

**ICAR – NATIONAL RESEARCH CENTRE FOR BANANA,
Thogamalai Road, Thayanur Post,
Tiruchirapalli – 620 102, Tamil Nadu
Phone: 0431-2618125**

F.No.9(246)/2021/Estt./ 53

Date: 25.06.2021

Applications are invited to engage 03 (Three) Research Assistant, 08 (Senior Project Assistant) and 06 (Six) Junior Project Assistant, purely on contractual basis under various projects at ICAR – NRC for Banana, Tiruchirapalli – 620 102. Eligible candidates are requested to submit their applications in the **enclosed proforma with self attested copies of educational qualification / experience certificates** etc through email to nrcbrecruitment@gmail.com **on or before 04.30 PM 09.07.2021 (Friday)**. After screening of applications, the shortlisted candidates will be informed the date & mode of interview through email.

I. Research Assistant

Remuneration - **Rs.24,000/-** (consolidated) per month

S.No.	Name of the Project	Essential qualification	Desirable	Nature of work
1.	Operation and maintenance of the Gas Chromatograph – Mass Spectrometer (GC-MS)	First class in M.Sc. (Biochemistry / Chemistry / any other field of Science) with at least 3 years experience in the research field and proficiency in operation of GC-MS, analysis of samples and report generation	<ul style="list-style-type: none"> Basic knowledge in computer applications (MS Office) Minimum 2 research publications having NAAS rating more than 6. 	<ul style="list-style-type: none"> Routine operation and maintenance of the GC-MS Extraction of samples, analysis of volatile profiles and generation of reports for institute funded and externally funded projects being operated at NRCB Analysis of samples received from other institutions on payment basis
2.	Improvement of banana through conventional breeding	First class in M.Sc. (Bioinformatics) with 3 years of related field experience	<ul style="list-style-type: none"> NET qualified Hands on experience In silico proteomics, Molecular modeling, Systems biology, At least two papers should be published with more than 7 NAAS score in the related field. Minimum three experience in the relevant field 	<ul style="list-style-type: none"> Updating the breeding information in the breeding tracker Statistical analysis of the data Documentation of photographs Handling of NGS data and updating the MusatransSSR database

3.	Mass Media Utilization for Extension delivery	First class in M.Sc. (Mass Media / Visual Communication / Media Science / Mass Farm Communication / Journalism) with respective / related field experience for 3 years	<ul style="list-style-type: none"> • Skill in computer software and hardware handling, Software production, Video recording, editing, video pre and post production skill, data analysis skill, SPSS analysis, secondary primary data collection and analysis. • Skill in online meeting handling software 	<ul style="list-style-type: none"> • Extension documentation, software & hardware handling • Video recording and editing skill • Data analysis skill, SPSS skill • Secondary primary data collection, recording and analysis • Online meeting handling and documentation
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II. Senior Project Assistant

Remuneration - Rs.18,000/- (consolidated) per month

S.No.	Name of the Project	Essential qualification	Desirable	Nature of work
1.	Pest mapping in bananas and plantains of India	First class in M.Sc. (Agricultural Entomology) with at least 3 years research experience	<ul style="list-style-type: none"> • Experience in handling / culturing of insects and their bio-agents, bioassays and field testing of insecticides and bio-pesticides • Basic knowledge in computer applications (MS Office / Photoshop) 	<ul style="list-style-type: none"> • Maintenance of cultures for banana insect pests and their bio-agents like entomopathogenic fungi • Laboratory bioassays of pesticides (chemical and bio-pesticides) against banana pest • Field trials and observations on management of banana insect pests • Studies on population dynamics and natural enemies of banana pests
2.	Operation and maintenance of the High Profile Liquid Chromatography (HPLC)	First class in M.Sc. (Biochemistry) at least 2 years research experience	<ul style="list-style-type: none"> • Working knowledge in HPLC analyses • Minimum 1 research publication having NAAS rating more than 5 	<ul style="list-style-type: none"> • Profiling of chlorophyll catabolites in relation to stay-green ripening of Cavendish bananas in HPLC • Characterization and profiling of anthocyanins from flower bracts of germplasm collection and leaves of ornamental bananas using HPLC • Analysis of biochemical compounds from other labs of the Centre using HPLC • Estimation of a-tocopherol in banana leaves using HPLC

