





BioNEST Agrinovation CENTER



University of Agricultural Sciences, Bangalore

ABOUT US:

UASB Agri. Innovation Center is an incubation center which was established at the University of Agriculture Sciences, GKVK, Bangalore on 2017 with the support of University. It has the motto of translating the innovative ideas of Start-ups into economically and commercially viable products. BioNEST grant was obtained in 2021 which is supported and funded by BIRAC, DBT, Ministry of Science and Technology, GoI. The BioNEST Agri. Innovation Center UASB paves the way for young entrepreneurs, farmers, academicians, agricultural graduates and agriculture scientists to implement their innovative ideas in developing a successful product/technology.



BioNEST AIC

Under BioNEST AIC laboratories and other infrastructure facilities were established to accommodate the Agri-based entrepreneurs to innovate and develop new products that address the problems in agriculture. The novelty features of the BioNEST supported incubator are the Biological Material Repository, which aims at making available of biological material which will be useful for students, academicians and startups research and commercialization. The Knowledge cell catalogues commercialized technologies from the University and other sources for startups, it will also cater to market and competitor analysis.

University of Agricultural Sciences Bangalore is one of the leading Agriculture focused universities in India. It has domain expertise in diverse area of Agriculture like crop improvement, conservation Agriculture, crop management, crop protection value addition and Agriculture implements. Several scientific leads have been made by the institution that have potential to be translated to commercial products.



UAS BANGALORE



Biotechnology Industry Research Assistance Council (BIRAC) is a not-for-profit Section 8, Schedule B, Public Sector Enterprise, set up by Department of Biotechnology (DBT), Government of India in 2012 as an interface agency to strengthen and empower the emerging biotech enterprise to undertake strategic research and innovation for translating innovations into commercial products and technologies.

BIRAC

PRIMARY OBJECTIVES OF THE INNOVATION CENTRE

Nurture agricultural innovation & entrepreneurship

Foster cutting-edge innovations in the agri-sector leading to economic development Serve as a knowledge centre & repository of biological materials

Enable innovative research with commercialization potential in the agri-sector

SCOPE OF BioNEST AGRI. INNOVATION CENTER UASB

- Incubation Center is a hub for agriculture and allied sector innovation, combining state-of-the-art tech facilities.
- Provide physical and technical expertise and help to fine tune their concepts into products.
- To facilitate entrepreneurs to obtain external funding to execute their programmes.
- Entrepreneurship and skill enhancement programmes.
- Expert teams for specific thematic areas.
- A conglomeration of UASB departments and schemes.







THEMATIC AREAS OF INNOVATION CENTER

- Biotechnologies for crop improvement
- Biofertilizers, biopesticide, biofuel, bio-energy, and bio-weedicides
- **Seed Production**
- Tissue culture, aeroponics, hydroponics
- Nanotechnology in agriculture
- Conservation and secondary agriculture





















Novelty of BioNEST Agri. Innovation Center UASB

1. Biological Material Repository (Physical and virtual)

Biological Material Repository

Virtual Repository (Sourced from other Research Institutes Physical Repository (Maintained at BioNEST AIC)

- National Bureau- NBPGR, NBAIR etc.
- ICAR research Institutes- IIHR, IARI,TNAU, CPRI etc.,
- Agriculture and Horticulture Universities
- Plant Biotechnology DH5 alpha cells, Agrobacterium strains etc.
- Genetics and Plant Breeding-Trait donar lines, germplasm lines
- NSP- University released varieties
- University Gene Bank
- Horticulture- Medicinal Plants, Aromatic plants etc.
- Microbiology- Endophytes Beneficial microbial strains, Mushroom spones



2. Knowledge Center and its focus areas

National
wide access
&
effectiveness

Querying & Interfacing (updating file)

Data mining
Extraction and
Integration
(DR, DE &
other authentic
Sources)

Bio-NEST Knowledge center

(Agri. Based Technologies)

Storage & Repositories

Visualization & Authoring

Data linking &
Enrichment

The major thematic areas of knowledge cell that need to be exploited and addressed are

- Crop improvement
- Crop protection
- Crop production
- Microbiology
- Agricultural engineering and postharvest technology
- Biotechnology
- Tissue culture
- Biofertilizers
- Biopesticides
- Bioweedicides
- Value addition and processing
- Marketing and digital farming
- Plant diagnostics
- Plant breeding and seed production
- Precision agriculture
- Aeroponics and Hydroponics

Facilities at BioNEST AIC UASB for registered Incubatees

- **Lab** space Open lab environment -Work bench with designated space and access to basic amenities and common equipments.
- Shared office space depending on the number of scientists.
- Access to infrastructure facilities.
- Greenhouse/Net house facilities, Field facilities, Post harvest processing facilities, Tissue culture facility, Plant Phenomics platform and Field space for conduct experiment in filed.
- Specific analytical facilities such as HPLC, GCMS, Mass spectrometry, Florescent microscopy, Inverted microscope, ICP-OES etc.,
- Access to other services Technical consultation services Market linkages, Access to technologies developed by the University and Biological Material Repository.
- Access to Meeting/ Seminar halls.



Organic Farming Unit



Tissue Culture Facility



Plant Phenomics Platform



Gene Bank Facility



Green House Facility



GCMS Facility



HPLC Facility



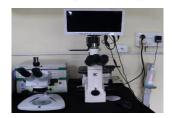
Field Space Facility



Florescent Microscope



ICP-OES Facility



Inverted Microscope Facility



Millet Dehusking Machine



SeqStudio Genetic Analyzer



Bio-fertilizer Unit

The BioNEST Agri. Innovation Center UASB

offers FOUR broad models of Incubation



In- House Incubatees with requirment of
Lab facilities
The incubatees will be physically incubate
at UASB AIC, provided with lab and office
space

In- House Student Incubatees with
requirement of Lab facilities
Students with innovative ideas will pay
subsidized incubation charges and will provide
the laboratory facilitates

In- House Incubatees without requirment of Lab facilities

The incubatees can utilize the office space for their computational research work such as software development

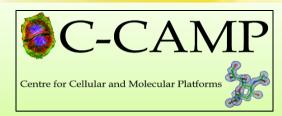
External Registrant Incubatees

The incubatees can register for virtual incubation and mentorship support will be provided by BioNEST Agri Innovation Center UASB

Collaboration with







Contact us

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