



European Regional Focal Point for Animal Genetic Resources




WORKING GROUP EX SITU CONSERVATION. REPORT OF ACTIVITIES 2022-2023.

26th August 2023.


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GOBIERNO DE ESPAÑA




MINISTERIO DE AGRICULTURA, PESCA Y ALIMENTACIÓN




AGENDA 2030

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- 1. Development of the EUGENA network and EUGENA Steering Board meeting.**
2. Task Force on documentation software for genebanks (2022-2023).
3. Ad hoc action on specific measures for AnGR ex situ conservation in the framework of the animal health legislation. (AHA Animal Health Regulation-Genebanks)
4. Ad hoc action Strengthening national capacities towards the development of a national Gene Bank strategy.
5. Annual meeting of the WG Ex Situ conservation.
6. Collaboration with Task Force AnGR Strategy-Action Plan.
7. Others.
8. Workplan for 2024

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1.1 DEVELOPMENT OF EUGENA.

New country:

- **PORTUGAL (data not updated)**

New genebank:

- Institute for Animal Husbandry (Serbia).
- Banco Português de Germoplasma Animal (Portugal). Data not updated.

Genebank removed:


- Livestock Veterinary Centre "Krnjača" (Serbia).

2022

13 Countries

13 Gene Banks

1379085 Samples




2023

13 Countries

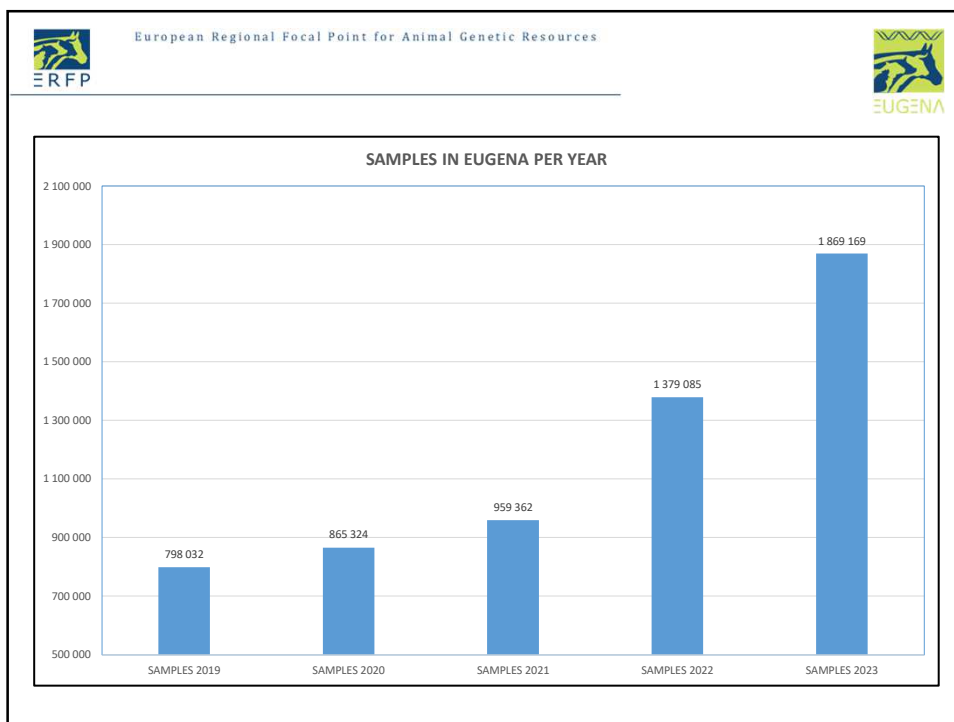
13 Gene Banks

1869169 Samples

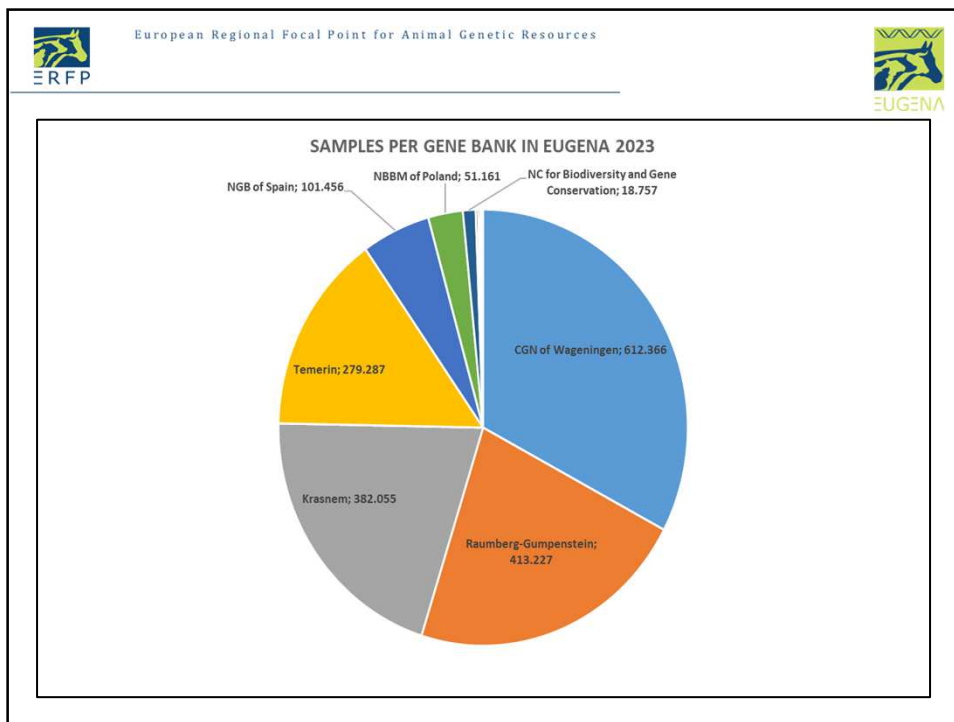


+ 490.084 SAMPLES (New Serbia genebank + INFORMATION UPDATE).
+ 48 BREEDS

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GENEBANK	SPECIES	BREEDS	% REPRODUCTIVE MATERIAL	MALE DONORS	FEMALE DONORS	FIRST YEAR OF COLLECTION	LAST YEAR OF COLLECTION
CGN of Wageningen.	10	160	99	10.160	13	1966	2022
Krasnem	1	8	100	314	0	1981	2022
Raumberg-Gumpenstein	4	45	100	3.758	0	1970	2023
NGB of Spain	5	61	100	1.373	82	1977	2022
NBBM of Poland	2	10	100	227	44	2002	2021
NC for Biodiversity and Gene Conservation	10	31	54	3.439	7.410	2002	2022
Nitra	4	13	94	42	7	1999	2021
Latvia U. of Life Science and Technologies	5	6	29	222	2.185	2008	2022
Temerin	1	3	100	33	0	1986	2018
University of Montenegro	3	8	0	25	543	2008	2018
University of Belgrado	3	14	0	128	1.662	2018	2022
Institute for Animal Husbandry	4	14	0	106	1.040	2011	2022
Velika Plana	1	1	100	8	0	1996	2010

