

International Crop Information System (ICIS)

- Akinnola N. Akintunde

ICARDA is collaborating with other centers on the objectives / goals of the CGIAR initiative on International Crop Information System (ICIS) to implement ICIS for all the ICARDA mandate crops (Barley, Bread & Durum Wheat, Chickpea, Lentil, Faba Bean and Forages).

The initiative now includes four major components

- 1. Genealogy management (Characterization, nomenclature, Geo-data)
- 2. Data Management (Field evaluation data)
- 3. Molecular data integration (Laboratory Management System (LIMS) & Genome Management System (GEMS) ICARDA is collaborating on GCP SP4 C1)
- 4. Expose / disseminate all components on the WEB

Activities includes the

Collection, collation, and converting all ICARDA breeding germplasm lists, all ICARDA field trial's data for the different crops to the ICIS database structure for genealogy, nomenclature, characterization and evaluation data management, all ICARDA trial sites coordinates/attributes, all ICARDA genetic / molecular information available for crops identified Allele, mapping data, finger printing, etc into a searchable form through the ICARDA LIMS and GEMS

• The International Fababean Information System (IFbIS) was initiated in 2006 and completed as scheduled in 2007. It is the first to implement the three arms of ICIS (Genealogy Management System, Data Management System, Location information for GIS) at ICARDA. This was made possible by the support of the Australian Department of Primary Industries and or course IRRI staff.

- Training
- In September 2007, training workshop was organized targeting crop scientists, research associates, technicians, and database managers at ICARDA and NARS to train interested users at ICARDA.

- 2008 Activities
- Complete DMS for Barley, Chickpea ???
- Implement Molecular data integration for Chickpea, Lentil
- Create Local ICIS for wheat using CIMMYT Wheat ICIS as Central
- Continue to update all existing databases

ICIS implementation Status

System Modules			GMS	DMS	GEMS	WEB Enabling
Barley			\checkmark	0	√	\checkmark
Chickpea			\checkmark	0	X	\checkmark
Lentil			√	\checkmark	X	\checkmark
Durum & Bread Wheat			X*	X*	Х	X
Faba Bean			√	√	X	0
Forages			Х	X	X	X

 $\sqrt{}$ = implemented

= on going

X = to be implemented

X* = implemented by CIMMYT