

Development of International Flax Data Base after the Second Sugar, Starch, Fibre Crops & Medicine and Aromatic Plants Network, Flax and Hemp Working Group meeting held in Velké Losiny, Czech Republic, July 6-10, 2010

Martin Pavelek, chairman of Flax and Hemp WG, AGRITEC, Research, Breeding, and Services, Ltd., Zemedelska Str. 16, 787 01 Sumperk, Czech Republic

International Flax Database has firstly been managed in the framework of FAO ESCORENA Flax and other Bast Plants Network FAO FOBPN since 1993. Because of the activities concerning IFDB development were not financially supported within the FAO FOBPN the work on this topic became more and more poor resulting to a stagnation finally. No obvious progress in further IFDB development was observed at the end 1999. In period 1993 – 1999 IFDB still contained 1 385 accessions only however the total European genepool is estimated at approximately 27 – 28 000 accessions. This means that only a very small part (approximately 4%) of the European flax genetic resources were included to the International Flax Database.

The situation became better at the end of ninetieths of the last century when the possibilities of the cooperation between FAO ESCORENA and IPGRI Networks occurred and were practically started in the framework of the Industrial Crops and Potato Network (later renamed to Sugar, Starch, Fibre Crop Network in 2004, nowadays Sugar, Starch, Fibre Crops & Medicine and Aromatic Plants Network) activities planned and carried out within Phase VI of ECP/GR (1999-2003).

EURISCO catalogue and the list of FAO/IPGRI *Multicrop passport descriptors* (MCPDs) agreed for data exchange by the European database managers in 1996 have been used as a starting point for the International Flax Data Base development and the project „Characterization of flax genetic resources in Europe and data transfer to the IFDB“ supported by ECP/GR (Maggioni et al., 2002) and adopted during the ECP/GR *ad hoc* meeting on Flax genetic resources held in RICP Prague-Ruzyne, 7-8 December 2001 became a base for further IFDB progress. It led to the further IFDB development resulting in new passport and partly also describing data submitting.

At the beginning of the 21st century IFDB contained 6 549 then newly adopted records so that the total number also previous IFDB 1385 records including was 8385 records. This situation prevailed up to the First Sugar, Starch, Fibre Crops & Medicine and Aromatic Plants Network, Flax and Hemp Working Group meeting held in Wageningen, the Netherlands, June 14-18, 2006. During this meeting it was also decided to try to submit the project **„Development of a reference implementation for access to and management of a Central Crop Database (*Linum* spp.) based on open source internet technology“** as an initiative of the ECP/GR Network Coordinating Group of the Sugar, Starch, Fibre Crops & Medicine and Aromatic Plants Network. This project was based on bilateral Czech – German cooperation with the main aim a reference implementation by open source internet technology for managing passport, characterisation and evaluation data, as available for the European Flax Database and on line available. Unfortunately this project was by the IPGRI Steering Committee refused and the funds were allocated to the AEGIS project development.

Without any view to this situation the further development of IFDB continued and further passport and evaluation data were received mainly after the Second Sugar, Starch, Fibre Crops & Medicine and Aromatic Plants Network, Flax and Hemp Working Group meeting held in Velké Losiny, Czech Republic, July 6-10, 2010. After this meeting the IFDB is described by 38 passport and 10 E/CH descriptors for the time being presented in table 1.

Table 1. IFDB passport and E/CH descriptors used after the Second Sugar, Starch, Fibre Crops & Medicine and Aromatic Plants Network, Flax and Hemp Working Group meeting

IFDB passport part	IFDB E/CH part
INSTCODE	INSTCODE
ACCENUMB	ACCENUMB
COLLNUMB	ACCENAME
COLLCODE	STEMLENGTH
GENUS	COROLLASIZE
SPECIES	FLOWERSHAPE
SPAUTHOR	PETALCOLOR
SUBTAXA	ANTHERCOLOR
SUBAUTHOR	TSW
CROPNAME	SEEDCOLOR
ACCENAME	
ORIGCTY	
COLLSITE	
LATITUDE	
LONGITUDE	
ELEVATION	
COLLDATE	
BREECODE	
SAMPSAT	
ANCEST	
COLLSRC	
DONORCODE	
DONORNUMB	
OTHERNUMB	
DUPLSITE	
STORAGE	
REMARKS	
COLLDESCR	
BREEDDESCR	
DONORDESCR	
DUPLDESCR	
ACCEURL	
USETYPE	
PLOIDY	
CHARMATER	
GROWTHHAB	
LIFETYPE	
AVAILAB	

Since the Second Sugar, Starch, Fibre Crops & Medicine and Aromatic Plants Network, Flax and Hemp Working Group meeting till now the new passport and E/CH data have been adopted and contemporary IFDB contains now 11 141 accessions from 15 countries and 22 genebanks also genebank in Fargo, the USA including. The last updated IFDB is presented in table 2.

Table 2. Last updated IFDB – passport part 2012

COUNTRY	GENEBANK - INSCODE	NUMBER OF ACCESSIONS
CZE	CZE 090	2053
HUN	HUN 003	418
ITA	ITA 054	361
LVA	LVA 009	108
POL	POL 026	990
PRT	PRT 004	47
ROM	ROM 007	499
SVK	SVK 001	170
RUS	RUS 001	1855
RUS	RUS VNIIL	356
UKR	UKR 015	1064
UKR	UKR 019	3
UKR	UKR 012	69
UKR	UKR 007	46
DEU	DEU 358	1757
DEU	DEU 415	101
FRA	FRA 065	62
NLD	NLD 027	11
NLD	NLD 037	747
NLD	NLD VDBILT	45
BRG	BRG 001	10
USA	USA 072	369
TOTAL		11 141

E/CH part is still being completed and will be presented in the next IPGRI Newsletter volume.

References

Maggioni, L., Pavelek, M., van Soest, L., J., M. a Lipman, E. (compilers) 2002: Flax Genetic Resources in Europe. *Ad hoc* meeting, 7-8 December 2001, Prague, Czech Republic. International Plant Genetic Resources Institute, Rome, Italy.