

Implementation of ICIS for Maize and Wheat Progress Report

Graham McLaren CRIL

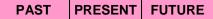




International Maize Information System

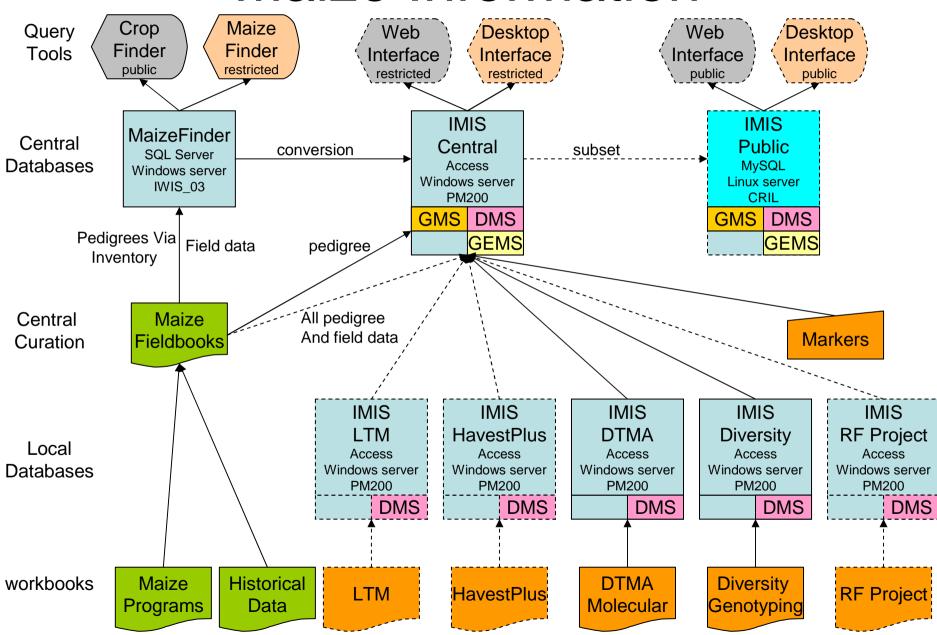
Eduardo Hernandez Juan Carlos Alarcon William Eusebio Jean Danga Graham McLaren





Maize Information

In development



Maize Pedigrees

- CML Pedigrees entered into IMIS
- 2006, 2007 and 2008a inventories for LT Program entered
- 2007 and most of 2008a inventories for H+ Program entered
- MaizeFinder pedigrees reviewed and passed to breeders for further verification before entry



USE of ICIS Applications for Maize Breeding

- All 2007 and 2008a nursery lists entered into ICIS
- Coding system for LT program developed
- WorkBook Templates for LT PN and TC Nurseries developed





Integration of Fieldbook with ICIS

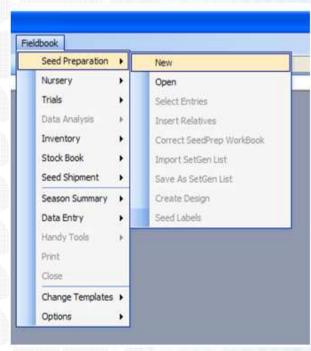
- Import of SetGen Lists to SeedPrep
- Export of SeedPrep Lists to SetGen





Import SetGen List

• In the Seed Preparation menu, choose to create a New one or Open an existing one.



Import SetGen List (cont'd.)

 After opening or creating a new seed prep worksheet, you can now choose from the Seed Preparation menu the Import SetGen List tool.

			cel - PREP8	sxis	-							
	Ele	Edit	View Inser	t Format Tools Data Window t	teip	Fieldbook						
	1		8 8 8	1 7 2 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(24	Seed Preparation	ns e ti	New				ľ
	A1		• fs	Entry		Nursery	•	Open				ľ
	A	В	С	D	T	Trials		 Select Entries 				1
-						Data Analysis	•	Insert F	Relatives			ľ
1 18	Entry	StockID	Name	BreedersPedigree1	0	Inventory		Correct SeedPrep WorkBook			T	
19						Stock Book	• [Import SetGen List				
20						Seed Shipment		Save As SetGen List			1	
21	Season: 08A						10605					L
22	Exp: PREP8								Create Design			L
23	Entry	Stock	Name	Pedigree		Data Entry	· •	Seed Labels				
24		D				Handy Tools	•	_		_	Asp	1
25						Print	H	_		-		+
26	_					Close	H	_		_		+
27 28	-			-		Change Template				_	-	+
20 29	-				-	Options	H	_		_	2	t
30					+L	opoors	<u> </u>	_				t
24	1.0			1	1	1 1		1				t





Import SetGen List (cont'd.)

