PVP Database in China

Yang Kun
Examiner
DUS Testing Division,
Development Center for Science & Technology, MOA, P.R.China

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History

- Tools used to manage and process data:
  - 1999~2004 Ms Word and Excel
  - 2004~2011 Several small tools, including Report Producing System made by Ms Excel, PVP DUS management database made by Ms Access respectively, Special programs used to generate official documents made by VB, etc.
  - 2008~2011 Developing a new database
  - 2011~2014 Application of the unified Database

History2008-2011

- Project started from 2008
- A work team composed by 20 key persons
- PVP database has four parts:
  - Application Management System (AMS)
  - Variety Description Database (VDD)
  - Data Analysis System (DAS)
  - Image Analysis System (IAS)

Application Management System

- Developed by an agricultural software company
- Written by .Net and SQL
- Online operation
- Used by all relevant units of PVP


植保办公系统 - Microsoft Internet Explorer
文件(F) 编辑(E) 查看(V) 收藏(A) 工具(T) 帮助(H)
地址(D) http://www.cnpvp.cn/pvps/default.aspx
转到
桌面 | 帐户信息 | 注销 | 帮助
农业部植物新品种保护审查系统
general tasks
审查管理
测试管理
品种测试
品种保藏
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测试报告
测试指南
已知品种
综合统计
字典管理
导入导出
tasks
Welcome. . .
农业部植物新品种保护审查系统

Main functions of AMS

- Role definition
- Task reminding
- Input new data and mistake check
- Calculate or convert data automatically
- Output in batches
- Inquiring, reporting and statistical analysis
- Message exchange

Variety Description Database

- Developed by an agricultural software company
- Written by .Net and SQL
- Online operation
- Used by DUS Testing Division and 14 sub stations
- So far, it contains 93 TGs (176 versions), 12899 Varieties

