# **Curriculum Vitae (as of August 2018)**

Name: Koichi FUTAKUCHI Nationality: Japanese

Marital status: Married with one child

Current position: Program Leader, the Sustainable Productivity Enhancement (SPE), Africa Rice

Center (AfricaRice)

**Contact:** Africa Rice Center (AfricaRice)

01 BP 2551 Bouaké 01, Côte d'Ivoire

Tel.: +225-22480928 (direct)

Fax: +225-31632800

E-mail: k.futakuchi@cgiar.org

### **Education:**

1991 PhD in crop science, The University of Tokyo, Japan. Dissertation on 'Proposal of action intensity index and its applications to crop ecology'

1988 MS in crop science, The University of Tokyo, Japan. Thesis on 'Plant growth affected by interaction among individuals in soybean populations'

BS in crop science, The University of Tokyo, Japan. Thesis on 'Effects of planting dates and density on growth performances of sunflower'

## **Professional experiences:**

| 2012 to date | Program Leader of the Sustainable Productivity Enhancement, Africa Rice      |
|--------------|------------------------------------------------------------------------------|
|              | Center (AfricaRice). The program covers agronomy and post-harvest research   |
| 2010, 2015   | Interim Program Leader of the Genetic Diversity and Improvement, AfricaRice. |
| -2017        | The program is in charge of genetic conservation and germplasm improvement   |
| 2009–2010    | Interim Head of Genebank (Genetic Resources Unit), AfricaRice                |
| 1997 to date | Ecophysiologist, AfricaRice                                                  |
| 1996         | JICA (Japan International Cooperation Agency) Expert dispatched to Côte      |
|              | d'Ivoire                                                                     |
| 1995–1997    | JSPS (Japan Society for Promoting Science) Research Fellow, Graduate School  |
|              | of Agricultural and Life Sciences, The University of Tokyo, Japan            |

### Resource mobilization:

- 'Enhancement of high-yielding rice germplasm and breeding capacity of rice producing countries in Africa'. This is a joint project with Rural Development Administration (RDA) of the Republic of Korea. \$3,368,932 for three years and one month (from 1 December 2016 to 31 December 2019) by RDA. A major contributor in the AfricaRice side—developed the first detailed budget; revised the initial draft by RDA; visited Korea to fine tune the project content with RDA
- 'Unlocking the genetic potential of an orphan crop species, African rice (*Oryza glaberrima*) for sustainable agriculture in Africa (2016–2019)'. A proposal developed with AfricaRice's lowland breeder. \$588,218 for three years by Global Crop Diversity Trust (GCDT) and Ministry of Agriculture, Forestry, and Fisheries (MAFF), Japan
- Developed a proposal for 'Dissemination of a crop management decision tool (RiceAdvice) to improve rice productivity and create youth employment in Nigeria and Mali under social unrest (2015–2016)'. \$1.8 million for one year by Ministry of Foreign Affairs (MOFA), Japan
- Developed a proposal for 'Emergency seed support for rice farmers in Guinea—a high rice consumption country affected by the Ebola crisis (2015–2016)'. \$1.5 million for one year plus no-cost extension by MOFA, Japan

