



KERALA AGRICULTURAL UNIVERSITY PINEAPPLE RESEARCH STATION

Vazhakulam, Muvattupuzha, Ernakulam District, Kerala, India, PIN-686 670

PINEAPPLE RESEARCH STATION, VAZHAKULAM

VISION 2030

Pineapple Research Station Vazhakulam visualizes to be **Fruit Crops Research Centre of Excellence (FCRCE)** by 2030. The advanced research centre of excellence dreams to be the ultimate authority and provider of excellent quality technology, products and services in fruit crops through concerted research and development efforts sustained by best human resources and infrastructure development.

The FCRCE comprises

1. Technology division
 - Crop improvement (Agricultural Botany, Plant Breeding and Biotechnology)
 - Crop production (Agronomy, Horticulture and Agricultural Chemistry)
 - Crop protection (Agricultural Entomology, Pathology, Microbiology and Nematology)
2. Products division
 - Crop Processing and Product Development
 - Quality Assurance
3. Services division
 - Transfer of Technology, Other Services

PRS envisages steady systematic metamorphosis into Fruit Crops Research Centre of Excellence (FCRCE) by 2030 in phases of 5 years as detailed below.

Phase I (2010-2015)

Technology division

- Development of improved varieties of pineapple and their cultivation practices
- Standardization of protocols for micro propagation of pineapple and passion fruit.
- Pest and diseases monitoring.
- Virus indexing.
- Standardization of quality parameters of pineapple.



Product division

- Production of Pineapple squash, jam, syrup
- Large scale production of tissue culture plants of pineapple and passion fruit and seedlings of passion fruit.
- Publications and video CDs on tissue culture of pineapple and passion fruit.

Services division

- Providing quality evaluation reports
- Agrilclinic, advisory, training and consultancy.

Human resources development

- Agronomist
- Biotechnologist
- Plant breeder
- Farm officer

Infrastructure development

- Establishment of processing lab
- Library
- Training complex

Phase II (2015-2020)

Technology division

- Development of improved varieties of passion fruit and their cultivation practices.
- Standardization of protocols for micro propagation of banana.
- Isolation and detection of microorganisms affecting pineapple, passion fruit and banana.
- Pest and diseases control of pineapple and passion fruit.
- Standardization of quality parameters of passion fruit.
- Biotic stress tolerant pineapple varieties.

Product division

- Augmentation of tissue culture plants of pineapple, passion fruit and banana.
- Pineapple and passion fruit squash, jam, syrup, candy, juice and blended items.
- Publications and video CDs tissue culture of banana.



Services division

- Quality testing of pineapple, passion fruit and banana.
- Project works of PG students.

Human resources development

- Horticulturist
- Microbiologist
- Agricultural chemist
- Pathologist

Infrastructure development

- Information and sales centre.
- Augmentation of microbiology and quality control lab.
- Purchase of equipment like GC, AS, Micro gel unit.
- Electron microscope
- Colony counter.
- Incubator
- Particle bombardment system.
- Vertical gel electrophoresis apparatus.

Phase III (2020-2025)

Technology division

- Development of improved varieties of banana and their cultivation practices.
- Standardization of protocols for micro propagation for jack fruit and mango.
- Development of molecular markers for pineapple, passion fruit, banana.
- Abiotic stress tolerant passion fruit varieties

Product division

- Large scale production of tissue culture plants of pineapple, passion fruit, banana, jack fruit and mango.
- Production of banana chips, candies.

Services division

- Custom based tissue culture production of fruit crops.



Human resources development

- Climatologist
- Home scientist
- Agricultural extension scientist
- Entomologist

Infrastructure development

- Weather forecasting station.
- Permanent farm of 5 hectares.
- Virtual database information system.
- Additional tissue culture lab
- HPLC
- 5 KVa system UPS.

Phase IV (2025-2030)

Technology division

- Development of improved varieties of other crops like sapota, rambutan etc.
- Micro propagation of other fruit crops
- Pest and disease control of sapota, mango, jack fruit, rambutan etc
- Molecular markers for sapota, mango, jack fruit, rambutan etc

Product division

- Publication and video CDs tissue culture of sapota, mango, jack fruit, rambutan and all other fruit crops.

Services division

- Providing quality evaluation reports.
- Custom based tissue culture production of fruit crops.

Human resources development

- Librarian
- System manager

Infrastructure development

- Establishment of full fledged FCRCE block

