

CALL FOR MSc AND PhD APPLICATIONS

Dear Colleagues,

Professor Shougian Feng of Shandong Agricultural University conducts research in **Fruit Molecular Biology and Germplasm Innovation**, with particular emphasis on the molecular regulatory mechanisms underlying fruit quality formation, ripening and coloration in apple and pear.

His research also explores mechanisms of tolerance to abiotic stresses, including salinity, drought and high temperature, mediated by plant hormones such as jasmonic acid and ethylene, as well as dopamine in fruit trees. His laboratory employs transcriptomics, metabolomics, biochemical assays and gene functional verification to identify key transcription-factor regulatory modules. Additional areas of research include apple and pear germplasm evaluation, hybrid breeding, development of new cultivars and intelligent management systems for fruit production. Considering the growing importance of fruit production and the challenges facing the fruit industry in Tanzania, this presents a valuable opportunity for candidates interested in advanced training and research in these areas. Eligible and interested candidates are therefore strongly encouraged to apply.

APPLICATION REQUIREMENTS

All applications should be submitted through the E-Mail: application@tari.go.tz and dahrm@tari.go.tz

Applicants should provide the following documents;

BSc/MSc Degree certificate, as applicable;

Academic transcript (s)

Curriculum Vitae (CV) / Academic CV

Statement of purpose/motivation letter

Recommendation letter from the Director General (DG). (This will only be provided to successful candidates)

A **one-page concept note** outlining the proposed area of study

Age Requirements

MSc applicants; Maximum age of 37 years

PhD applicants; Maximum age of 43 years

POTENTIAL RESEARCH AREAS AND ONGOING PROJECTS

1. Elucidation of the mechanism by which jasmonic acid inhibits apple fruit softening based on gene-expression profiles. Funding institution.

Shandong Provincial Natural Science Foundation Committee Funding:
RMB 120,000

2. Regulation of anthocyanin biosynthesis in pear by transcription factors PyMYB10 and PyMYB114
Funding institution; National Natural Science Foundation of China (NSFC). Funding: RMB 200,000
3. Germplasm innovation and new cultivar breeding of pear (III) Sub-project of the Shandong improved Variety Engineering Programme, Department of Science and Technology of Shandong Province Funding; RMB 300,000
4. Molecular mechanism of jasmonic acid- and ethylene-regulated anthocyanin biosynthesis and fruit coloration via MdERF 1L in apple
Funding institution: National Natural Science Foundation of China (NSFC)
Funding: RMB 600,000
5. Molecular mechanisms underlying environmental regulation of fruit ripening Sub-project of the National Key Research and Development Program, Ministry of Science and Technology of China
Funding: RMB 750,000
6. Precise monitoring of storage and transportation environments and early warning of physiological disorders in apple fruit Sub-project of the National Key Research and Development Program, Ministry of Science and Technology of China Funding: RMB 400,000
7. Development of breeding and production-management systems for fruit trees Horizontal/Enterprise-funded Project Funding 500,000

ADDITIONAL OPPORTUNITIES

Candidates whose interests fall outside the specific fruit-related research areas listed above are also encouraged to apply. Relevant disciplines may include, but are not limited to;

Plant improvement and Breeding

Biotechnology

Precision Agriculture

Soil Science

Plant Protection

Nanotechnology/Nanoparticles in Agriculture

Related agricultural and biological sciences

There are **five competitive opportunities available: two (2) PhD positions and three (3) MSc positions.**

Interested candidates are encouraged to prepare and submit their applications promptly.

Travel to & from ticket is not provided

No air ticket will be provided to beneficiaries of these scholarships

Deadline For application is fourteen days (14) from the date of this announcement