- Developed a proposal for 'Improving rice farmers' decision making in lowland rice-based systems in East Africa (2015–2018)'. 1.2 million EURO for three years funded by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Germany
- Contributed as a major player to develop the proposal of 'Emergency Rice Initiative Phase 2 (2013–2015)'. \$9 million for one year + no-cost extension funded by MOFA, Japan (this is a commissioned project by MOFA)
- 'Japan Attributed Projects (2010 to date)'. The projects are annually evaluated and annual budgets are decided in each year; reports and proposals are developed on an annual basis. \$807,000/year for 2010–2013, \$509,400 for 2014, \$400,000 for 2015, \$270,000 for 2016 and \$260,000 for 2017, funded by MOFA, Japan
- Contributed as a major player of AfricaRice's team to develop the proposal with CAAS (Chinese Academy for Agricultural Sciences) titled 'Green Super Rice' to Bill and Melinda Gates Foundation (2009–2011). \$3,449,862 of AfricaRice's share for 3 years. In this project, AfricaRice is a subcontractor and the fund comes through CAAS
- Contributed as a major player of AfricaRice's team to develop the proposal with IRRI titled
  'Stress-Tolerant Rice for Poor Farmers in Africa and South Asia' to Bill and Melinda Gates
  Foundation (2008–2010). \$4.8 million of AfricaRice's share for 3 years. In this project,
  AfricaRice is a subcontractor and the fund comes through IRRI
- 'Training workshop for NARS scientists in West and Central Africa (2007)'. A proposal developed with AfricaRice's seed specialist. \$14,500 from Japan Capacity Building Program for African Agricultural Researchers by MAFF, Japan
- Developed a proposal for 'Interspecific Hybridization Project (IHP) UNDP Phase 3 (2007–2009)'. \$589,218 for three years by South South Cooperation Programme, UNDP.
- Developed a proposal for 'Interspecific hybridization Project (IHP) Japan Phase 4 (2006–2009)'. \$1,140,000 for three years by MOFA, Japan
- 'Training workshop for NARS scientists in West and Central Africa'. A proposal developed with AfricaRice's seed specialist. \$19,376 from Japan Capacity Building Program for African Agricultural Researchers by MAFF, Japan
- 'Gene mining of indigenous rice germplasm to improve grain micronutrient content for West and Central African people suffering from micronutrient deficiency (2004–2006)'.
   This is part of HarvestPlus (CGIAR Biofortification Challenge Program). A workplan for 2004/05 including a budget proposal was developed. \$50,000 for two years
- Developed a proposal for 'Interspecific Hybridization Project (IHP) Phase 3 (2003–2006)'. \$1,140,000 for three years by MOFA, Japan
- Developed a proposal for 'Ecophysiology project at WARDA (2001–2002)'. \$100,000 for two years by MOFA, Japan
- Developed a proposal for 'Support for grain quality activities at WARDA (2000)'. \$70,000 for one year by MOFA, Japan
- Developed a proposal for 'Post-Doctoral Research at WARDA (1997–2000)'. \$140,000 for three years by MOFA, Japan
- Developed a proposal for 'Physiological characterization of *Oryza glaberrima* (1995–1997)'.
   3,000,000 JPY (around \$27,000) for three years by Japan Society for Promoting Science (JSPS)

### Capacity building:

- Supervision of postdoctoral fellows: 5 PDFs
- Co-supervision of postgraduate students with university professors: 3 PhD; 9 MS/DEA; 4 IA
- Supervision of short term non-degree trainees: 7 trainees
- Training workshops: 2 organized; 7 attended as a resource person

### **Activities in professional societies:**

- Member of Crop Science Society of Japan
- Member of Japanese Society for Tropical Agriculture
- Permanent Member of Association of Rice Research Workers, India
- Editor of Plant Production Science (Taylor & Francis/Crop Science Society of Japan), from April 2014 to date

#### Awards:

- Director General's 2005 Citation in recognition of an impressive record of scientific publications in Africa Rice Center.
- Long Service Award in recognition of his 9 years of outstanding service to the Africa Rice Center
- The first Dr Robert J. Carsky Award in 2009 in recognition of his contributions to the Africa Rice Center (AfricaRice). A Dr Robert J. Carsky Award was instituted by AfricaRice's management in 2009 to honor the distinguished services that Dr Carsky rendered to the Center until his tragic death on 6 November 2004.
- The 11th Japanese Crop Science Society Best Paper Award in 2014 with the article: 'Futakuchi, K., M. Sié and K. Saito 2012. Yield potential and physiological and morphological characteristics related to yield performance in *Oryza glaberrima* Steud. *Plant Production Science* 15: 151–163.'

#### **Publications:**

## Journals and other refereed articles

- Ishii, R. and K. Futakuchi 1996. Rice cultivation in Africa and the activities of West Africa Rice Development Association (WARDA). *Agriculture and Horticulture* 71: 955–959.
- Futakuchi, K. and R. Ishii 1996. Effects of planting pattern on the growth of soybean plants. Ishii, R. and T. Horie ed. "Crop research in Asia: Achievement and perspective" Asian Crop Science Association, Tokyo pp. 464–465.
- Futakuchi, K. and R. Ishii 1997. Estimation of leaf area index by tube solarimeter and photodiode in rice populations. *Japanese Journal of Crop Science* 66: 135–136.
- Ishii, R. and K. Futakuchi 1999. Current activities and achievement of West Africa Rice Development Association (WARDA). International Cooperation for Agriculture and Forestry 22: 20–24.
- Watanabe, H. and K. Futakuchi 2000. Rapid method of Brabender viscograph and its application to analysis of a large number of samples. *Nippon Shokuhin Kagaku Kogaku Kaishi* (Journal of the Japanese Society for Food Science and Technology) 47: 926–931.
- Futakuchi, K., M.P. Jones and R. Ishii 2001. Physiological and morphological mechanism of submergence resistance in African rice (*Oryza glaberrima* Steud.). *Japanese Journal of Tropical Agriculture* 45: 8–14.
- Kang, D. J., K. Futakuchi, S. Dumnoenngam, T. Mechai, B. Chakranon and R. Ishii 2001. Factors related to differences in rice yield among districts in Narathiwat Province, southern Thailand. *Japanese Journal of Tropical Agriculture* 45: 49–56.
- Futakuchi, K. 2001. Research and extension activities of West African Rice Development Association (WARDA). *Japanese Journal of Crop Science* 70: 115.
- Watanabe, H., K. Futakuchi, M.P. Jones, I. Teslim and B.A. Sobambo 2002. Brabender Viscogram characteristics of interspecific progenies of *Oryza glaberrima* Steud and *O. sativa* L. *Nippon Shokuhin Kagaku Kogaku Kaishi* (Journal of the Japanese Society for Food Science and Technology) 49: 155–165.
- Watanabe, H., K. Futakuchi, I. Teslim and B.A. Sobambo 2002. Milling characteristics and grain quality traits of interspecific progenies of Asian rice (*Oryza sativa*) with African rice (*Oryza glaberrima*). *Japanese Journal of Tropical Agriculture* 46: 47–55.