Login interface

Structure of VDD

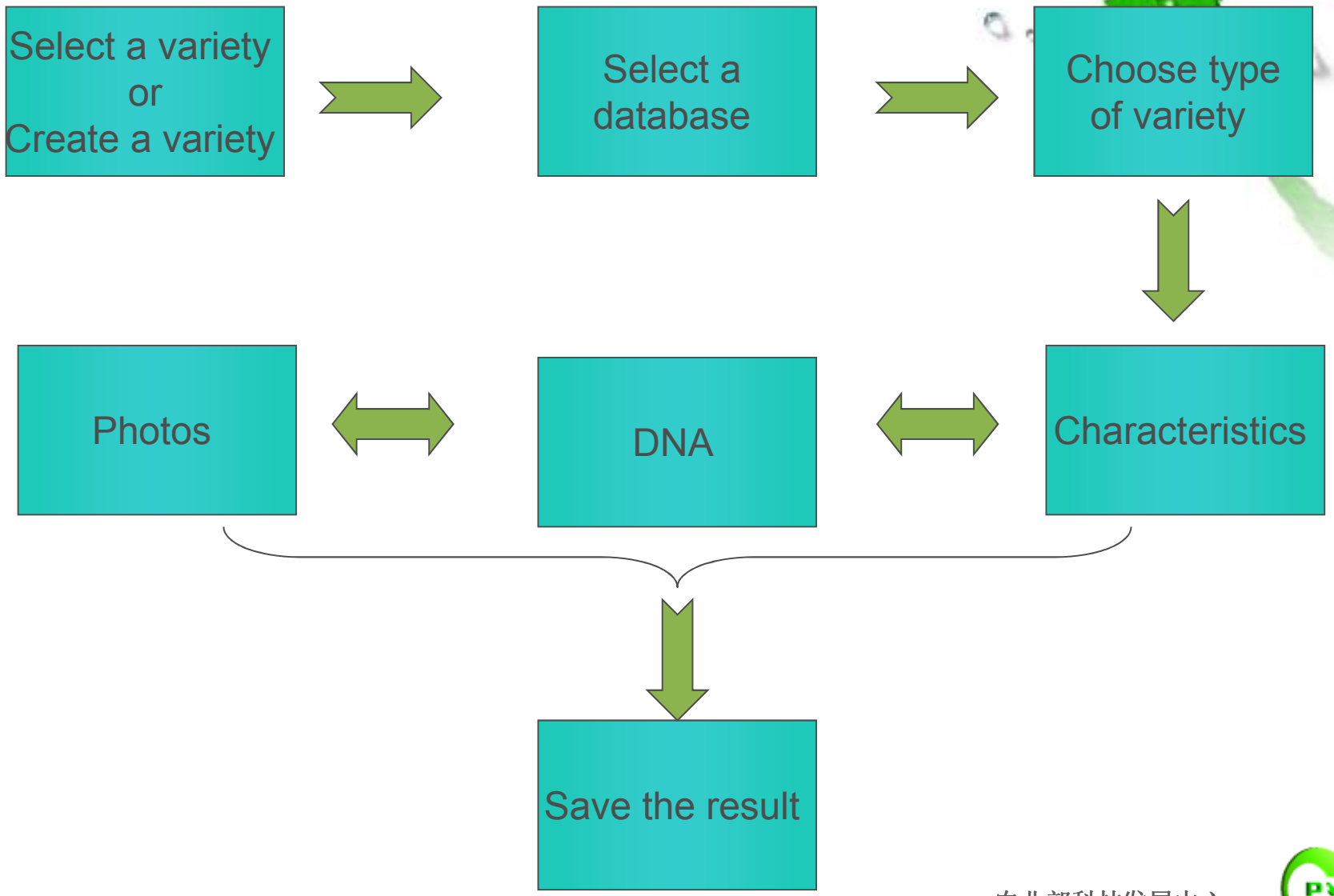
Basic information

DNA fingerprint

Description

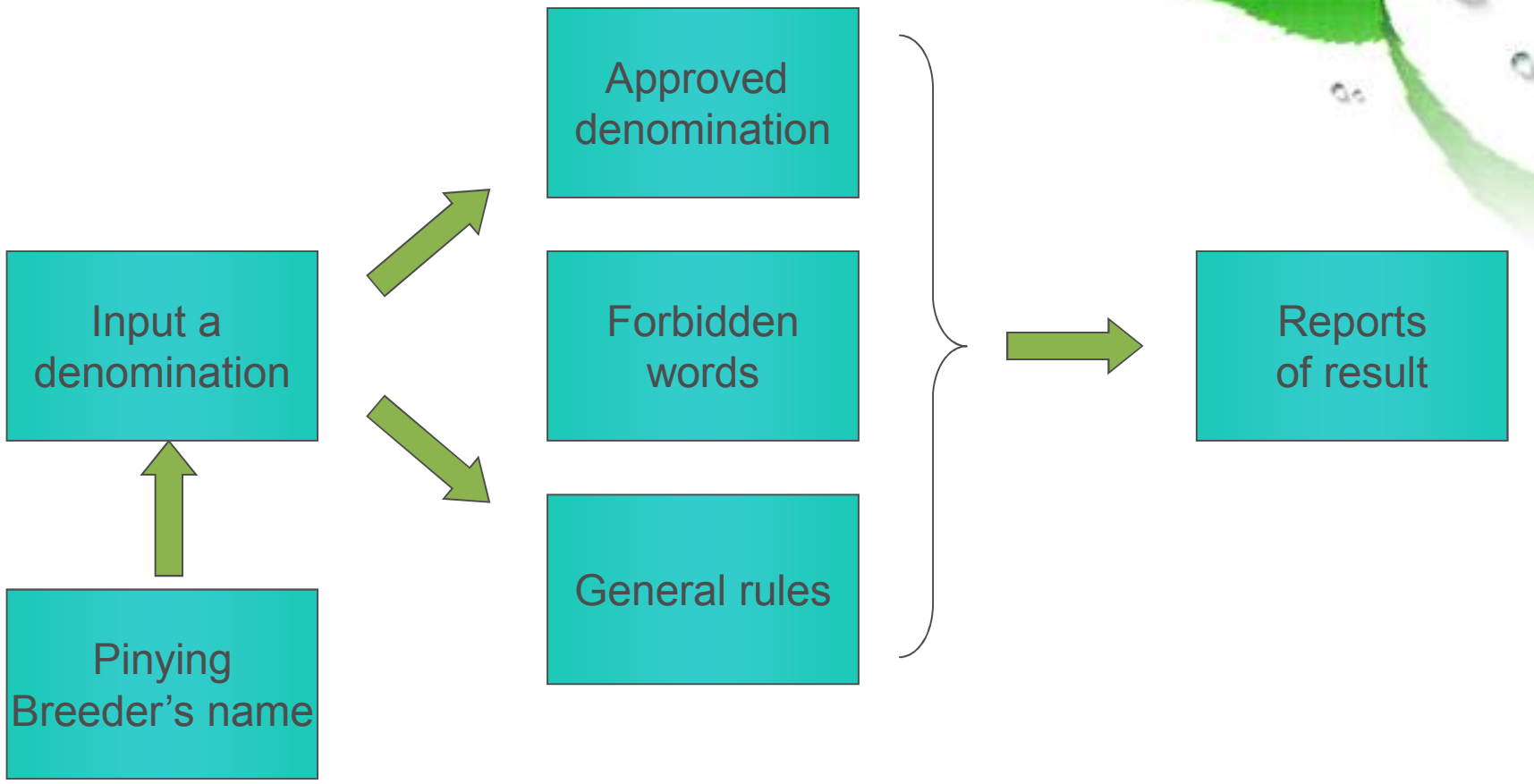
Image

to select similar varieties



to select similar varieties

to check denomination



to check denomination

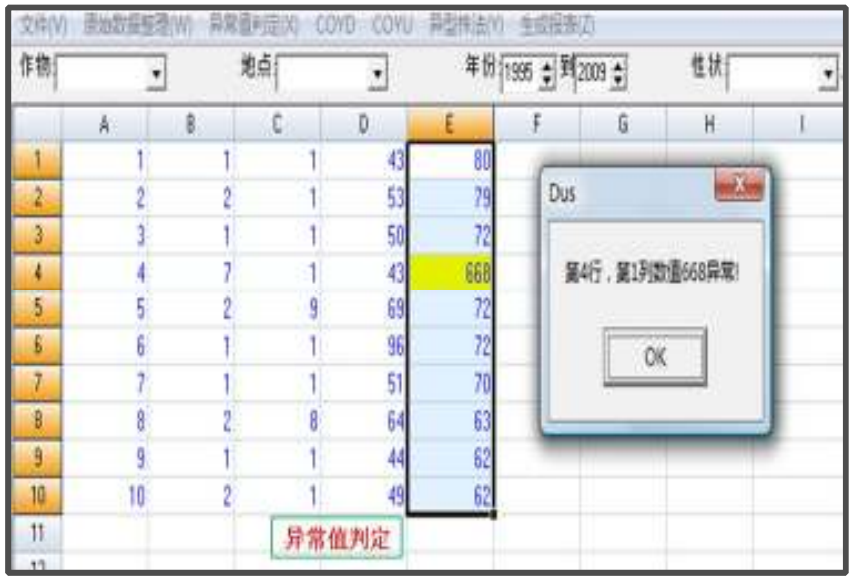
Data Analysis System

- Developed by a statistical expert
- Written by Delphi
- Green software in PC
- Used by sub-stations

Main functions of DAS

- Converting from raw data to pre-analyzing format
- Detecting abnormal datum
- Methods for examining distinctness (F, Fisher's exact, LSD, COYD)
- Methods for examining uniformity (off-types, COYU)