• The Import SetGen List dialog box will appear. Select the list you want to import and click OK.

LIST NAME	LIST DESCRIPTION					
293	synthetic F1 formation of three 8 line synthetics					
292	synthetic F1 formation of three 6 line synthetics					
291	synthetic F1 formation of three 4 line synthetics					
298	synthetic F1 formation of three 24 line synthetics					
297 296	synthetic F1 formation of three 20 line synthetics synthetic F1 formation of three 16 line synthetics					
95	synthetic F1 formation of three 12 line synthetics					



IMIS for Genomic Data

- Curated Maize diversity data sets in IMIS
- Ready to do this for the SNP studies once the data is available
- Constructing a Rockefeller project database for all the QTL, Maps and summary microarray data from this maize drought project.
- Documenting all genomic datasets on the GREU wiki (http://cril.cimmyt.org/confluence/display/GREU/Geno mic+Datasets).
- The scope the work to be done in Maize molecular breeding is being ascertained in collaboration with DTMA researchers.
- The CMAP software is being uses to visualise map base data for maize (cmap.cimmyt.org).

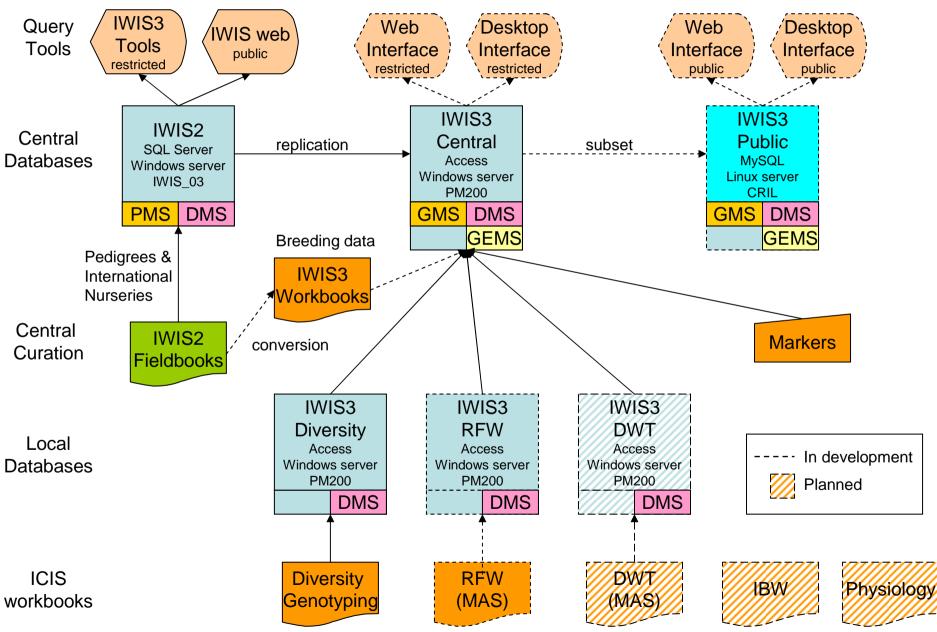


International Wheat Information System

Jesper Nørgaard Juan Carlos Alarcon Bibiana Espinosa Guy Davenport Miguel Anducho Graham McLaren