- Futakuchi, K., M.P. Jones and O. Osiname 2004. Development of lowland rice from the interspecific cross of *Oryza sativa* and *O. glaberrima*. Proceedings for the 4th International Crop Science Congress, Brisbane, Australia, 26 September–1 October 2004. (Available online at: <a href="http://www.cropscience.org.au/icsc2004/">http://www.cropscience.org.au/icsc2004/</a>)
- Futakuchi, K. 2005. Submergence damages in rice and challenges in expanding its adaptability to submerged conditions in West and Central Africa. Toriyama, K, KL. Heong and B. Hardy ed. Rice is life: scientific perspectives for the 21st century. Proceedings of the World Rice Research Conference held in Tokyo and Tsukuba, Japan, 4–7 November 2004. International Rice Research Institute, Los Baños, Philippines and Japan International Research Center for Agricultural Sciences, Tsukuba, Japan. pp. 445–448. (Available on a CD-ROM)
- Watanabe, H., Futakuchi, K., Jones, M.P. and Sobambo, B.A. 2004. Grain protein content of African rice (*Oryza glaberrima* Steud) lines and Asian rice (*O. sativa* L.) varieties in West Africa. *Oryza* 41(1 & 2): 35–38.
- Futakuchi, K. 2006. Current research activities and their outlook in Africa Rice Center (WARDA). *Agriculture and Horticulture* 81 (2): 245–253.
- Watanabe, H., K. Futakuchi and M.P Jones 2006. Grain quality traits of NERICA rice. *Expert Bulletin for International Cooperation of Agriculture and Forestry* 1: 12–23.
- Rodenburg J., A. Diagne, S. Oikeh, K. Futakuchi, P.M. Kormawa, M. Semon, I. Akintayo, B. Cissé, M. Sié, L. Narteh, F. Nwilene, S. Diatta, Y. Sere, M.N. Ndjiondjop, O. Youm and S.O. Keya, 2006. Achievements and Impact of NERICA on Sustainable Rice Production in sub-Saharan Africa. International Rice Commission Newsletter 55: 45–58.
- Watanabe, H., K. Futakuchi, M.P. Jones and B.A. Sobambo 2006. Grain protein content of interspecific progenies developed from the cross of African rice (*Oryza glaberrima* Steud.) and Asian rice (*O. sativa* L.). *Plant Production Science* 9 (3): 287–293.
- Kang, D.J., K. Futakuchi, S. Dumnoenngan and R. Ishii 2007. High yielding performance of a new rice variety, IR 53650, in mildly improved acid sulphate soil conditions. *Plant Production Science* 10 (1): 64–67.
- Akinbile, C.O., A.Y. Sangodoyin, I. Akintayo, F.E. Nwilene and K. Futakuchi 2007. Growth and yield responses of upland rice (NERICA 2) under different water regimes in Ibadan, Nigeria. Research Journal of Agronomy 1 (2):71–75.
- Futakuchi, K. 2007. Quantification of competitive interference by neighboring plants in a crop population. *African Crop Science Conference Proceedings* 8: 233–236.
- Manneh, B., P. Kiepe, M. Sie, M.N. Ndjiondjop, N.K. Drame, K. Traore, J. Rodenburg, E.A. Somado, L. Narteh, I. Akintayo, A. Diagne and K. Futakuchi 2007. Exploiting African partnerships to help rice farmers cope with greater climate variability. *Journal of Semi-Arid Tropical Agricultural Research* 4 (1). (online publication with no pagination)
- Futakuchi, K., H. Watanabe and M.P. Jones 2008. Relationship of grain protein content to other grain quality traits in interspecific *Oryza sati*va L. x *Oryza glaberrima* Steud. progenies. *Agricultural Journal* 3 (1): 50–57.
- Futakuchi, K. 2008. Achievement and outlook in rice research in Africa with special reference to WARDA's activities. *JIRCAS Working Report* (57): 121–135.
- Futakuchi, K., M. Fofana and M. Sié 2008. Varietal differences in lodging resistance of African rice (*Oryza glaberrima* Steud.). *Asian Journal of Plant Sciences* 7 (6): 569–573.
- Sanni, K.A., O.J. Ariyo, D.K. Ojo, G. Gregorio, E.A. Somado, I. Sanchez, M. Sie, K. Futakuchi, S.A. Ogunbayo, R.G. Guei, and M.C.S. Wopereis 2009. Additive Main effects and multiplicative interactions analysis of grain yield performances in rice genotypes across environments. *Asian Journal of Plant Sciences* 8 (1): 48–53.
- Saito, K. and K. Futakuchi 2009. Performance of diverse upland rice cultivars in low and high soil fertility conditions in West Africa. *Field Crops Research* 111: 243–250.