Main functions of DAS



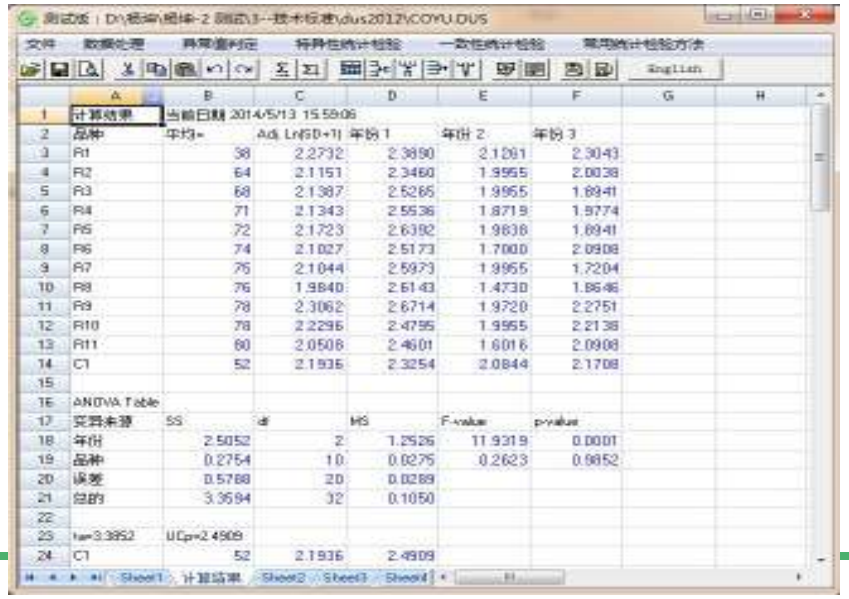


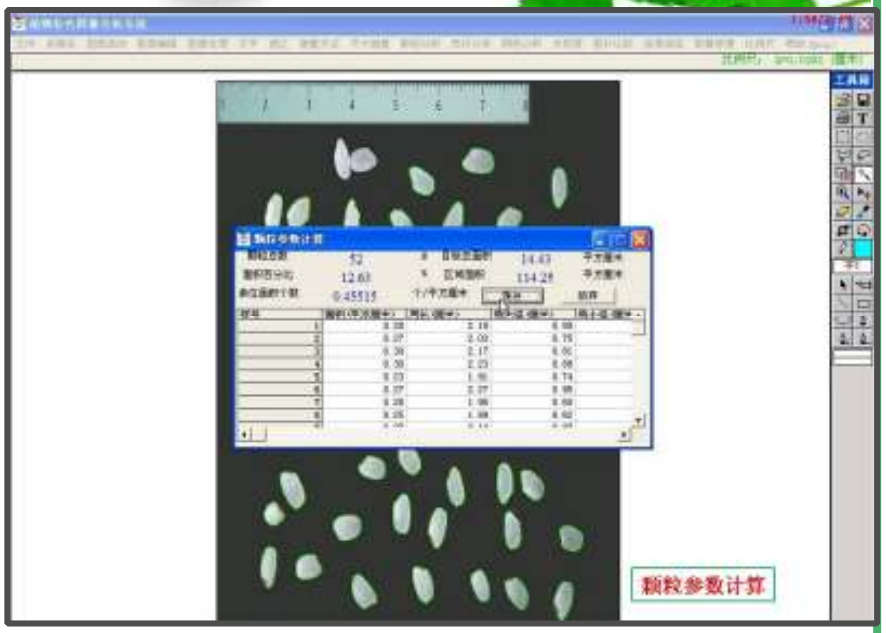
Image Analysis System

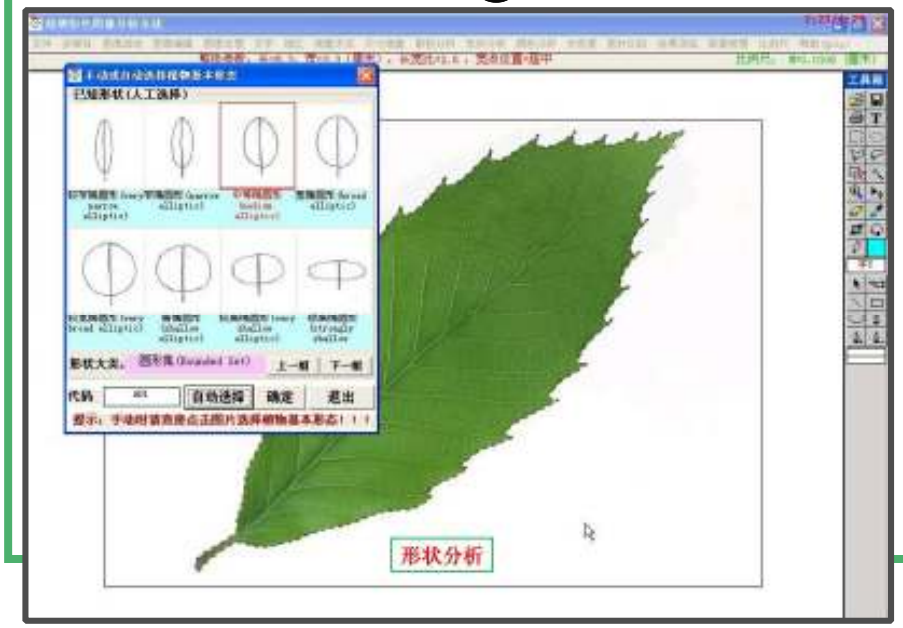
- developed by a professional company
- written by VB
- secured in PC
- used by sub-stations

Image Analysis System

Main functions of IAS

- Shape analysis
- Color analysis
- Image comparison
- Image storage
- Data storage





Hard wares of IAS

Costs

- 1. Development fee: 2,039,000 RMB
  - 1.1 AMS: 849,000 RMB
  - 1.2 VDD: 150,000 RMB
  - 1.3 DAS: 200,000 RMB
  - 1.4 IAS: 240,000 RMB
  - 1.5 Hardware of IAS 600,000RMB
- 2. Maintance fee: 300,000 RMB /year

Benefits

- 1. Made our work transparent, accurate and efficient.
- 2. Expanded the scope of known varieties for selecting similar varieties
- 3. Harmonized the TGs
- 4. Harmonized the key data among different units and made the exchange of data much easier

Future plan

- To enhance the speed of AMS and VDD
- To develop online application system
- To harmonize the four parts to work together
- To shorten the manual steps of IMS according to certain pictures
- To create English version of last three softwares

Appreciations

- We have learnt a lot from UPOV and it's members' experience, especially from The Netherlands, Japan, Germany, France, UK…

- Thank you for your sharing and help!
- Thank you for your attention!