



INTERNATIONAL
FOUNDATION FOR
SCIENCE



Call for manuscripts/applications to

EU-ACP Scientific Writing and Communication Training Course

with focus on Neglected and Underutilized Species of plants

Dates and venue: 12th – 16th September, 2011
Nairobi, Kenya

Deadline for application: 24th of June, 2011

We hereby invite **Prospective Applicants from Ethiopia, Malawi, Mozambique, Kenya, Uganda** to submit an abstract of a research manuscript, and apply for participation in a Scientific Writing and Communication Training Course with focus on Neglected and Underutilized Species of plants, to be held in Nairobi, Kenya.

Background

Neglected and Underutilised Species (NUS) of plants include hundreds of locally domesticated and wild species, which are rich in nutrients and adapted to low-input agriculture. NUS and their traditional production systems can play a key role in supporting rural livelihoods. They can be important in strategies to alleviate the effects of biotic and abiotic stresses – particularly those related to climate change. Their commercialization can provide income opportunities and many NUS species are important in traditional pharmacology. Due to the intensification of agriculture and the commoditization of food markets towards a more narrow range of the most important food crops, diversity of NUS and associated local knowledge is rapidly being lost. Therefore, research on NUS needs strengthening.

Plenty of research results on NUS crops are never published, and others are published in journals with limited circulation, or in 'grey literature' and so are neither widely read nor cited. Effective scientific writing and communication skills can improve the situation and contribute to converting research results into innovation. Increasing the rate of published research results on NUS crops is therefore an important mechanism for bringing research into use, while building the publishing record of early career scientists. Being able to write a good paper, whether it is for a peer reviewed publication, a popular science article or for channelling research evidence to inform policy makers, it is a central skill for early career scientists. We believe this fact is not emphasized often enough in normal academic training.

A Partnership of five African and two European organizations¹ are implementing the project, entitled '**Building human and institutional capacity for enhancing the conservation and use of Neglected and Underutilized Species of crops in West Africa, and Eastern and Southern Africa**'. The project is funded by the European Union in cooperation with the ACP Science and Technology Programme during 2009-2012.

The objective is to contribute towards poverty reduction and greater food and nutrition security in West Africa, and Eastern and Southern Africa through enhanced conservation and use of Neglected and Underutilized Species (NUS) of plants.

This call

This EU-ACP project aims to strengthen the ability of early career scientists to develop and manage interdisciplinary, multistakeholder research projects on NUS and to publish research results. To achieve this, the project will organize **training on scientific writing and communication in relation to NUS research**.

The training course is jointly organized by University of Nairobi, the International Foundation for Science (IFS), Bioversity International (as part of the CGIAR Research Programme: Climate Change, Agriculture and Food Security Programme CCAFS), the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) and the African Network for Agriculture, Agroforestry and Natural Resources Education (ANAFE).

The course will be held on 12th -16th September 2011, in Nairobi, Kenya.
The deadline for applications is 24th June, 2011

Aims and objectives

The course objective is to provide early career scientists working on NUS with the skills and tools for writing and editing scientific papers intended for peer review, as well as communicating research to popular science publications and evidence to inform agricultural policy development. The course aims to improve communication skills (both scientifically and with media) and sharpen ability to present research results in various forums.

The course will specifically develop knowledge and skills to:

- Peer-review and edit scientific manuscripts
- Communicate research results to 'popular' target groups and the media
- Communicate research evidence in support of policy
- Use electronic resources for literature searching and organization
- Finalize manuscripts to increase acceptance for publication in scientific journals

A workshop resource CD will be produced to provide examples and information of use to future facilitators of similar workshops.

¹Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), Uganda; International Foundation for Science (IFS), Sweden; Bioversity International, Italy; African Network for Agriculture, Agroforestry and Natural Resources Education (ANAFE), Kenya; Institut de Recherche et de Développement sur la Biodiversité des Plantes Cultivées, Aromatiques et Médicinales (IRDCAM), Benin; Plant Genetic Resources Research Institute (PGRRI), Ghana; University of Nairobi, Kenya; and University of Malawi, Malawi.