- Futakuchi, K. and M. Sié 2009. Better exploitation of African rice (*Oryza glaberrima* Steud.) in varietal development for resource-poor farmers in West and Central Africa. *Agricultural Journal* 4 (2): 96–102.
- Sone, C., K. Saito and K. Futakuchi 2009. Comparison of three methods for estimating leaf area index of upland rice cultivars. *Crop Science* 49: 1438–1443.
- Saito, K. and K. Futakuchi 2010. Genotypic variation in epidermal conductance and its associated traits among *Oryza sativa* and *O. glaberrima* cultivars and their interspecific progenies. *Crop Science* 50: 227–234.
- Saito, K., K. Phanthaboon, T. Shiraiwa, T. Horie and K. Futakuchi 2010. Genotypic variation in ability to recover from weed competition at early vegetative stage in upland rice. *Plant Production Science* 13: 114–118.
- Fofana, M., M. Cherif, B. Kone, K. Futakuchi and A. Audebert 2010. Effect of water deficit at grain ripening stage on rice grain quality. *Journal of Agricultural Biotechnology and Sustainable Development* 2: 100–107.
- Fofana, M., K. Adhikari, K. Futakuchi, J. Dossou, R.T.M. Bleoussi and I. Dieng 2010. Urban consumer acceptability of newly introduced rice with local and imported rice in Benin: A comparison. *Indian Food Industry* 29 (5): 37–45.
- Fofana, M., J. Wanvoeke, J. Manful, K. Futakuchi, P.V. Mele and E. Zossou and T.M.R. Bléoussi 2011. Effect of improved parboiling methods on the physical and cooked grain characteristics of rice varieties in Benin. *International Food Research Journal* 18: 697–703.
- Fofana, M., K. Futakuchi, J.T. Manful, I. Bokossa Yaou, J. Dossou and R.T.M. Bleoussi 2011. Rice grain quality: A comparison of imported varieties, local varieties with new varieties adopted in Benin. *Food Control* 22: 1821–1825.
- Touré, A., J. Rodenburg, K. Saito, S. Oikeh, K. Futakuchi, Y.M.D. Gumedzoe and J. Huat. 2011. Cultivar and weeding effects on weeds and rice yields in a degraded upland environment of the Coastal Savanna. *Weed Technology* 25: 322–329.
- Traore, K., A.M. McClung, R. Fjellstrom and K. Futakuchi 2011. Diversity in grain physic chemical characteristics of West African rice, including NERICA genotypes, as compared to cultivars from the United States of America. *International Research Journal of Agricultural Science and Soil Science* 1: 435–448.
- Kang, D.J., Y.J. Seo, K. Futakuchi, P. Vijarnsorn and R. Ishii 2011. Effect of aluminum toxicity on flowering time and grain yield on rice genotypes differing in Al-tolerance. *Journal of Crop Science and Biotechnology* 14 (4): 305–309.
- Kang, D.J., K. Futakuchi, Y.J. Seo, P. Vijarnsorn and R. Ishii 2011. Relationship of Fetolerance to morphological changes in roots in upland NERICA lines under Fetreated hydroponic condition. *Journal of Crop Science and Biotechnology* 14 (4): 311–315.
- Bocco, R., M. Lorieux, P.A. Seck, K. Futakuchi, B. Manneh, H. Baimey and M. N. Ndjiondjop 2012. Agro-morphological characterization of a population of introgression lines derived from crosses between IR 64 (*O. sativa* indica) and TOG 5681 (*O. glaberrima*) for drought tolerance. *Plant Science* 183: 65–76.
- Sié, M., K. Sanni, K. Futakuchi, B. Manneh, S. Mande, R. Vodouhe, S. Dogbe, K.N. Drame, A.S. Ogunbayo, M.N. Ndjiondjop and K. Traore 2012. Towards a rational use of African rice (*Oryza glaberrima* Steud.) for breeding in sub-Saharan Africa. *Genes, Genomes and Genomics* 6: 1–7.
- Sanni, K.A., I. Fawole, S.A. Ogunbayo, D.D. Tia, E.A. Somado, K. Futakuchi, M. Sié,F.E. Nwilene, and R.G. Guei 2012. Multivariate analysis of diversity of landrace rice germplasm. Crop Science 52: 494–504.
- Ndjiondjop, M.N., K. Futakuchi, F. Cisse, H. Baimey and R. Bocco 2012. Field evaluation of rice genotypes from the two cultivated species (*Oryza sativa* L. and *Oryza glaberrima* Steud.) and their interspecifics for tolerance to drought. *Crop Science* 52: 524–538.

