



MANAGEMENT OF VARIETY COLLECTIONS MEXICO

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IT IS NECESSARY TO POINT OUT:

- In Mexico Plant Breeder Rights system works based on DUS results provided by the Applicant Breeder or buying it from other authorities as CPVO.
- Only in native species as amaranth, avocado, cactus pear, marigold, among others, varieties collections have been integrated as well as some experience have been acquired.
- Even though, Mexico has some facilities to face activities relating Varieties Collection, in particular some green houses and a building named “Bank of reference varieties”



REFERENCE VARIETIES BANK

OBJECTIVES

- To safeguard propagation material (mainly seeds) from plant varieties of different species, with economical, social and cultural interest: national list, plant breeders rights, and plant genetic resources system.
- To provide a reference in relation to description of varieties, technical guidelines and graphic handbooks development.
- To support training programs about Distinctness, Uniformity and Stability (DUS) test.
- To be considered as a reference to clarify identity or distinctness and enforcement in relation with intellectual property cases in plant varieties.

FACILITIES

- Cold chamber ($5\pm 1^{\circ}\text{C}$)
- Shelves (Capacity: more than 10,000 samples).
- Office - Conference Room (Capacity: 30 persons).
- Furniture and computing equipment
- Plastic and aluminium containers for keeping samples safe.
- Greenhouses (700 m²), laboratories and agricultural fields.

 REFERENCE VARIETIES BANK 		
(Total number of varieties = 798)		
No.	COMMON NAME	Number of Varieties
1	Agave	7
2	Sesame	1
3	Lucerne	2
4	Amaranth	56
5	Rice	8
6	Oat	11
7	Peanut	4
8	Safflower	5
9	Barley	16
10	Pea	1
11	Clitoria	1
12	Bean	165
13	Sunflower	1
14	Chickpea	5
15	Broad bean	1
16	Yam bean	2
17	Maize	325
18	Grasses	3
19	Sorghum	58
20	Soybean	5
21	Wheat	44
22	Triticale	1
23	Vegetables	66
24	Ornamentals	19

REFERENCE VARIETIES BANK DATABASE							
PROGRAM: REFERENCE VARIETIES BANK							
SPECIES: <i>Phaseolus vulgaris</i> L.							
COMMON NAME: BEAN	Location	Person, company or institution	Production place	Production cycle	Production lot	Producción type	Seed category
Azufrado Pimono-78		INIFAP	Montecillo	P-V 1999	Predio Nuevo	Irrigation	
Azufrado Higuera		INIFAP	Montecillo	P-V 1999	Predio Nuevo	Irrigation	
Azufrado Regional-87		INIFAP	Montecillo	P-V 1999	Predio Nuevo	Irrigation	
Azufrado Tapatío		INIFAP		P-V 2002			
Azufrado Namiquipa		INIFAP	Montecillo	P-V 1999	Predio Nuevo	Irrigation	
Azufrado		INIFAP	Montecillo	P-V 1999	Predio Nuevo	Irrigation	
Azufrado Noroeste		INIFAP	Montecillo	P-V 1999	Predio Nuevo	Irrigation	
Azufrado Nayarit		INIFAP	Montecillo	P-V 1999	Predio Nuevo	Irrigation	
Azufrado Peruano 87		INIFAP	Montecillo	P-V 1999	Predio Nuevo	Irrigation	
Azufrado Peruano P-80		INIFAP	Montecillo	P-V 1999	Predio Nuevo	Irrigation	
FS - 1 PL - 1		CP	Montecillo	P-V 1999	Predio Nuevo	Irrigation	

**Varieties registered in the National List of Plant Varieties
(CNVV; for its Spanish acronym)**

Number of Registered varieties: **1493**. Main crops: Bean (56), Maize (817), Potato (43), Sorghum (148), Soybean (16) and Wheat (85).

Plant Breeder Rights Applications by specie









No. Especie Name	Género / especie Latin name	Número Number	Participa Proportion %
1. Maiz	Maize <i>Zea mays</i>	255	22.7
2. Rosa	Rose <i>Rosa sp.</i>	216	19.2
3. Fresa	Strawberry <i>Fragaria sp.</i>	83	7.4
4. Sorgo	Sorghum <i>Sorghum bicolor</i>	49	4.4
5. Algodón	Cotton <i>Gossypium hirsutum</i>	42	3.7
6. Papa	Potato <i>Solanum tuberosum</i>	36	3.2
7. Gerbera	Gerbera <i>Gerbera jamesonii</i>	38	3.4
8. Trigo	Wheat <i>Triticum aestivum</i>	37	3.3
9. Anturio	Anthurium <i>Anthurium andreanum</i>	23	2.0
10. Chile	Pepper <i>Capsicum annuum</i>	25	2.2
.	.	.	.
.	.	.	.
86. Zoysia	Zoysia grass <i>Zoysia matrella</i>	.	.
		↓	↓
		1124	100.0

**SUPPORT FOR VARIETY
CHARACTERIZATION AND DUS TESTING**

- Technical Guidelines
- Graphic Handbooks
- Reference Varieties
(Nowadays, some native species).

AMARANTH

• Eight reference varieties:

	← • NUTRISOL (México)	
	• ROJITA (México) →	
	← • EDIT (Hungary)	
	• ROZA (Hungary) →	
	• REKA (Hungary) →	
	← • REVANCHA (México)	
	• MAROS (Hungary) →	
	• ENIKO (Hungary) →	

Grouping Varieties and Exam

25. Inflorescence: compactness



MARIEL

Candidate
Variety

OPEN
(7)



EDIT
COMPACT
(3)



ROZA

OPEN
(7)

Grouping Varieties and Exam

30. Inflorescence: growth habit



MARIEL
Candidate
Variety
Determinate
(1)



ENIKO
Determinate
(1)



Reference
Varieties

Male
flower

ROJITA
Indeterminate
(2)



NUTRISOL
Indeterminate
(2)



Grouping Varieties and Exam

17. Petiole: anthocyanin coloration



MARIEL
Candidate
Variety
Absent
(1)



Brs Alegria
Candidate
Variety
Present
(9)



Grouping Varieties and Exam



ENIKO



MAROS



REVANCHA

MARIEL
Candidate
Variety
Yellow



ROJITA



EDIT



NUTRISOL



ROZA



REKA

Grouping Varieties and Exam



ENIKO



MAROS



REVANCHA

Brs
Alegría
Candidate
Variety
rosa



ROJITA



EDIT



NUTRISOL



ROZA



REKA

Grouping Varieties and Exam



Behavior analysis among five environments (E) in two varieties of amaranth:

NUTRISOL

	E1				
E 1	0	E2			
E 2	6	0	E3		
E 3	16	18	0	E4	
E 4	10	4	14	0	E5
E 5	8	10	8	6	0

REKA

	E1				
E 1	0	E2			
E 2	10	0	E3		
E 3	8	2	0	E4	
E 4	10	4	2	0	E5
E 5	12	10	8	10	0

RETRIEVAL, PRESERVATION AND USE OF MAIZE
 JALA RACE : AN ALTERNATIVE FOR
 ENDANGERED LANDRACES

THANK YOU!