3.	Biochemistry of banana fruit ripening and characterization of high value compounds of fruit and flower	First class in M.Sc. (Biochemistry) at least 2 years research experience	<ul style="list-style-type: none"> Working knowledge in phytochemicals analysis Minimum 1 research publication having NAAS rating more than 5 	<ul style="list-style-type: none"> Analysis of flavonoids compound of fruit pulp and peels Characterization of anthocyanins from flower bracts of germplasm collection Analysis of total fructans and types in commercial banana Estimation of a-tocopherol in banana leaves Glycemic index estimation in germplasm
4.	Improvement and management of banana genetic resources in the Indian sub continent	First class in M.Sc. (Biotechnology) with at least 2 years research experience	<ul style="list-style-type: none"> Hands on experience in molecular biology Experience in bioinformatics especially SNP detection. Basic knowledge on tissue culture At least one paper should be published with more than 7 NAAS score in the related field. Minimum three experience in the field of molecular biology 	<ul style="list-style-type: none"> Maintaining the bioreactor room and developing plantlets through bioreactor. ECS development and fine tuning the protocol for other varieties
5.	Management of post harvest diseases of banana	First class in M.Sc. Agricultural Pathology / Biotechnology / Microbiology) or M.Sc. (Microbiology / Botany / Plant Science / Bioscience) with research work in Plant Pathology or Microbiology or biotechnology with at least 2 years research experience	<ul style="list-style-type: none"> 2 years work experience in isolation and characterization of microbes/plant pathogens and molecular biology related works (PCR with ITS/16srRNA sequences, molecular markers, Data annotations etc.). Minimum 1 research publication having NAAS rating more than 5 	<ul style="list-style-type: none"> Isolation of post harvest pathogens Field trial for pre-harvest sprays To test the effect of chemicals on post harvest diseases Survey for collection of market samples for analysis of residues Isolation of phyllosphere microbes In vitro screening of microbes and chemicals on post harvest disease Characterization post harvest pathogens and biocontrol agents Development of bioformulation / consortia for management of post harvest diseases To test the bioformulations on post harvest diseases of banana under field conditions

6.	Production of doubled haploids for improvement of bananas (Musa spp.)	First class in M.Sc. (Biotechnology) with at least 2 years research experience	<ul style="list-style-type: none"> Working experience on banana anther culture & embryo culture Minimum 1 research publication having NAAS rating more than 5 	<ul style="list-style-type: none"> To test the bioformulations on post harvest diseases under pack house conditions Residual analyses for chemical in fruits Working out the MRL and waiting period for fungicides / chemicals Performing another culture of commercial banana cultivars Recording of Morpho-taxonomical, growth and yield characteristics of 33 gametic derived plants Performing wide crossing (inter generic, specific, genomic & ploidy) Embryo culturing of hybrids from wide crossing Estimation of mineral nutritional value of commercially grown banana cultivars in India
7.	Functions of resistant starch and designer food development from banana flour	First class in M.Sc. (Agriculture / Horticulture / Bio-chemistry / Microbiology / Life Sciences or equivalent degree) with at least 2 years research experience	<ul style="list-style-type: none"> Work experience in starch modification, bio-plastics Food product development, fermentation Experience on HPLC / GCMS handling & data interpretation Handling analytical instruments and proficiency in statistical tools NET or equivalent Minimum 1 research publication having NAAS rating more than 5 	<ul style="list-style-type: none"> Encapsulation, nano-compounds development, functional food development Proximate elucidation of bioactive materials, elucidation of bioactive compounds, separation of compounds HPLC, GCMS analysis Product development
8.	Identification of resistant gene candidate (s) in banana for race 1 and tropical race 4 of Fusarium oxysporum f.s.Cubense	First class in M.Sc. (Biotechnology / Bio-informatics) with at least 2 years research experience	<ul style="list-style-type: none"> Work experience in molecular techniques and NGS data analysis Minimum 1 research publication having NAAS rating more than 5 	<ul style="list-style-type: none"> Cloning and characterization Expression studies Plant transformation Bioinformatics – NGS data analysis

