



GOBIERNO DE ESPAÑA
MINISTERIO DE AGRICULTURA, PESCA Y ALIMENTACIÓN





SPAIN GENE BANK IN EUGENA: The National Genebank for Animal Germplasm.


20ST April 2023.




**Fernando Tejerina Ampudia, PhD. Spanish representative in the
EUGENA Steering Board.**


Sonsoles Zabala Arguelles. Director of the Colmenar Viejo CENSYRA


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1. OBJECTIVE (and some history) OF THE NATIONAL GENE BANK

- 1998: The National Genebank was settled down in the Nacional Center for Animal Reproduction and Breeding in Colmenar Viejo (Madrid Region). Currently a unit of the Madrid Region Research Institute on Agriculture, Food and Rural Development (IMIDRA).
- 2008: Publication of National Program for Conservation, Improvement and Development of the Livestock Breeds (Royal Decree 2129/2008).
 - **Plan of action** (7 Strategic Priorities):
 - Strategic Priority 3: Animal Reproduction and Genetic.
 - **Enhance the National Genebank** as the collection of duplicates from other genebanks in Spain.



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AGENDA 2030

IMI DRA Instituto Madrileño de Investigación y Desarrollo Rural, Agrario y Alimentario

1. OBJECTIVE (and some history) OF THE NATIONAL GENE BANK

- 2019: Update of the National Program for Conservation, Improvement and Development of the Livestock Breeds (Royal Decree 45/2019):
 - Definition of Genebank = EUGENA definition.
 - Regulation on genebanks (Article 15): The facilities developing genebanking activities for the breeders societies must be registered by the competent authorities in ARCA: 28 facilities.



- Regulation on National Genebank (Article 16):
 - Collection of the Ministry of Agriculture, Fisheries and Food to keep a genetic duplicate of the core collections managed by breeders societies and/or competent authorities: the National Genebank is a backup.



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1. OBJECTIVE (and some history) OF THE NATIONAL GENE BANK

- 2019: Update of the National Program for Conservation, Improvement and Development of the Livestock Breeds (Royal Decree 45/2019):
 - Regulation on National Genebank (Article 16):
 - The storage of the material is developed in accordance with a **Standard Operating Procedure (SOP)** approved by the National Committee on AnGR.
 - The property and the uses of material are set down in a **MAA/MTA** between the breeders societies/competent authorities owners of the material and the Ministry of Agriculture, Fisheries and Food. (77 MAA/MTA signed)
 - The utilization of the material stored in the National Genebank must be authorized by the National Committee on AnGR, and only in case of:
 - Rebuilding of an extinct breed.
 - Support the conservation programs of endangered breed to increase the genetic diversity.
 - Destruction of the origin genebank.
- Selection (again) of IMIDRA as institution managing the National Genebank.

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3. INSTITUTION HOSTING THE NATIONAL GENE BANK.

Instituto Madrileño de Investigación y Desarrollo Rural, Agrario y Alimentario

LIVESTOCK RESEARCH INSTITUTE.
In charge of the direct management of the material stored.

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GOVERNMENT.
Final responsible of the collection and in charge of coordination with other actors (breeders societies and regional competent authorities). Funding.

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3. MATERIAL, BREEDS AND SPECIES STORED (April 2023).

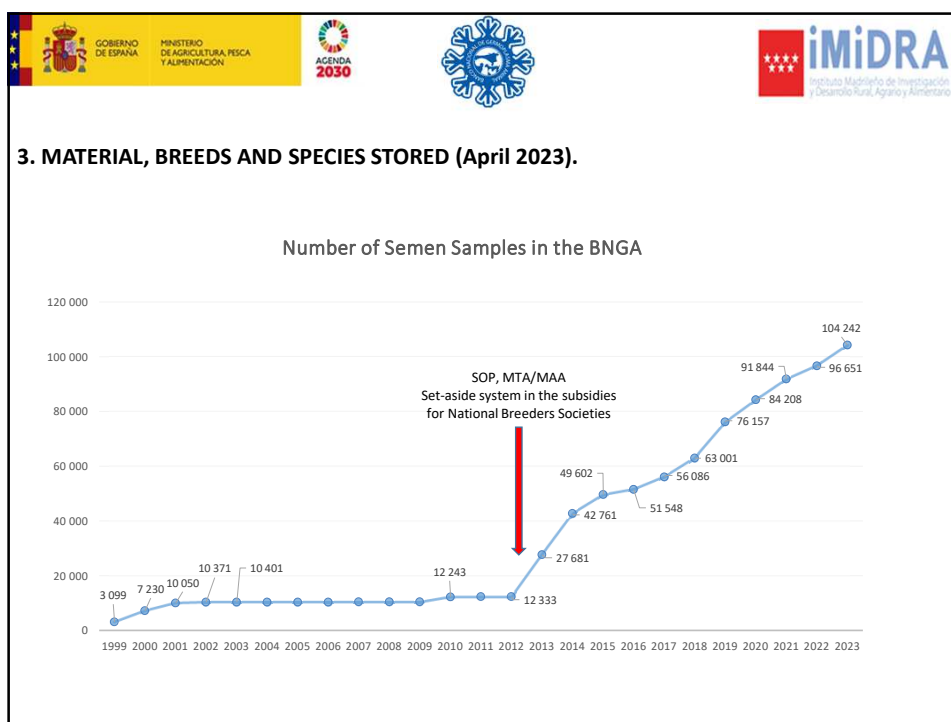
SEMEN SAMPLES

SPECIES	BREEDS	DONORS	SEMEN SAMPLES
Bovine	24	647	58.458
Caprine	8	135	10.517
Ovine	23	546	33.027
Horse	4	11	290
Porcine	6	52	1.877
Poultry	2	18	73
Total	67	1.409	104.242

EMBRYOS

SPECIES	BREEDS	MALE DONORS	FEMALE DONORS	EMBRYOS
Bovine	6	86	110	420

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4. HOW EUGENA CAN SUPPORT THE NATIONAL GENE BANK?.

- Sharing experiences and best practices between the genebanks in the net.
- Promoting the ex situ conservation on AnGR across Europe, focus in the european institutions and national governments.
- As a starting point for the development of common project between the genebanks in the net, specifically relevant in case of transboundary breeds.
- As a showcase of the activities of the genebanks, and in this way highlight our work at national and international level. Those action is very relevant to maintain or increase the support of the governments to the genebank.

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