Research focus

This call is focused on research on priority species of Neglected and Underutilized Species of plant for the Eastern and Southern Africa region. Please refer to Annex 1.

Who should apply?

The course targets early career scientists who are conducting a research project on priority NUS, and are at the stage when they need to write up their findings for publishing in a popular or scientific journal or share in a policy domain.

Applicants eligible for this call should:

- Be a citizen of either **Ethiopia, Malawi, Mozambique, Kenya or Uganda**
- Be a national scientist attached to a university, research institution or a research oriented and not-for-profit NGO
- Be under 40 years of age (or up to 45 providing the last higher degree was obtained in the previous 5 years) and at the beginning of their research career
- Have at least a Master's degree or equivalent

We particularly welcome applications from female scientists.

Applications should include:

- An abstract of your work. The abstract can be from a draft manuscript that you are thinking of writing, or a popular science publication or policy brief that you are planning to submit, or that you have submitted but did not get published. **(Maximum 200 words)**.
- Curriculum Vitae

The deadline for application is **24th of June, 2011**. Late applications will not be considered. Only the selected participants will be notified by **29th of July , 2011**.

Applications should be made on the Application Form available on the IFS website:

http://www.ifs.se/Programme/ApplicationForm_NUS_ScientificWriting_Kenya2011.doc

They should be sent, together with a full CV via email to IFS at:

email: nus@ifs.se

write subject line: Scientific Writing Kenya

Priority species and research topics in Eastern and Southern Africa

Priority species for NUS research in Eastern and Southern Africa

A regional stakeholder workshop for Eastern and Southern Africa was held in Nairobi, Kenya on 26-28 July 2010 and was attended by 31 participants from Ethiopia, Kenya, Malawi, Mozambique and Uganda. The participants agreed on the following NUS priority species for the region (Table 1).

Table 1: Priority species for NUS research, Eastern and Southern Africa

Cereals	Research questions
Grain Amaranth <i>Amaranthus</i> spp	<ul style="list-style-type: none"> • Can Amaranth be integrated in existing cropping systems? • Do the current processing methods affect the nutrient content and bioavailability of nutrients from amaranth? • Can Amaranth seed production be enhanced to improve food security in the region? • Can rural small-holder farmers be organized to produce Amaranth on a large scale to sustain a cereal and weaning foods industry? • What is the range of culturally acceptable products that can be produced from grain Amaranth to improve food security and nutrition in the region?
Finger Millet <i>Eleusine coracana</i>	<ul style="list-style-type: none"> • Can Finger Millet be bred for early maturity? • How can threshing of Finger Millet be improved to reduce the labor and reduce post-harvest losses? • How can production and consumption of Millet be enhanced to improve food security and dietary diversity in areas where it is not consumed? • Can de-branning improve acceptability (reduce musty taste) of Millet while preserving nutrients and antioxidants? • What technological developments can improve the palatability of straw for livestock? • What are the different products that can be produced from Millet straw?
Pearl Millet	<ul style="list-style-type: none"> • How can production and consumption of Pearl Millet be enhanced to improve food security and dietary diversity in areas where it is not consumed? • What are the strategies to reduce losses due to birds? • Can Pearl Millet provide a good supplement for Finger Millet as a staple and major grain used for making weaning foods? • What is the regional capacity to produce Pearl Millet for food?
Sim Sim (Sesame) Seed	<ul style="list-style-type: none"> • How can Sim Sim production in the region be improved? • Do the current processing methods affect the content and bioavailability of nutrients from Sim Sim? • Can rural small-holder farmers be organized to produce Sim Sim on large scale to sustain demand? • What is the range of culturally acceptable products that can be produced from Sim Sim?
Legumes and pulses	Research questions
Cowpea <i>(Vigna unguiculata)</i> Bambara groundnut <i>(Vigna subterranea)</i> Lablab bean	<ul style="list-style-type: none"> • Are there genotypes of high-yielding varieties? • Is it possible to intercrop prioritized legumes with crops commonly grown in the region? • Are there varieties associated with efficient nitrogen fixing bacteria? • What are the mechanisms for promoting consumption of the prioritized legumes in the region?