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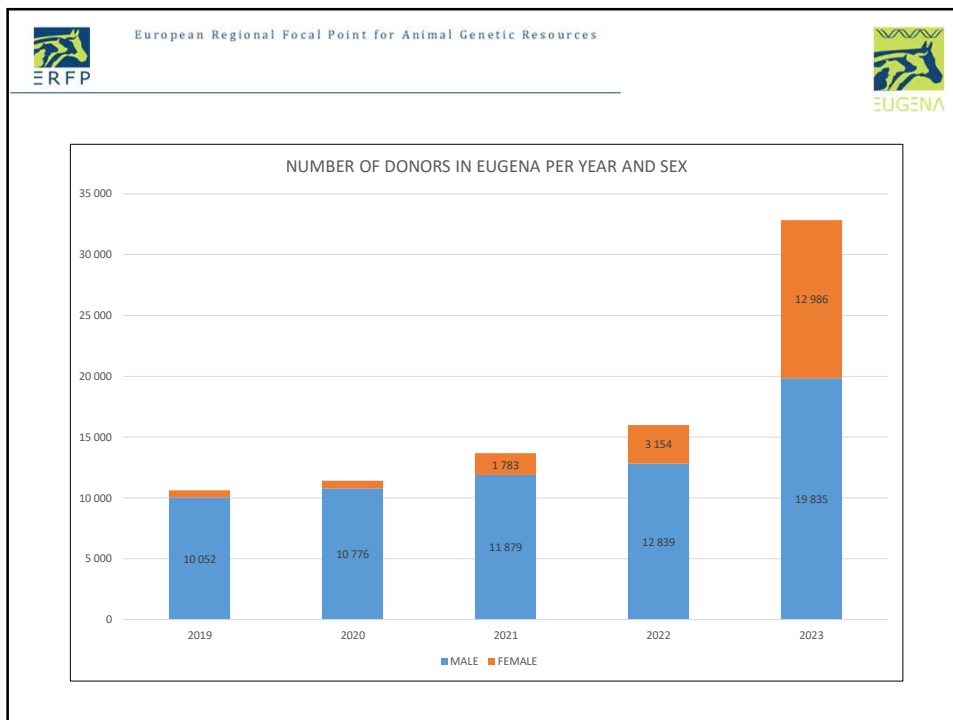
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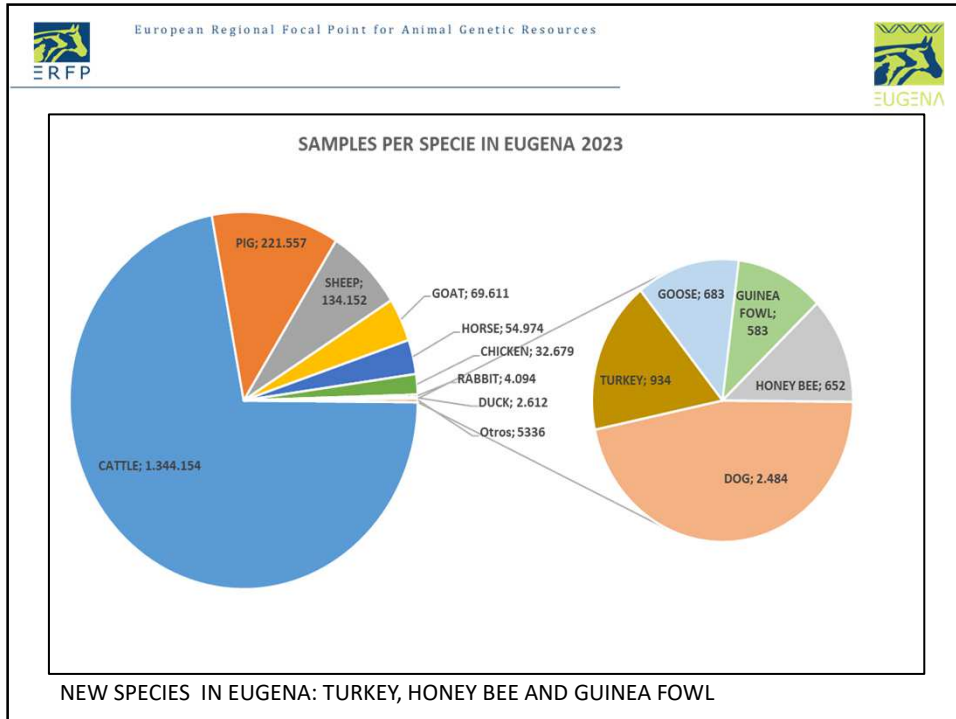
MATERIAL TYPE	SAMPLES 2019	SAMPLES 2020	SAMPLES 2021	SAMPLES 2022	SAMPLES 2023
Blood	1.198	1.397	1.673	3.291	11.037
DNA	0	0	24	1.109	4.489
Embryos	413	590	844	967	979
Primordial germ cells					540
Stem cells				328	339
Hair	48	48	218	218	218
Ovarian tissue					213
Semen	796.373	863.289	956.603	1.373.172	1.851.354
Total	798.032	865.324	959.362	1.379.085	1.869.169

MATERIAL TYPE	MALE DONOR	FEMALE DONOR
Blood	1.662	8.721
DNA	672	3.817
Embryos	67	140
Hair	165	45
Ovarian tissue	0	104
Primordial Germ Cells	387	153
Stem Cells	1	6
Semen	16.881	0
Total	19.835	12.986