III. Junior Project Assistant

Remuneration - Rs.15,000/- (consolidated) per month

S.No.	Name of the Project	Essential qualification	Desirable	Nature of work
1.	Development of Clump Management Technology for enhanced productivity in banana	First class in B.Sc. (Agriculture / Horticulture)	<ul style="list-style-type: none"> Good knowledge and skills in computer and laboratory analysis 	<ul style="list-style-type: none"> Assisting in proper maintenance of experimental field by timely irrigation, fertilization Imposing treatments as per the schedule Management of pests and diseases if any through timely application of pesticides Assisting in periodical recording of biometric observations, collection and analyses of soil and plant samples, etc. Assisting in laboratory analyses of fruit samples
2.	Organic banana farming for sustainable soil health and nutritional security	First class in B.Sc. (Agriculture / Horticulture / Chemistry)	<ul style="list-style-type: none"> Experience in laboratory instrumentation 	<ul style="list-style-type: none"> Assisting the scientist in ICP-OES analyses and its maintenance Assisting in collecting data on field observations and related statistical analyzes
3.	Improvement of banana through conventional breeding	First class in B.Sc. in Biological Sciences (Agriculture / Horticulture / Botany as a subject)	<ul style="list-style-type: none"> Working experience in experimental field and laboratory work (Preferably in Banana). Proficiency in working with basic computer programmes (Word/Excel/Powerpoint). Experience in data recording and compilation 	<ul style="list-style-type: none"> Field maintenance, crossing, data recording and compilation
4.	Investigations on Musa Nematodes' diversity, biology, behaviour, interactions and its management	First class in B.Sc. (Agriculture / Horticulture)	<ul style="list-style-type: none"> M.Sc. Agri. (Nematology / Plant Pathology / Microbiology) Working knowledge in computer (MS Office, internet browsing, etc) and statistics 	<ul style="list-style-type: none"> Collection of soil and root samples from farmer's field / glasshouse Extraction of nematodes from soil and root samples and identification and counting of nematodes under stereo-binocular microscope Assistance in conducting bioassay experiments in laboratory Assistance in preparation and sterilization of

				<ul style="list-style-type: none"> • pot mixture, collection of planting material, planting in pots / field, taking observations on plant growth • Quantification and inoculation of nematodes in glasshouse experiments • Maintenance of plant nematode cultures in glasshouse and entomopathogenic nematodes and their wax-moth cultures in laboratory • General maintenance of laboratory and glasshouse
5.	Krishi Portal	First class in B.E. / B.Tech. (ECE)	<ul style="list-style-type: none"> • Experience on Internetwork troubleshooting 	<ul style="list-style-type: none"> • Uploading information in the existing internal and external portal & Organising Zoom meeting • Maintenance of Computers with LAN network and Other duties as in KRISHI Portal unit
6.	FMS-MIS / CPPP / E-Office / AEBAS	First class in Bachelor's degree (Computer Applications / Computer Science / Information Technology) or any equivalent degree	<ul style="list-style-type: none"> • Master's degree Computer Applications / Computer Science / Information Technology) or any equivalent degree • Sound working knowledge in MS Office tools and ICT tools 	<ul style="list-style-type: none"> • To diarize the DAKs in e-office • To enter day-to-day transactions in ERP • To process the pay bill module in ERP • To upload quotations / tenders and download responses in CPP Portal • To maintain biometric attendance in AEBAS

General Terms and conditions:

1. Age limit: Minimum age 21 years and Maximum age 45 years for Research Assistant, Senior Project Assistant and Junior Project Assistant. Age relaxation shall be applicable for the post as per rules.
2. The above position is purely on temporary basis and co-terminus with the project. There is no provision for re-employment after termination of project. The selected candidate will not have any right for claiming pay scale or absorption against any regular post being vacant on a later date at this institute.
3. Candidates who have passed the required qualifications **only be called for the interview.**
4. Candidates attending the Interview should neatly type the application in the format prescribed in MS-WORD – TIMES NEW ROMAN FONT – 12 SIZE and **submit the same along with attested copies of educational qualifications, experience and publications etc. through email.**
5. Candidates already working should produce necessary "No Objection Certificate" in case he / she is employed elsewhere.
6. For more details please contact: 0431- 2618125


Assistant Administrative Officer