. M. Machua (2014). Reforestation for rehabilitation of degraded areas surrounding Kakuma Refugee Camp. In *Rehabilitation of degraded areas surrounding Kakuma Refugee Camp* (J. G. Kariuki, G.M Muturi and J. M. Machua, B. Kamondo, P. Tuwei, J. Wanjiku and D. Ochieng (Eds): KEFRI/JOFCATEchnical Report No. 2.
5. G.M Muturi, **J. G. Kariuki and** J. M. Machua (2014). Prosopis Management Strategies in Turkana. In *Rehabilitation of degraded areas surrounding Kakuma Refugee Camp* (J. G. Kariuki, G.M Muturi and J. M. Machua, B. Kamondo, P. Tuwei, J. Wanjiku and D. Ochieng (Eds): KEFRI/JOFCATEchnical Report No. 2.
6. Bernard Kamondo, Osore Chahilu, Gitehi Giathi and Jason Kariuki. Collection, Handling and Germination of *Osyris lanceolata* Seeds: Guidelines for Farmers and Extension Agents. KEFRI April 2012.
7. G. M. Muturi, **J. G. Kariuki** and J. M. Machua (2014). Rehabilitation of Degraded Areas Surrounding Kakuma Refugee Camp (KEFRI/JOFCA Project Technical Report No. 2. KEFRI/JOFCA. (In press)

8. **Kariuki, J. G.** (2013). Polycross progeny trial of *Pinus patula* at Muguga, Kenya: Results and their Implications on the Genetic improvement of the species in Kenya. Paper presented at the IUFRO Conference, ICRAF Nairobi Kenya.
9. Gabriel M. Muturi, Jason G. **Kariuki**, Lourens Poorter and Godefridus M. J. Mohren. (2012). Allometric equations for estimating biomass in naturally established *Prosopis* stands in Kenya *Journal of Horticulture and Forestry* Vol. 4(2), pp. 69-77, March 2012
10. Bernard Kamondo, Osore Chahilu, Giathi Gitehi and **Jason Kariuki**. (2012). Collection, handling and Germination of *Osyris lanceolata* Seeds. Guidelines for Famers and Extension Agents. KENYA FORESTRY RESEARCH INSTITUTE
11. Githiomi JK and **Kariuki JG** (2010) wood basic density of *Eucalyptus grandis* from plantations in central rift valley, kenya: variation with age, height level and between sapwood and heartwood
12. **Kariuki J. G**, Machua J. M, Luvanda A. M. and Kigomo J. N. (2008). Baseline Survey of Woodland Utilization and Degradation around Kakuma Refugee Camp. KEFR/JOFCA Project Technical Report No 1
13. Muturi, G., **Kariuki, J.** Ndungu, S.M, Waweru, S.G. and Changwony, M. 2011. Technical guidelines for forest, Nursery and *Prosopis* Management in Turkana Kenya. KEFRI/JOFCA technical report.
14. Oeba V. O., M.N Muchiri and **J.G Kariuki.**, (2009). Growth performance of *Eucalyptus* hybrid clones and four common landraces in Kenya. *Journal of East African Natural Resources Management*. 3: 219-236.
15. Kagombe, J. K., Luvanda A. M. and **Kariuki J. G.** Socio-economic baseline survey and analysis of natural resource management options in Mukogondo Landscape, Laikipia District
16. Muturi G. A., Mulatya J., Ego W., Maina, N. I., Nyariki D., Muthoka P., **Kariuki J. G.**, Esilaba A. O. Cheriuyot H. K. (2004): Benchmark Characterization: Kenya Country report. Desert Margins programme (DMP) UNEP/(RF) 28 pp
17. D. K. Langat and **J. G. Kariuki** (2004): Variations between heartwood proportion and basic density between provenances of *eucalyptus grandis* in Kenya. *Journal of Tropical Forest Science* 16 (2) pp 179-186 (RF)
18. Muturi G. A., Mulatya J., Ego W., Maina, N. I., Nyariki D., Muthoka P., **Kariuki J. G.**, Esilaba A. O. Cheriuyot H. K. (2004): Benchmark Characterization: Kenya Country report. Desert Margins programme (DMP) (RF) 28 pp
19. James E. Chiria and **J. G. Kariuki**: (2002) Improvement of Biometrics services to Scientists in KEFRI. Report and synthesis of a survey carried out at the Institute Research Centres (Kenya Forestry Research Institute and Commonwealth Secretariat. 22 pp