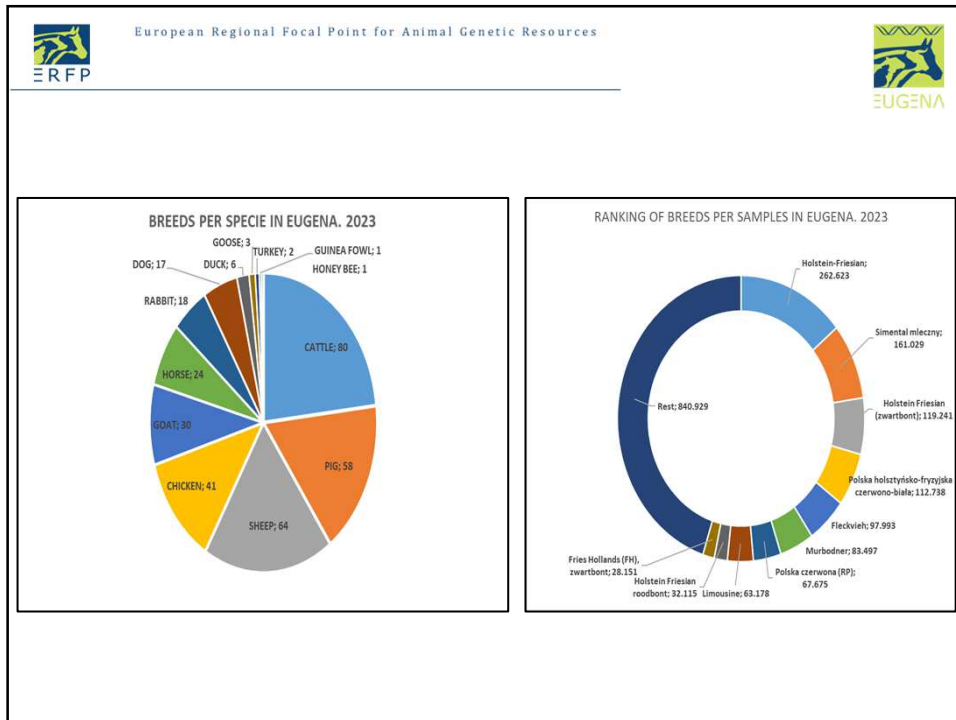
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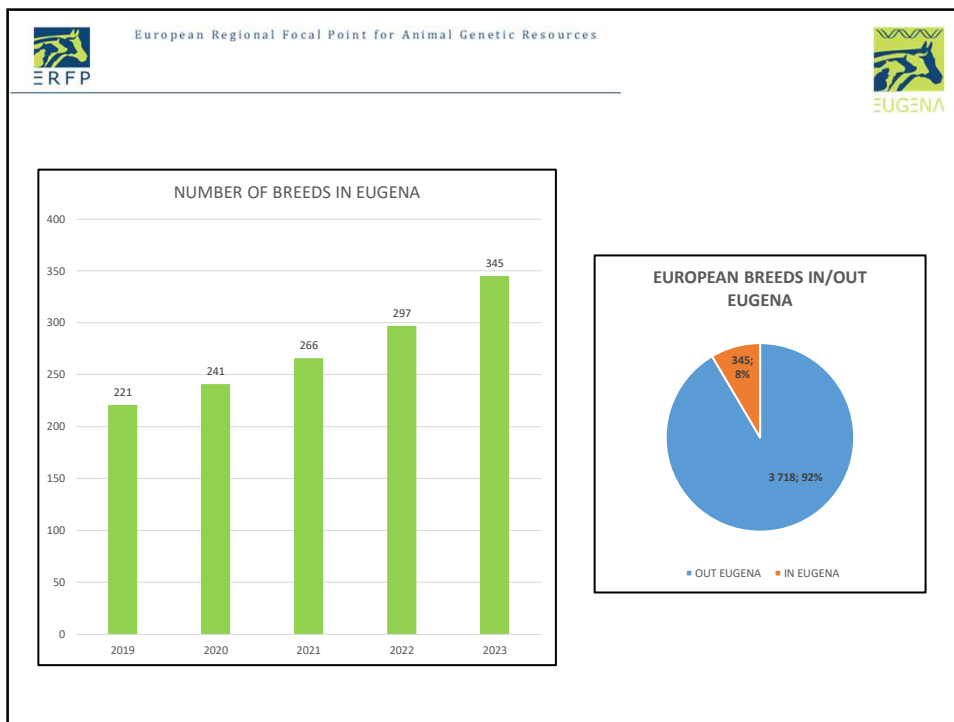
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1.2 EUGENA STEERING BOARD MEETING.

