

Advertisement

Junior Professional Officer
Specialist (Sorghum Breeding)
International Crops Research Institute
for the Semi-Arid Tropics (ICRISAT)



Closing date
30th June 2012

I General information

Title:	<i>Specialist (Sorghum Breeding)</i>
Sector of Assignment:	<i>Breeding</i>
Country:	<i>Mali</i>
Location (City):	<i>Bamako</i>
Agency:	<i>International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)</i>
Duration of Assignment:	Initially one year with the possibility to extend up to 3 years
Grade:	P1 step 1 or P2 step 1 in the first year, depending on the level of education and relevant working experience

Note : this post is opened in the context of the Junior Professional Officer (JPO) scheme sponsored by the Government of the Netherlands and is addressed exclusively to **people with the Dutch nationality**. For criteria see the website of the Dutch Ministry of Foreign Affairs:
<http://www.minbuza.nl/contact/werken-bij/internationale-organisaties/assistent-deskundigen-programma>

II Duties, responsibilities and Output Expectations

General

A decade of collaborative breeding research by ICRISAT and the Malian Institute d'Economie Rural has developed the first series of sorghum hybrid parental-lines based on adapted Guinea-race germplasm. This first set of sorghum hybrids have shown 40% grain yield advantage over the best local varieties across a range of farmer-management conditions in extensive on-farm testing. However, broadening the genetic base and clearer definition and establishment of distinct parental pools is necessary to make sorghum hybrids a viable and sustainable commercial success. The specialist will join the ICRISAT-Bamako sorghum breeding team. She/he will contribute to hybrid development research, with emphasis on hybrid parent development and testing. The results and breeding material developed will contribute directly to the ICRISAT/NARS collaborative endeavor for sorghum improvement in West and Central Africa.

1. *Responsibility 1 (40% time)*

Summary of duties and expected output

- Field experiment planning and installation (30%)
- Field operations and observations for crossing, backcrossing, fertility reaction determination (30%)
- Phenotyping for key agronomic traits (20%)
- Data management and analysis (20%)

2. *Responsibility 2 (30% time)*

Summary of duties and expected output

- Creation of new variability (random-mating population and bi-parental crossing to diversify maturity to combine Guinea-race grain characteristics for quality food and feed use and reduced plant height) (50%)
- Test crossing, back crossing and combining ability testing to develop new seed-parent A/B pairs (50%)

3. *Responsibility 3 (30% time)*

Summary of duties and expected output

- Collaborating with National Programs and Farmer Organizations to create and test experimental hybrids under targeted environmental conditions to identify hybrids for commercial production (40%)
- Determination of heterotic pools for Guinea-race sorghum hybrids (30%)
- Use of genetic-diversity information from molecular-genetic studies, testing and confirmation of heterotic pools (30%)

III Learning elements and expectations

The JPO learning programme includes the following elements:

The candidate will gain experience in applied hybrid breeding and a wide range of field research techniques. The specialist will participate in all planning meetings of the research team, seminars, scientific workshops and symposia. S/he will be requested to prepare and give seminars on topics of her/his own work as well as integrating other researchers' results/information on hybrid development. In addition, the incumbent will participate in stakeholders meetings, integrating issues related to hybrid development into the research strategy.

Upon completion of the assignment the JPO will have/ will be able to

- Knowledge and expertise on major issues involved in sorghum hybrid development
- Experience in working in a multidisciplinary and multicultural research team including NARS Scientists and other Stakeholders.
- Extensive knowledge of breeding and writing scientific articles and reports

IV Supervision

Title of supervisor:

Principal Scientist (Sorghum Breeding and Genetic Resources)

Content and methodology of supervision

Immediate supervisor and the Director, West and Central Africa will supervise the Specialist. Evaluation will take place each year. The candidate will be asked to fill a standard performance evaluation form of ICRISAT. The supervisor will discuss with the candidate about the activities, achievements and constraints in carrying out the agreed activities. The specialist will participate in all planning meetings of the research team, seminars, scientific workshops and symposia. He/she will be requested to prepare and give seminars on topics of his/her own work as well as integrating other researcher's results/information on technology. In addition, the incumbent will participate in stakeholders meetings, integrating issues related to technology transfer into the research strategy.

V Required Qualifications and Experience

Education:

Master degree in Agriculture with 2 years, or BSc in Agriculture with 4 years, relevant working experience in Sorghum Breeding.

Working experience :

Preferably 2 to maximal 4 years relevant working experience, including internships and voluntary work.

Languages:

Fluency in English is essential and knowledge of French and any other African languages will be an advantage.

Key competencies

- Extensive knowledge of plant breeding
- Statistics/quantitative genetics; Use and interpretation of molecular genetic
- Data management and ability to analyse research results
- Self-motivated and analytical; Team worker
- Scientific articles and reports writing

VI Background information on Agency/Department/Section

The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) is a non-profit, non-political organization that conducts agricultural research for development in Asia and sub-Saharan Africa with a wide array of partners throughout the world. It belongs to the Consortium of Centers supported by the Consultative Group on International Agricultural Research (CGIAR). ICRISAT is headquartered in Hyderabad, Andhra Pradesh, India, with two regional hubs one each for East and Central Africa at Nairobi, Kenya and West and Central Africa at Bamako, Mali and four country offices at Niger, Nigeria, Malawi and Zimbabwe in Sub-Saharan Africa. ICRISAT staff collaborates closely with NARES, sister IARCs, ARIs, NGOs and private sector organizations. Please visit our website: www.ICRISAT.ORG

VII Information on living conditions at Duty Station

Living conditions in Bamako, Mali are good. Housing is comfortable and secure and there is plenty of opportunity for shopping, recreation, sport and dining out. There are good international air travel connections to Europe and elsewhere in Africa and telephone, internet and email facilities are available both at the ICRISAT-Samanko Regional Hub. The research facilities are good with a number of other institutions co-located at the research station. Medical, dental and primary education facilities are available locally. French is the official language and knowledge of French is helpful for interacting with national program partners.

VIII How to apply

Applications including curriculum vitae (giving contact address with email Id, date of birth, nationality, marital status – if married with spouse and children details), list of publications, and names and addresses of three referees should be sent to Human Resources, ICRISAT, Patancheru, Andhra Pradesh 502 324, India, by email to: icrisatjobs@cgiar.org before 30th June 2012.

Applicants will receive acknowledgement of receipt of their submission. Only shortlisted candidates will be contacted.