20. Muok B. O and **Kariuki J.**(2001). Socio-economic survey of *Tamarindus indica* and *Dialium orientale* in Kenya. KEFRI/IPGRI.
21. Production-to-Consumption System: A Case study of the Bamboo Sector in Kenya. P. O. Ongugo, G. O. Sigu, **J. G. Kariuki**, A. M. Luvanda and B. N. Kigomo. KEFRI/INBAR Report. 2000. 53pp
22. **Kariuki J. G.** and Omenda, T. O: Impacts of climate change on forests in Kenya: Paper presented at National workshop on Impacts of climate change on Socio-economic development in Kenya. Nairobi, Kenya December 4-5 1998.
23. **Kariuki, J. G.** (1998). Provenance and Family-within-provenance variation in *Pinus patula*, *Pinus patula* subspecies *tecunumanii* and *Pinus oocarpa* planted at Turbo, Kenya. ***Forest Ecology and Management*** 107:127-133. (RF)
24. **Kariuki, J. G.** and Omenda T. O. (1998). Potential effects of Climate Change on Forests in Kenya. US Country Studies Programme and Ministry of Research, Technical Training and Technology. (RF)
25. **Kariuki, J. G.** and T. O. Omenda (1998). Impacts of climate change on forests in Kenya: In **J. G. Kariuki, T. O. Omenda and P. M. Mbuti** (Editors): Impacts of climate change on socio-economic development in Kenya. Kenya Country Report. Kenya Country Studies on climate change project, Ministry of Research, Science and Technology, Nairobi.
26. **Kariuki, J. G.** and Chagala, E. M. (1996). Gains obtained from genetic improvement of *Cupressus lusitanica* Miller in Kenya: a comparative trial of seed orchard and other sources of seed at different stages of improvement. *In Tree Improvement for Sustainable Tropical Forestry*, Dieters, M. J., Matheson, A. C., Nickles, D. G., Harwood, C. E., and Walker, S. M. (eds.). pp 409-411. ***Proc. QFRI-IUFRO Conference, Caloundra, Queensland Australia***, 27 October-1 November 1996 (Queensland Forestry Research Institute, Gympie). (RF)
27. Chagala, E. M. and **Kariuki, J. G.** (1996). Growth and response to spacing of ten open-pollinated progenies of *Cupressus lusitanica* at Muguga, Kenya. *In Tree Improvement for Sustainable Tropical Forestry*, Dieters, M. J., Matheson, A. C., Nickles, D. G., Harwood, C. E., and Walker, S. M. (eds.). pp 409-411. *Proc. QFRI-IUFRO Conference, Caloundra, Queensland Australia*, 27 October-1 November 1996 (Queensland Forestry Research Institute, Gympie). (RF)
28. **Kariuki, J. G.** (1994). Genetic variation in early growth and in resistance to water stress in *Grevillea robusta*. MSc Thesis, The Australian National University, Canberra.
29. **Kariuki, J. G.** (1989). Interim Results of a provenance trial of *Liquidambar styraciflua* at Turbo, Kenya. KEFRI Research Note No. 5.

(Note: Highlighted papers are in refereed journals)

## **6. RESEARCH**

### **6.1. Completed**

1. Research and development in support of commercial forestry in Kenya, Funded by Gatsby Africa (KEFRI/GATSBY)
2. Development of Drought Tolerant Trees for Adaptation to Climate Change in Drylands of Kenya (2012-2017) (KEFRI/JICA)
3. Project on sustainable forest Management on Kenya (KEFRI/GTZ)
4. Rehabilitation of Degraded Areas Surrounding Kakuma Refugee Camp (KEFRI/JOFCA)
5. FORREMS (Forest Rangeland Environmental Management Strengthening) Project: KEFRI/USAID 2006
6. Desert Margins Project: (DMP) UNEP/GEF

### **6.2. Ongoing research**

- CADEP Project – KEFRI/JICA
- Tree Improvement of various tree species

### **6.3. Mentorship and supervision**

## **7. INNOVATIONS AND PATENTS (Intellectual Property)**

## **8. CONFERENCES/SEMINARS/WORKSHOPS**

*8.1. Presentation of Papers at Academic and Professional Conferences*

*8.2. Participation in Workshops/Conferences*

*8.3. Convening/Coordinating Conferences*

## **9. PROFESSIONAL ENGAGEMENT**

### **9.1. Training**

### **9.2. Consultancies**

- Feasibility study for establishment of biomass tree plantations by communities within community in limestone mining areas of Mutomo (Kanziku and Mathima) for Lafarge (EA) Ltd.
- Feasibility of Establishing Commercial Plantations for Timber, Woodfuel, Biofuel, and Carbon Sequestration and formulation of a Forest Management Plan (FMP) for 15,000 hectares of tree plantations in Musimba Farm, Kulalu in Galana (for Musimba Investments Ltd).

**9.3.** Collaboration with external organizations

## **10. EXTERNAL AND INTERNAL RESEARCH GRANTS**

**10.1.** Project on development of drought tolerant trees in the drylands of Kenya 2012-2017:

**10.2.** Capacity Development Project Kenya 2017-present

**11. LOCAL, REGIONAL & INTERNATIONAL APPOINTMENTS**

**11.1.** Local

**11.2.** Regional

**11.3.** International

**12. AWARDS AND RECOGNITION**

**13. CONTRIBUTION TO KEFRIs ADVANCEMENT**

**13.1.** Breeding of *Melia volkensii*

**13.2.** Breeding of *Acacia tortilis*

**14. MEMBERSHIP TO PROFESSIONAL BODIES**

**14.1.** Member, Environment Institute of Kenya

**15. REFEREES**