EUGENA STEERING BOARD: *The EUGENA activities are coordinated by the Steering Board.*


The Steering Board consists of a genebank representative per Member Country (one person per country) nominated by the NC. The Steering Board is supervised by the ERFP Assembly and assisted by the ERFP Working Group on Ex situ conservation.

Diagram 1: The organizational structure of the EUGENA


COUNTRY	EXPERT
The Netherlands	Annemieke Rattink
Serbia	Jelena Aleksic
Austria	Beate Berger
Spain	Fernando Tejerina
Latvia	Dainis Rungis
Hungary	Krisztina Liptoi
Slovak	Peter Chrenek
Poland	Ewa Sosin

Genebanks authorized and/or recognized by a national authority for ex situ conservation of AnGR

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EUGENA STEERING BOARD MEETING: 20TH APRIL 2023. VIDEOCONFERENCE


MAIN CONCLUSIONS:

- Enlarge the net:
 - EUGENA members should work actively to encourage other genebanks to enrol the net, at national and european level.
 - The incorporation to the net of Ex situ – In vivo facilities was proposed.
- EUGENA must be promoted at national and European levels with the objective to increase awareness about the activities of the members genebanks and the role of genebanks in the proper conservation of AnGR.
- The networking between genebanks and countries should be promoted, with special interest, in:
 - Quality Management Systems – Best practices in genebanks.
 - Develop of MTA/MAA.
 - Animal health issues.
 - Better integration between in situ and ex situ conservation activities.
- EUGENA web page:
 - The 31st March as deadline for the annual updates.
 - Information about the implementation of QMS is going to be added to the EUGENA web page.
 - The addition of new information about the animal health status was discussed.
- Next meeting: all members agree in propose a physical meeting next year and ask for funds to ERFP to organize it.

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5. ANNUAL MEETING OF THE WG EX SITU CONSERVATION. Toledo, 22th May.

1. Inform on activities of the WG in the last year.
2. Report on the EUGENA status and inform about conclusions of EUGENA Steering Board meeting.
3. **Share the experiences of several regional genebanks in Spain in the *ex situ* conservation.**
4. Report the advances of the TF on documentation software for genebanks.
5. Report the advances of the AHA Animal Health Regulation – Genebanks.
6. Discuss on the proposed actions in relation with Ex Situ Conservation for the ERFP MYPOW:
 - **Inventory of ex situ in vivo collections (in collaboration with In situ conservation WG).**
 - **Ex situ conservation activities (genebanks) should be part of the sustainable breeding programmes.**
7. Present and approve the **Guidelines** on practical recommendations for the development of genebanks for animal genetic resources.
8. Share with the WG members the experiences of the Veterinary Faculty of Murcia and inform about novelties in **the production and cryoconservation of porcine embryos.**
9. Propose the **Workplan** for 2024.

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6. COLLABORATION WITH TASK FORCE AnGR STRATEGY-ACTION PLAN.


7. OTHER ACTIVITIES.

- Collaborate with ERFP Secretariat in the dissemination of information and knowledge in the ERFP Webpage and Social Media.

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8. PROPOSAL OF PLAN AND PRIORITIES FOR 2023-2024.

1. Development of **EUGENA**.
2. Design a guidelines with recommendations to implement derogations for the collection, processing, storage and use of germinal products intended to be kept in genebanks. (AHA Animal Health Regulation and Genebanks).
3. Promote the incorporation of the Ex situ conservation activities in the breeding programs of breeders societies.
4. Continue the collaboration in the development of the Action Plan for the European strategy for Animal Genetic Resources and ERFP MYPOW.
5. Sharing knowledge and expertise in relation with cryopreservation protocols by species.
6. Analyze the incorporation of Ex situ – in vivo facilities to EUGENA, in collaboration with the In situ Conservation WG.
7. Spread information about ex situ conservation and **EUGENA** in collaboration with the Communication Strategy of the ERFP.
8. Support the implementation of a modern genebank documentation software (Task Force on documentation software for genebanks)
9. Support the utilization of Quality Management Systems in Genebanks.

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