

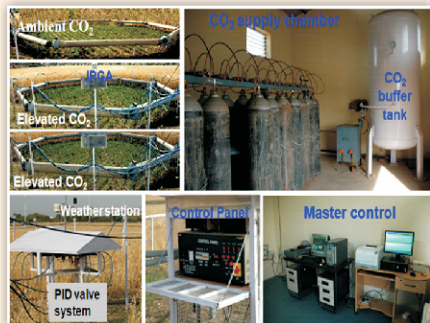
INFRASTRUCTURE FACILITIES

Research facilities

- Well laid out laser-levelled fully-irrigated experimental farm (60 ha)
- Containment facility for conducting experiments under varied environmental conditions
- Open Top Chambers (OTCs) to assess the impact of climate change on crops and weeds
- Free Air CO₂ Enrichment (FACE) facility to study the effect of elevated CO₂ on crop-weed interaction
- Lysimeters to assess ground water contamination potential of herbicides
- Phytoremediation unit to study the bioremediation potential of weed species
- Setup to evaluate management practices for aquatic weeds
- Runoff tanks for studies on herbicides toxicity to non-target organisms
- Well equipped research laboratories
- Agrowaste and weed biomass composting unit
- Weed cafeteria for demonstration and conservation of weed germplasm
- Weed seed herbarium containing germplasm of 100 species
- Technology park on weed management technologies
- Information centre displaying the world of weed science
- Net/poly-houses for quarantine weeds and multiplication of bio-agents



Technology park



Free Air CO₂ Enrichment (FACE) facility





Lysimeters



Aquatic ponds



Runoff tanks



Phytoremediation unit



Central laboratory



Containment facility



Weed cafeteria



Open Top Chambers (OTCs)

Equipments

- LC-MS/MS system
- High performance liquid chromatography (HPLC) unit
- Gas chromatography (GC) unit
- Portable photosynthesis system (IRGA)
- Soil CO₂ flux analyser
- Spectro-radiometer
- SPAD chlorophyll meter
- Osmometer



- Stereo zoom research microscope with photographic attachment
- Thermal cycler (PCR)
- Gel documentation unit
- Atomic absorption spectrometer (AAS)
- High speed centrifuge
- Ultra water purification unit
- Root scanner
- Multi-probe soil moisture meter
- Leaf area meter
- Vacuum evaporator
- Lyophilizer
- UV-visible double beam spectrophotometer
- Kjeldtec unit for nitrogen analysis



LC-MS/MS System



Gel Documentation Unit



Portable Photosynthesis System



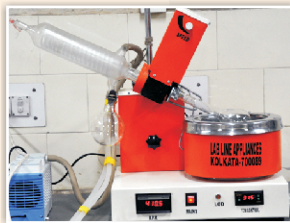
Thermal cycler



Lyophilizer



High Performance Liquid Chromatography



Vacuum Evaporator



Atomic Absorption Spectrometer





UV-visible Spectrophotometer



Gas Chromatography Unit



Stereo Zoom Microscope



Spectro-radiometer

AKMU

Agriculture Knowledge Management Unit (AKMU) is well equipped with computers, LAN facilities, colour xerox-cum-printer and A-0 plotter. Specialized software like ARCInfo for GIS analysis and ERDAS Imagine for satellite image analysis are available. All the scientists are provided with internet connection through Lease Line. The main building of the Directorate is Wi-Fi enabled.



Agriculture Knowledge Management Unit

Library

Library has a total collection of 5059 books pertaining to weed science. It has modern facilities such as CAB-PEST and CAB-SAC CD-ROMs and Current Contents on Diskette (CCOD) on biological sciences, software for library automation and information retrieval. It has 60 Indian and 20 foreign journals in its subscription. Library is also a member of Consortium for e-Resources in Agriculture



Library

(CeRA). All the scientists have online access to more than 2000 e-journals in various fields of science. Reprographic and documentation facilities have also been created for the preparation of documents and reports.

Information centre

Well developed Information Centre has been created with the aim of briefly informing farmers, dignitaries and other stakeholders about its mandate and thrust areas; history, importance, methodologies and tools of weed management; problematic and alien invasive weeds; weed utilization and environmental concerns in respect to chemical weed management using sophisticated display systems. Directorate's publications, prototypes of weed management tools and live specimen of weed seeds are also displayed.



Information Centre

Kisan mobile advisory service

Knowledge management service through SMS has been launched for disseminating weed management technologies to the farming community. The Kisan mobile advisory service delivers real time agricultural information and customized knowledge to improve farmers' decision making ability in developing strategies to manage weeds for enhancing farm productivity. The advisory services on weed management are provided to more than 1000 of registered farmers/stakeholders. Any farmer may avail the service by getting registered free of cost.



SMS to farmer's on weed control

Farm and other civic amenities

- Well developed farm with roads, street lights and boundary wall
- Water harvesting ponds for efficient drainage and ground water recharge
- Threshing yard
- Plantations of teak, white oak and other ornamental trees along roadside and boundary



- Agri-horticulture based system (Mango, guava, *aonla* (Indian gooseberry), citrus and pomegranate)
- Watch towers to strengthen farm security
- Farm godowns for storage of farm produce
- Staff welfare club for recreational activities
- Well developed sports ground
- Conference hall, committee hall and visitors' room
- Guest house



Farm roads



Water harvesting pond



Lawn



Guest house



Visitors room



Godown



Composting unit



Mass multiplication unit for Mexican beetle



Committee hall



Watch tower



ICAR central zone sports meet in the playground

Farm mechanization

Research farm is equipped with modern farm machines like high power tractors, mini tractor, power weeders, tractor-driven sprayers, laser land-leveler, happy seeder, zero-till seed-cum-fertilizer drill, multi-crop seed-cum-fertilizer drill, disc bund former, dozer blade, front loader, bed maker, multi-crop threshers, reaper, tube wells, underground irrigation pipelines and sprinkler system.



Laser land leveller



Happy seeder



Multi-crop seed-cum-fertilizer drill



Zero-till seed-cum-fertilizer drill



Raised-bed seed-cum-fertilizer drill



Mini tractor



Tractor-driven multi-boom sprayer



Sprinkler system



Power weeder



Reaper



Disc bund former



Disc bund former

