

GENE BANKING IN EXTREMADURA



Animal Selection and
Reproduction Center

Centro de Selección
y Reproducción Animal



JUNTA DE EXTREMADURA

1

- What is CENSYRA Badajoz?
 - What are our goals?
 - What are our activities?
 - Ex Situ Conservation
 - GENE BANKING
-

2



CENSYRA

3

1931. Livestock station

1972. National Animal Selection and Reproduction Center (CENSYRA)

Centro Nacional de Selección y Reproducción Animal

Lugo (+ Fonefiz, Orense)

Somío (Oviedo, + Bárcena de Cícero, Santander)

Colmenar Viejo (Madrid)

Movera (Zaragoza)

Murcia

Valdepeñas (Ciudad Real)

León (+Boñar)

Badajoz (+ Hinojosa del Duque, en Córdoba)



4



5



CENSYRA participates in the **Breeding Programs**, through collaboration agreements with breeders associations.

REPRODUCTION
SELECTION
CONSERVATION
TRAINING / PROMOTION

The CENSYRA's objectives are conservation, promotion and improvement of livestock breeds.

6



Seminal doses:

- Horse
- Donkey
- Cattle
- Sheep
- Goat
- Pig

Embryos:

- Cattle

REPRODUCTION

7

Authorized reproduction centers (Reglamento 686/2020; RD 429/2022)

ES11001	ES11002	ES11003	ES11004	ES11005	ES11006
					
					

8



Individual test station:
cattle, heifers, sheep, and pig

Wool analysis

SELECTION



THE GLOBAL STANDARD
FOR LIVESTOCK DATA

Section 3 - ICAR Guidelines for Beef Cattle
Production Recording

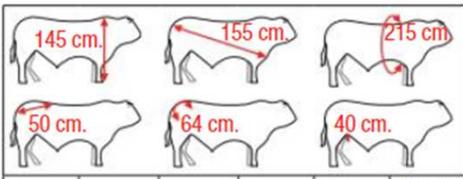
Section 3 - Beef Cattle
Version March, 2018



9

- Average daily weight gain
- Conversion rate (consumption)
- Chest girth circumference
- Scrotal Circumference
- Linear scoring
- Ultrasound measurements





Peso	Peso nacimiento	Peso 120 días	Peso 210 días	Peso 365 días	Ganancia media diaria
664 kg	40 kg	192 kg	303 kg	490 kg	1893 g

10



11



Ex situ in vivo (conservation groups):

- Donkey
- Cattle
- Sheep
- Goat
- Poultry

Ex situ in vitro (GENEBANKING)

- Semen doses
- Embryos

CONSERVATION

12



Conservation groups:

- Minimal crossbreeding
- Population increase
- Increase in donors
- Refreshing the Gene bank collection

13



CRSB / ETB
 365.514 seminal doses
 22 breeds, 397 donors
 680 embryos
 8 breeds, 85 donors

CRSO-C
 28.965 seminal doses
 9 breeds, 107 donors

Gene bank

- Maintaining genetic diversity
- Breed reconstitution
- Supporting in vivo conservation, introducing variation into existing populations



CRSP
 3.642 seminal doses
 2 breeds, 30 donors



CRSE
 3.423 seminal doses
 6 breeds, 75 donors

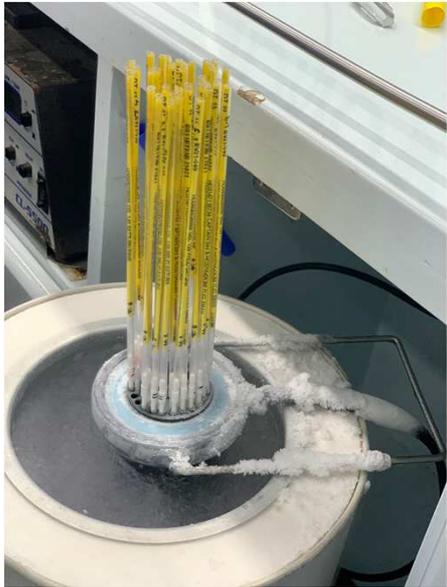
14

CORE COLLECTION

WORK COLLECTION

HISTORIC COLLECTION



15



TRAINING / PROMOTION

There are also collaboration agreements with educational centers, universities, and professional associations to carry out **training activities**.

In addition, **promotion activities** are carried out for schools and the general public. through visits, advertising in the media, reports, livestock auctions, or articles for the promotion and improvement of livestock breeds

16



17



18