

FLAX (*Linum usitatissimum* L.) DESCRIPTORS

I PASSPORT DESCRIPTORS

The database is using the 28 FAO/IPGRI Multi-crop passport descriptors, see http://www.ipgri.cgiar.org/publications/pubfile.asp?ID_PUB=124).

Additionally for flax, the following passport descriptors are used:

Descriptor code	Number of trait in other descriptors	Descriptor Scale (score)	Reference values	Remarks
I/36		Year of release [YYYY]		Year of release of the cultivar, or year of registration
I/37		Type of use 1 Flax 2 Linseed 3 Combined/Intermediate		
I/38		Pedigree		Parentage or nomenclature, and designations assigned to breeder's material
I/39		Year of input into IFDB [YYYY]		Year on which the accession data were first entered into the IFDB
I/40		Date of updating [YYYYMMDD]		Date on which the accession data were updated in the IFDB

III CHARACTERIZATION AND EVALUATION DESCRIPTORS

Flax genetic resources evaluation methodology:

Plot size: minimum 1m², at least 3 replications, random plot layout. Seed rate: flax – 1700 and linseed – 700 seeds able to germinate per m². Non-treated seed will used. 3 year average data will used for final evaluation.

Characterization of testing location:

- a. Country of characterization
- b. Institute name and address
- c. Institute site (latitude, longitude, elevation)
- d. Sowing date
- e. Harvest date
- f. Percentage seed germination
- g. Percentage field establishment
- h. Plot size
- i. Number of replications
- j. Fertilizer (types, doses)
- k. Plant protection

ENVIRONMENT CHARACTERISTIC

- l. Soil type
- m. Relief
- n. Soil pH
- o. Soil organic matter content
- p. Soil texture
- q. Temperature range (year and/or the seasonal mean, maximum, minimum)
- r. Frost (date and lowest temperature of most recent frost)

Descriptor code	Number of trait in other descriptors	Descriptor Scale (score)	Reference values	Remarks
III/1		Plant growth habit		
		1 Prostrate 2 Spreading 3 Semi-erect 4 Erect		

III/2		Plant life cycle		
		1 Annual 2 Biennial 3 Perennial		
III/3		Plant natural height		
	UPOV 1	1 Very short 3 Short 5 Medium 7 Tall 9 Very tall		
III/4		Stem length		
	UPOV 2	1 Very short 3 Short 5 Medium 7 Long 9 Very long		
III/5		Flower: size of corolla		
	UPOV 3	3 Small 5 Medium 7 Large		
III/6		Flower: shape		
		1 Regular 2 Star 3 Semi-star		
III/7		Sepal dotting		
	UPOV 4	1 Absent or very weak 3 Weak 5 Medium 7 Strong 9 Very strong		
III/8		Petal colour: colour of corolla (when fully developed)		
	UPOV 6	1 White 2 Light blue		

		3 Blue 4 Pink 5 Red violet 6 Violet		
III/9		Petal: longitudinal folding		
		0 Absent 1 Present		
III/10		Anther colour		
	UPOV 9	1 Yellowish 2 Bluish 3 Greyish 4 Orange		
III/11		Stamen: filament colour at top		
	UPOV 8	1 White 2 Blue 3 Violet		
III/12		Style colour at base		
	UPOV 10	1 White 2 Blue 3 Violet		
III/13		Boll type		
		1 Dehiscent, fully opened 3 Dehiscent, half-opened 5 Semi-dehiscent 7 Weakly dehiscent 9 Undehiscent		
III/14		Boll size		
	UPOV 11	3 Small 5 Medium 7 Large		
III/15		Boll: ciliation of septa		
	UPOV 12	0 Absent 1 Present		
III/16	UPOV 13	1000-seed weight [g]		

		(In grams, to two decimal places)		
III/17		Seed colour		
	UPOV 14	1 Yellow 3 Light brown 5 Brown 7 Dark brown 9 Green		
III/18		Resistance to lodging		
		1 Very low 3 Low 5 Medium 7 High 9 Very high		
III/19		Fusarium susceptibility		
		1 Very low 3 Low 5 Medium 7 High 9 Very high		
III/20		Vegetation period (to maturity)		
		1 Very early 3 Early 5 Medium early 7 Medium late 9 Late		
III/21		Time of beginning of flowering		
	UPOV 15	9 Very early 7 Early 5 Medium early 3 Medium late 1 Late		
III/22		Fibre content in straw		
		9 Very high 7 High		

		5 Medium 3 Low 1 Very low		
III/23		Fibre yield		
		9 Very high 7 High 5 Medium 3 Low 1 Very low		
III/24		Seed yield		
		9 Very high 7 High 5 Medium 3 Low 1 Very low		
III/25		Oil content		
		9 Very high 7 High 5 Medium 3 Low 1 Very low		
III/26		Oil yield		
		9 Very high 7 High 5 Medium 3 Low 1 Very low		
III/27		Linolenic acid content		
		9 Very high 7 High 5 Medium 3 Low		
III/28		Ploidy level (2x, 3x, 4x, etc.)		

III/29		Rust susceptibility		
		1 Very low 3 Low 5 Medium 7 High 9 Very high		
III/30		Notes		Any other additional information
III/31		Cytological characteristics and identified genes		
III/32		Molecular markers		
III/33		Pictures		