Fruits	Research questions
Guava (<i>Psidium guajava</i>)	<ul style="list-style-type: none"> • Ethno-botanical surveys • Collections and inventories • Sharing germplasm within region • Morphological and genetic characterization • Adaptive research: Post harvest handling to extend shelf life • Processing and value addition • Crop protection research • Market research
Prickly Pear (<i>Opuntia spp</i>)	<ul style="list-style-type: none"> • Domestication, propagation and production packages? • Consumer acceptability • Phenological studies (maybe develop flowering calendar?) • Nutritional studies
Mexican Wild Apple (Uapaca spp)	<ul style="list-style-type: none"> • Propagation and production studies • Breeding for fewer seeds and more pulp • Sexual identification studies • Value addition studies, marketing issues • Protection from pests • Nutritional studies
Roots and tubers	Research questions
Arrow Roots (<i>Colocasia spp</i>)	<ul style="list-style-type: none"> • Collection of germplasm • Propagation and production studies • Acceptability studies • Nutritional studies • Agronomic studies • Varietal selection • Preservation and processing • Marketing and promotion
Wild/Livingstone potato (<i>Plectranthus spp</i>)	<ul style="list-style-type: none"> • Propagation and production • Acceptability • Nutritional studies • Medicinal studies • Processing • Storage and keeping ability • Marketing
Yams (<i>Dioscorea Spp</i>)	<ul style="list-style-type: none"> • Propagation and production • Acceptability • Nutritional studies • Medicinal studies • Processing • Storage and keeping ability • Marketing
Leafy vegetables	Research questions
Vegetable Amaranth (Amaranthus spp)	<ul style="list-style-type: none"> • Morphological and genetic characterization of the different species • Assessment of commercial feasibility of the different Amaranth types • Evaluation of the nutritional and health value (phytochemicals) of the different species • Physiological studies e.g water and nitrogen use efficiency • Intercropping systems with other NUS to assess the pest and disease control, yields and nutritional quality • Development of technologies to extend the shelf life for fresh vegetables, processing and product development • Value chain analysis and market research

African nightshades (<i>Solanum spp</i>)	<ul style="list-style-type: none"> • Assess the nutritional aspects as well as other phytochemicals • Physiological studies e.g water and nitrogen use efficiency • Shelf life studies and product development • Value chain analysis and market research • Traditional knowledge on uses
Spider plant (<i>Cleome gynandra</i>)	<ul style="list-style-type: none"> • Topping studies to lengthen leaf production • Adaptation studies in different ecological zones/seasons • Seed viability studies • Nutritional and phytochemical studies • Shelf life studies • Value chain analysis and market research • Traditional knowledge on uses
Undomesticated plants	Research questions
Horseradish tree/Drumstick tree (<i>Moringa spp</i>)	<ul style="list-style-type: none"> • Ethnobotanical and utilization surveys • Morphological and genetic characterization • Agronomic and adaptation studies • Nutrition and phytochemical studies
Vine spinach (<i>Basella alba</i>)	<ul style="list-style-type: none"> • Genetic characterization • Nutritional and phytochemical studies • Agronomic studies • Documentation of the traditional knowledge on production and utilization • Shelf life studies • Physiological studies on drought tolerance • Recipe development and evaluation
Baobab fruits and shoots (<i>Adansonia digitata</i>)	<ul style="list-style-type: none"> • Document traditional knowledge on conservation and utilization • Nutritional and phytochemical studies • Product development (fruit) • Morphological and genetic characterization

Additionally, some general research questions were identified:

- Neglected in research (characterization of different provenances in different ecologies)
- Develop agronomic information on the species
- Research possibilities for value addition in terms of various products for different market
- Nutrition information
- Collection of indigenous knowledge
- Studies on gender and cultural dimensions (in some communities there are male and female crops)
- Collection and conservation studies