- Kang, D.J., K. Futakuchi, Y.J. Seo, P. Vijarnsorn and R. Ishii 2012. Evaluation of Al-tolerance on upland and lowland types of NERICA lines under hydroponic conditions. *Journal of Crop Science and Biotechnology*. 15 (1): 25–31.
- Ndjiondjop, M.N., K. Futakuchi, P.A. Seck, F. Cisse, R. Bocco and B. Fatondji 2012. Morphoagronomic evaluation of *Oryza glaberrima* accessions and interspecific *O. sativa* x *O. glaberrima* derived lines under drought conditions. *African Journal of Agricultural Research* 7 (16): 2527–2538.
- Futakuchi, K., M. Sié and K. Saito 2012. Yield potential and physiological and morphological characteristics related to yield performance in *Oryza glaberrima* Steud. *Plant Production Science* 15 (3): 151–163.
- Agnoun, Y., E. Ahounou, M. Sié, S.A. Ogunbayo, B. Toulou, K. Futakuchi and A. Ahanchédé 2012. Variation and Phenotypic Evaluation of Intraspecific *Oryza glaberrima* Lines Resulting from Crossings between Tog5681, Tog5672 and Tog7291. *Journal of Plant Studies* 1 (2): 129–139.
- Oikeh, S.O., A. Niang, R. Abaidoo, P. Houngnand, K. Futakuchi, B. Koné and A. Touré 2012. Enhancing rice productivity and soil nitrogen using dual-purpose cowpea-NERICA® rice sequence in degraded Savanna. *Journal of Life Sciences* 6: 1237–1250.
- Montcho, D., K. Futakuchi, G. Agbangla, M. Fofana and I. Dieng 2013. Yield loss of *Oryza glaberrima* caused by grain shattering under rainfed upland conditions. *International Journal of Biological and Chemical Sciences* 7(2): 535–543.
- Montcho, D., K. Futakuchi, C. Agbangla, M. Semon, I. Dieng and M. Sie 2013.
   Morphological and physiological response of African rice (*Oryza glaberrima* Stueud.) under different hydrological conditions. *Asian Journal of Plant Sciences* 12 (2): 79–86.
- Kijima, Y., K. Otsuka and K. Futakuchi 2013. The development of agricultural markets in sub-Saharan Africa: the case of rice in Uganda. *African Journal of Agricultural and Resource Economics* 8 (4): 253–264.
- Saito, K. and K. Futakuchi 2014. Improving estimation of weed suppression ability of upland rice varieties using substitute weeds. *Field Crops Research* 162: 1–5.
- Saito, K., I. Dieng, E. Vandamme, J.M. Johnson and K. Futakuchi 2015. Does use of unbordered plots affect estimation of upland rice yield? *Crop Science* 55: 255–261.
- Djaman, K., A.B. Balde, A. Sow, B. Muller, S. Irmak, M.K. N'Diayea, B. Manneh, Y.D. Moukoumbi, K. Futakuchi and K. Saito 2015. Evaluation of sixteen reference evapotranspiration methods under Sahelian conditions in the Senegal River Valley. *Journal of Hydrology: Regional Studies* 3: 139–159.
- Montcho, D., K. Futakuchi, G. Djedatin, M. Fofana, B. Manneh, C. Agbangla and C. Ahanhanzo 2015. Morpho-physiological characterization of cultivated rice (*Oryza* spp.) during early vegetative growth under different soil water conditions. *International Journal of Agronomy and Agricultural Research* 7 (4): 135–142.
- Ndindeng, S.A., J.T. Manful, K. Futakuchi, D. Mapiemfu-Lamare, J.M. Akoa-Etoa, E.N. Tang, J. Bigoga, S. Graham-Acquaah and J. Moreira 2015. Upgrading the quality of Africa's rice: a novel artisanal parboiling technology for rice processors in sub-Saharan Africa. *Food Science and Nutrition*.3 (6): 557–568.
- Ndindeng, S.A., J.E. Mbassi, W.F. Mbacham, J. Manful, S. Graham-Acquaah, J. Moreira, J. Dossou and K. Futakuchi 2015. Quality optimization in briquettes made from rice milling by-products. *Energy for Sustainable Development* 29: 24–31.
- Djaman, K., S. Irmak, I. Kabenge and K. Futakuchi 2016. Evaluation of FAO-56 Penman-Monteith model with limited data and the Valiantzas models for estimating grass-reference evapotranspiration in the Sahelian conditions. *Journal of Irrigation and Drainage Engineering* <a href="http://dx.doi.org/10.1061/(ASCE)IR.1943-4774.0001070">http://dx.doi.org/10.1061/(ASCE)IR.1943-4774.0001070</a> 04016044 1–14.
- Djaman, K. H. Tabari, A.B. Balde, L. Diop, K. Futakuchi and S. Irmak 2016. Analyses, calibration and validation of evapotranspiration models to predict grass-reference

