Acquisition and Management of C&E Data within the Genebank Information System (GBIS)
GBIS: Applications

GBIS / Management – Rich Client for internal genebank management

GBIS / Bonitur – Java application for acquisition of C&E data using Pocket-PCs as mobile data collection devices

GBIS / Internet – JSF-based internet application for external information retrieval and seed orders

BioCase - Interface – Formats: gcp-passport, ABCD, MCPD
Current Efforts on C&E Data

- Support for electronic data acquisition of observations (GBIS/B)
  - Done

- Import of Excel files with “legacy” observation data
  - Planned (2009)

- Reports (tables, diagrams) on observation data (GBIS/M, GBIS/I)
  - In progress (2009 for GBIS/M, not yet scheduled for GBIS/I)

- Querying for accessions using C&E data (GBIS/M, GBIS/I)
  - Planned (2009 for GBIS/M, 2010 for GBIS/I)

- Import of (external) secondary evaluation data
  - Planned (2009 onwards)
Main Object Types for Observation Data

- Observations on “growths” (growth: set of plants of one accession grown together)
- Experiment: observation data on a set of growths
- Crop-specific schemas of descriptors (Boniturschema)
  - Multiple schemas for one crop for different purposes
- Observation data
Main Object Types for Observation Data (2)

- Observation data
  - Different scale and data types, such as
    - text
    - number
    - date
    - list of values
      - coded as numbers (1 – 9)
  - Multiple observation values for one observation, e.g. 50% red, 50% white
• GBIS/B: Java application, Java Swing for GUI
  • Development and tests on PC
  • Deployment on Pocket PCs as jar file

• Definition of experiments, descriptor schemas etc. in GBIS/M

• Synchronisation GBIS/M – GBIS/B
  • CSV-files using Microsoft ActiveSync
  • Mapping of GBIS/B-IDs to GBIS/M-IDs
  • Handling of multiple exports
    • Prevent export of same growth to more than one Pocket PC
    • Rearrangement of a set of growths
Acquisition of Observation Data with GBIS/B (2)

- Selection of imported experiment
- ID of growth
  - Barcode scanning
  - Manual entry
- Selection of descriptors
- Combo boxes for list of values
- Handling of multiple values
- Comments on observations and values
- Display of
  - existing observed values of growth
  - “historical” values of accession
Discussion Results -> Implementations at IPK

- Import of Excel files with “legacy” observation data
  - Planned (2009)

- Reports (tables, diagrams) on observation data (GBIS/M)
  - In progress (2009)

- Querying for accessions using C&E data (GBIS/M, GBIS/I)
  - Planned (2009 for GBIS/M, 2010 for GBIS/I)

- Import of (external) secondary evaluation data
  - Planned (2009 onwards)

- Interface for data exchange
  - Not yet scheduled