Wheat Information



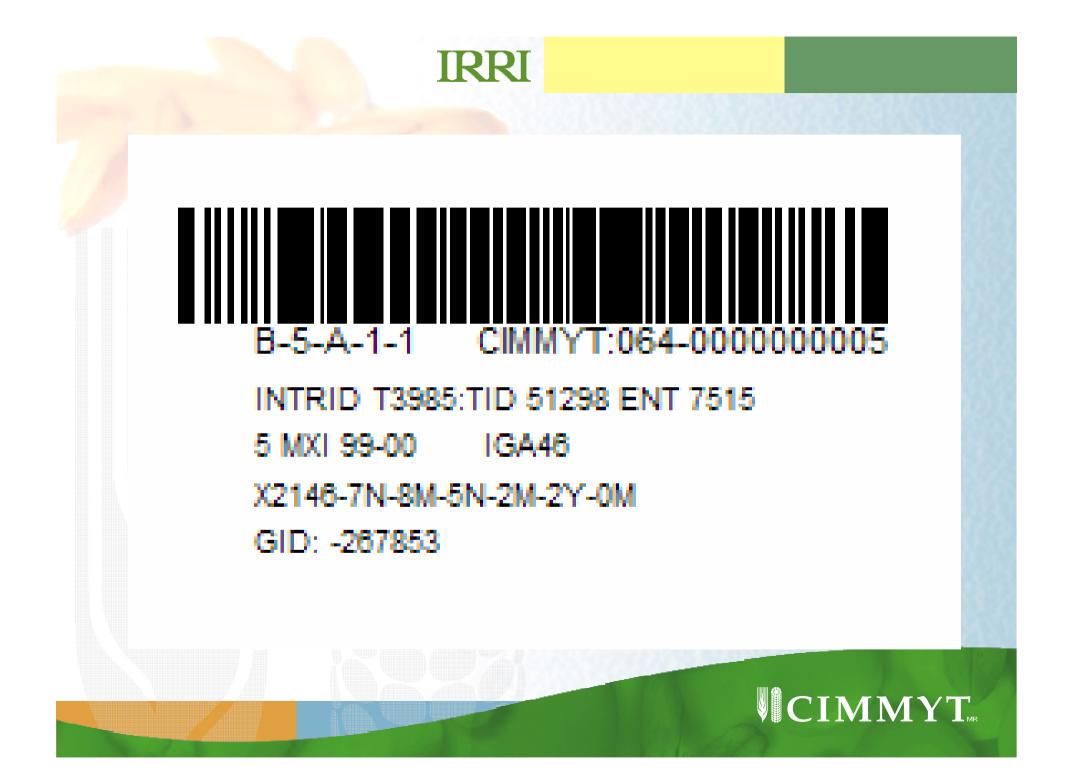
IWIS3 Central DB activities

- Improved synchronization of Intrlds between IWIS2 and IWIS3
- Updating MGIDs where appropriate (when representing an INTRID)
- New int. nurseries recognized and put in place in IWIS3 new DMS released
- Prepare DBs for v.5.5 (field lengths etc.) and released a new public version of IWIS3
- Continue work with setting up ICIS for Wheat Germplasm Bank for Bibiana Espinosa
- Include GIDs in Excel exporting from IWIS2

Progress with WGB Inventories

- Contents of many boxes have been entered as Setgen Lists
- Inventory Tracker has been modified
 - To produce barcode labels for boxes and packets
 - Read Lot IDs from barcodes and accept weights from an electronic scale to update inventories





SMTA (Standard Material Transfer Agreement)

- Create the ICIS environment in order to generate the SMTA.
 - 1. Create SIDU database
 - 2. Install web site on server
- Test phase was done by CRIL.
- Install ICIS environment on users PC.
- SIDU and SHU users are training in order to generate the SMTA documents.
- First phase. Generate some (all) SMTA from Jan 2008 to Jun 2008)
- Second phase. Release SMTA site on 1st July 2008 and continue generating SMTA.





SMTA site

CIMMYT's portal for the online dissemination of information on maize and wheat exported from CIMMYT under the Standard Material Transfer Agreement of the multilateral system of the <u>International Treaty on Plant Genetic Resources for Food and Agriculture</u>



Results per page: 100 Set







SMTA site(2)

Summary of shipments of germplasm sent by CIMMYT under the Standard Material Transfer Agreement (SMTA)

Total number of SMTAs: 4 Max SMTAs per page: 100 Page no. 1 of 1 [Home] [SMTAs]

SMTA ID	SMTA Date	SMTA Full Text	Recipient	Country	Number of Samples in Shipment	List of Entries
SIDU-002	20080101	text	N. BAYARSUKIN / PSARTI	MONGOLIA	50	<u>entries</u>
SIDU-003	20080101	text	Mr. Michelle van Wyk / Small Grain Institute	SOUTH AFRICA	50	<u>entries</u>
SIDU-004	20080101	text	Dr. Ron M. DePauw / SPARC	CANADA	50	<u>entries</u>
SIDU-005	20080101	text	Dr. Ravi Singh / CIMIMYT	MEXICO	50	<u>entries</u>



IWIS3 for Genomic Data

- Curated diversity datasets of all SNP and DArT genotyping data in IWIS3
- We have maps for 3 GWP populations and 9 from Triticarte
- Documenting all genomic datasets on the GREU wiki (http://cril.cimmyt.org/confluence/display/GREU/Geno mic+Datasets).
- Working with Wheat molecular breeding to develop IWIS3 local databases for the Rain Fed and Durum breeding programs.
- The CMAP software is being uses to visualise map base data for wheat (cmap.cimmyt.org).



New Staff

- Hector Sanchez Crop Informatics Specialist-Maize
- Arllet Portugal Crop Informatics Specialist Wheat