- evapotranspiration in the Senegal River Delta. *Journal of Hydrology: Regional Studies* 8: 82–94.
- Hori, T., D. Montcho, C. Agbangla, E. Kaworu, K. Futakuchi and H. Iwata 2016. Multi-task Gaussian process for imputing missing data in multi-trait and multi-environment trials. Theoretical and Applied Genetics 129: 2101–2115.
- Houssou, A.F.P, Y.B. Gankoue, A. Kabore, K. Futakuchi, K. Traore, J. Moreira, A. Diagne, J. Manful, G.A. Mensah 2016. Comparision of parboiled and white rice obtained from ten varieties cultivated in Benin. *International Food Research Journal* 23: 2479–2486.
- Djaman, K., V, Mel, A.B. Balde, B.V. Bado, B. Manneh, L. Diop, D. Mutiibwa, D. Rudnick, S. Irmak and K. Futakuchi 2017. Evapotranspiration, irrigation water requirement and water productivity of rice (*Oryza sativa* L.) in the Sahelian environment. *Paddy and Water Environment* 15: 469–482.
- Djaman, K., S. Irmak and K. Futakuchi 2017. Daily Reference Evapotranspiration Estimation under Limited Data in Eastern Africa. *Journal of Irrigation and Drainage Engineering*. 143 (4): <a href="https://doi.org/10.1061/(ASCE)IR.1943-4774.0001154">https://doi.org/10.1061/(ASCE)IR.1943-4774.0001154</a>
- Zohoun, E.V., E.N. Tang, M.M. Soumanou, J. Manful, N. Akissoe, J. Bigoga, K. Futakuchi and S.A. Ndindeng 2018. Physicochemical and nutritional properties of rice as affected by parboiling steaming time at atmospheric pressure and variety. *Food Science and Nutrition* 6: 638–652. DOI: 10.1002/fsn3.600
- Zohoun, E.V., S. Ndindeng, T.E. Nchuaji, S. Mohamed, J. Manful, A. Noel, J. Bigoga and K. Futakuchi 2018. Appropriate parboiling steaming time at atmospheric pressure and variety to produce rice with weak digestive properties. Food Science and Nutrition 6: 757–764. <a href="https://doi.org/10.1002/fsn3.617">https://doi.org/10.1002/fsn3.617</a>
- Djaman, K., V.C. Mel, L. Diop, A. Sow, R. El-Namaky, B. Manneh, K. Saito, K. Futakuchi and S. Irmak 2018. Effects of alternate wetting and drying irrigation regime and nitrogen fertilizer on yield and nitrogen use efficiency of irrigated rice in the Sahel. *Water* 2018, 10, 711; <a href="http://dx.doi.org/10.3390/w10060711">http://dx.doi.org/10.3390/w10060711</a>

### Book chapters and proceedings:

- Kang, D.J., K. Futakuchi, S. Dumnoenngam, T. Mechai, B. Chakranon, A. Jongskul, C. Sitthibush and R. Ishii 2000. Mechanisms of rice yield difference between districts in Narathiwat region in Thailand. In Asian Natural Environmental Science Center, The University of Tokyo and Institute of Advanced Studies, The United Nations University ed. "Can Biological Production Harmonize with Environment? Reports from Research Sites in Asia" Proceedings for the International Symposium held on 19–20 October 1999 at The United Nations University, Tokyo, Japan, pp. 477–480.
- Futakuchi, K. 2001. Submergence tolerance and deep-water avoidance in *Oryza glaberrima*Steud. and interspecific progenies. Takagi, Y., O. Ito and M. Iwanaga ed. JIRCAS Working
  Report No. 22. *Oryza Glaberrima* Genetic Resources: Evaluation and Use. JIRCAS, Tsukuba,
  Japan, pp. 41–47.
- Futakuchi, K. 2005. Current trends of WARDA's research and NERICA (interspecific *Oryza sativa* x *O. glaberrima* progenies) development. Forum for Agriculture in Africa ed. Report of the Voluntary Meetings for Agricultural Problems in Africa. "African Agriculture: its problems and potential". Forum for Agriculture in Africa, Tokyo, pp. 39–55.
- Sakurai, T., J. Furuya and K. Futakuchi 2006. Effects of industrial amassment on the improvement of efficiency and quality: A case study for rice millers in Ghana. Sonobe, T and Y. Sawada ed. Market and Economic Development. Toyo Keizai Shinpou Sya, Tokyo, pp. 151–179. (The book received the 23rd Masayoshi Ohira Memorial Prize of 2007)
- Sakurai, T., J. Furuya, and K. Futakuchi 2006. Rice miller cluster in Ghana and its effects on efficiency and quality improvement. Proceedings for the 26th Conference of the International Association of Agricultural Economists, 12–18 August 2006, Gold Coast, Queensland, Australia. (Available on a CD-ROM)

- Futakuchi, K., H. Watanabe and M.P. Jones 2007. Possibility of the development of high
  protein rice with acceptable grain quality for West African people in interspecific breeding
  between *Oryza sativa* and *O. glaberrima*. Proceedings for the 31st Rice Technical Working
  Group Meeting, 26 February–1 March 2006, The Woodlands, TX, USA, pp. 127–128.
- Sié, M., Y. Sere, S. Sanyang, L. Narteh, S. Dogbe, M.M. Coulibaly, A. Sido, F. Drammeh and K. Futakuchi 2007. Status of development of lowland NERICA rice in West Africa. Proceedings for the 31st Rice Technical Working Group Meeting, 26 February–1 March 2006, The Woodlands, TX, USA, p. 44.
- Kang, D.J., Y.J. Seo, K. Futakuchi, P. Vijarnsorn, C Sittibush and R. Ishii 2007. Yield trials of acid sulfate soil tolerant varieties in Thailand. Proceedings for the for Center of Excellence (COE) International Meeting on Bioremediation of Acid Sulfate Soil for Agriculture and Forestry. 1–4 March 2007, Bangkok, Thailand, pp. 30–31.
- Futakuchi, K., T. Berhe and I. Akintayo 2008. Grain and nutritional quality of NERICA varieties. Somado, E.A., R.G. Guei and S.O. Keya ed. NERICA: the New Rice for Africa—a Compendium. Africa Rice Center (WARDA), Cotonou, Benin, pp. 116–120.
- Sié M, K. Futakuchi, H. Gridley, S. Mande, B. Manneh, M.N. Ndjiondjop, A. Effisue, Ogunbayo, H. Tsunematsu and H. Samejima 2008. Drought research at WARDA: current situations and prospects. Serraj, R., J. Bennett and B. Hardy ed. Drought Frontiers in Rice: Crop Improvement for Increased Rainfed Production. World Scientific Publishing, Singapore, and International Rice Research Institute (IRRI), Los Baños, pp. 61–73.
- Futakuchi, K., H. Gridley and M. Sié 2009. Beyond the current NERICAs: Better exploitation of *Oryza glaberrima*. Narteh, L.T., J.S. Tenywa, P. Nampala and G. Kawube ed. Beyond the First Generation NERICAs in Africa: Paradigms and Partnerships for the Next Decade. Proceedings for the 1st African Rice Congress. 31 July–4 August 2006, Dar es Salaam, Tanzania, pp. 95–98.
- Futakuchi, K., M. Sié and M.C.S. Wopereis 2011. Rice breeding strategy at AfricaRice. Yanagihara, S. ed. JIRCAS Working Report No. 70. Next Challenges in Rice Development for Africa: Workshop for New Collaboration between JIRCAS and AfricaRice. JIRCAS, Tsukuba, Japan, pp. 1–14.
- Futakuchi, K., M.N. Ndjiondjop, M. Sié and M.C.S. Wopereis 2011. Rice breeding for drought-prone environments at Africa Rice Center. Yanagihara, S. ed. JIRCAS Working Report No. 70. Next Challenges in Rice Development for Africa: Workshop for New Collaboration between JIRCAS and AfricaRice. JIRCAS, Tsukuba, Japan, pp. 45–50.
- Bleoussi T.M., J. Roseline, M. Fofana, B. Innocent and K. Futakuchi 2011. Effect of parboiling and storage on grain physical and cooking characteristics of the some NERICA rice varieties. Proceedings for the 2nd Africa Rice Congress: Innovation and Partnerships to Realize Africa's Rice Potential, 22–26 March 2010, Bamako, Mali. Africa Rice Center (AfricaRice), Cotonou, Benin. (Available online at: <a href="http://www.africarice.org/workshop/ARC/3.3%20Bleoussi%20fin.pdf">http://www.africarice.org/workshop/ARC/3.3%20Bleoussi%20fin.pdf</a>)
- Ndjiondjop, M.N., F. Cisse, K. Futakuchi, M. Lorieux, B. Manneh, R. Bocco and B. Fatondji 2011. Effect of drought on rice (*Oryza* spp.) genotypes according to their drought tolerance level. Proceedings for the 2nd Africa Rice Congress: Innovation and Partnerships to Realize Africa's Rice Potential, 22–26 March 2010, Bamako, Mali. Africa Rice Center (AfricaRice), Cotonou, Benin. (Available online at:
  - http://www.africarice.org/workshop/ARC/1.5%20Ndjiondjop%20et%20al%20ed3.pdf)
- Sanni, K.A., I. Fawole, A. Ogunbayo, D. Tia, E.A. Somado, K. Futakuchi, M. Sié, F.E. Nwilene and R.G. Guei 2011. Multivariate analysis of diversity of landrace rice germplasm. Proceedings for the 2nd Africa Rice Congress: Innovation and Partnerships to Realize Africa's Rice Potential, 22–26 March 2010, Bamako, Mali. Africa Rice Center (AfricaRice), Cotonou, Benin. (Available online at:

# http://www.africarice.org/workshop/ARC/1.1%20Sanni%20fin.pdf)

- Diagne, A., E. Amovin-Assagba, K. Futakuchi and M.C.S. Wopereis 2013. Estimation of cultivated area, number of farming households and yield for major rice-growing environments in Africa. Wopereis, M.C.S., D.E. Johnson, N. Ahmadi, E. Tollens and A. Jalloh ed. Realizing Africa's Rice Promise. CABI, Oxford, UK; Africa Rice Center (AfricaRice), Cotonou, Benin, pp. 35–45.
- Kumashiro, T., K. Futakuchi, M. Sié, M.N. Ndjiondjop and M.C.S. Wopereis 2013. A continent-wide, product-oriented approach to rice breeding in Africa. Wopereis, M.C.S., D.E. Johnson, N. Ahmadi, E. Tollens and A. Jalloh ed. Realizing Africa's Rice Promise. CABI, Oxford, UK; Africa Rice Center (AfricaRice), Cotonou, Benin, pp. 69–78.
- Futakuchi, K., J. Manful and T. Sakurai 2013. Improving grain quality of locally produced rice in Africa. Wopereis, M.C.S., D.E. Johnson, N. Ahmadi, E. Tollens and A. Jalloh ed. Realizing Africa's Rice Promise. CABI, Oxford, UK; Africa Rice Center (AfricaRice), Cotonou, Benin, pp. 311–323.
- Fiamohe, R., S. Ndindeng, G. Mujawamariya, S. Sanyang and K. Futakuchi 2016. Responding to consumers' preference in African rice markets: experiences of Africa Rice Center. Proceedings for the 5th International Conference of the African Association of Agricultural Economists: Transforming Smallholder Agriculture in Africa: the Role of Policy and Governance, 23–26 September 2016, Addis Ababa, Ethiopia. (Available online at: <a href="http://ageconsearch.umn.edu/bitstream/249322/2/141.%20Preferences%20for%20rice%20in%20Africa.pdf">http://ageconsearch.umn.edu/bitstream/249322/2/141.%20Preferences%20for%20rice%20in%20Africa.pdf</a>)