

**XIII CONGRESO
ASOCIACIÓN DE VETERINARIOS
DE PORCOS DE ARAGÓN**

¿Cuantos lechones nacidos llegan a destetarse?

The graph displays two data series: the number of weaned piglets per litter (Nacidos Vivos) and their survival rate (Supervivencia en Lactación). The x-axis represents the years from 2014 to 2023. The left y-axis shows the number of weaned piglets (10 to 15), and the right y-axis shows the survival percentage (80 to 90%).

Año	Nacidos Vivos	Supervivencia (%)
2014	12.8	84.5
2015	12.5	85.0
2016	13.2	85.5
2017	13.8	86.0
2018	14.2	86.5
2019	13.5	86.0
2020	12.8	85.5
2021	12.5	85.0
2022	11.5	84.5
2023	14.8	85.0

ZARAGOZA 22 y 23 de mayo de 2024

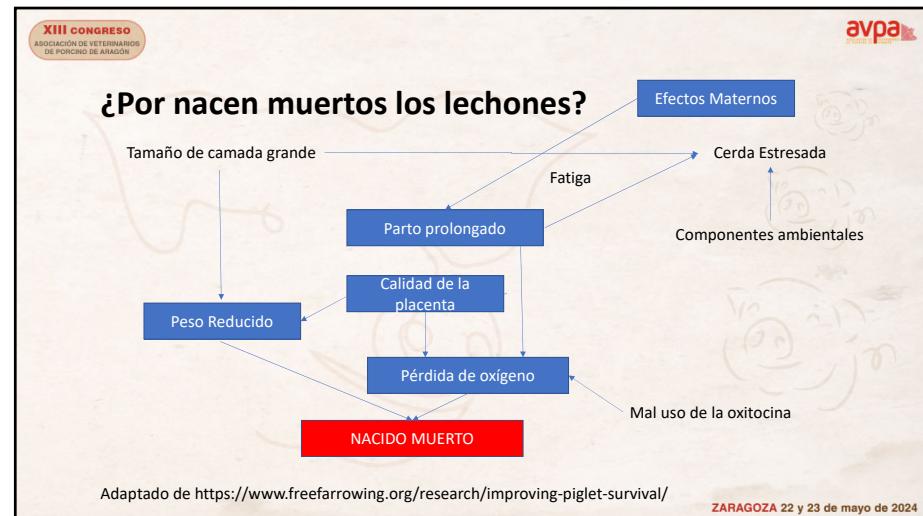
<https://bdporc.irta.es/resultados/>

A

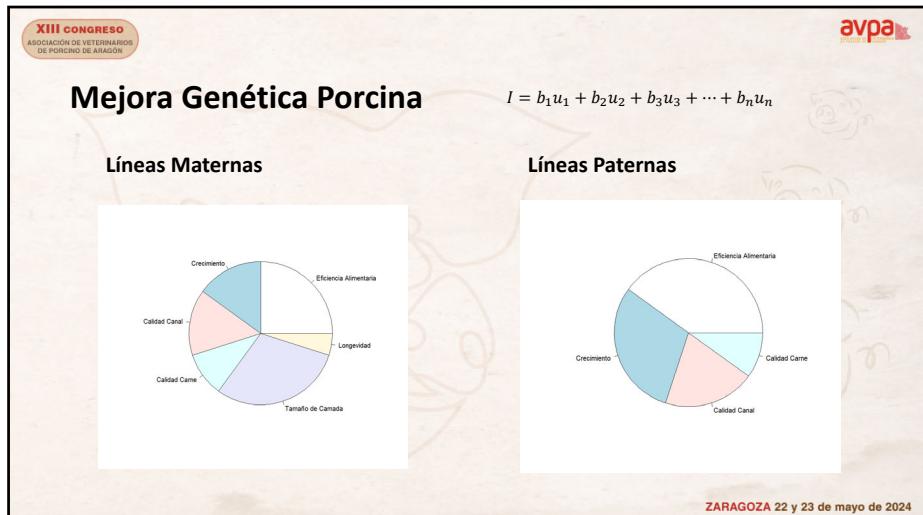
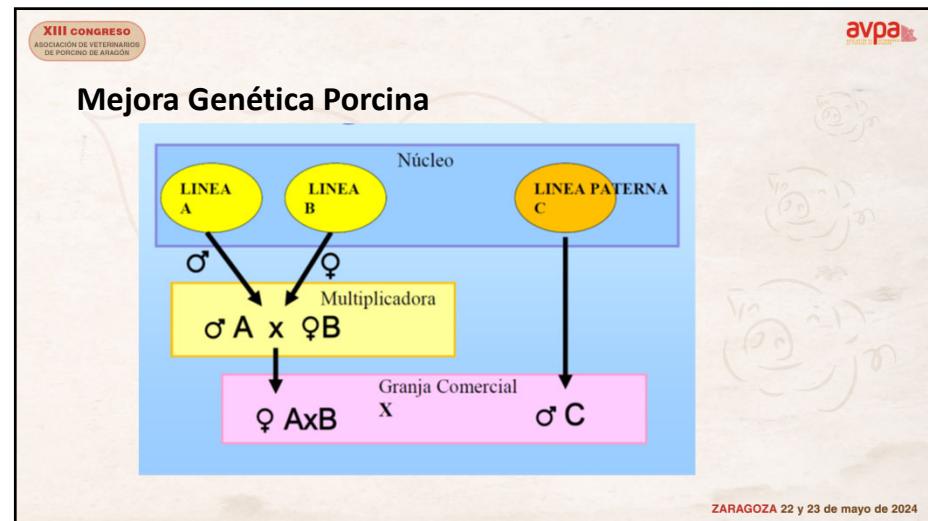
Age, d	Mortality, %
0	40
1	28
2	24
3	16
4	12
5	8
6	4
7	2
8	1
9	1
12	1
15	1
18	1
21	1
24	1
27+	1

B

Age, d	Mortality, %
17	0.5
27	1.0
37	2.0
47	4.5
57	3.0
67	1.0
77	0.8
87	0.5
97	0.4
107	0.3
117	0.2
127	0.1
137	0.1
147	0.1
157	0.1
167	0.1
177	0.1
187	0.1
197	0.1
207	0.1
217	0.1
227	0.1
237	0.1
247	0.1
257	0.2

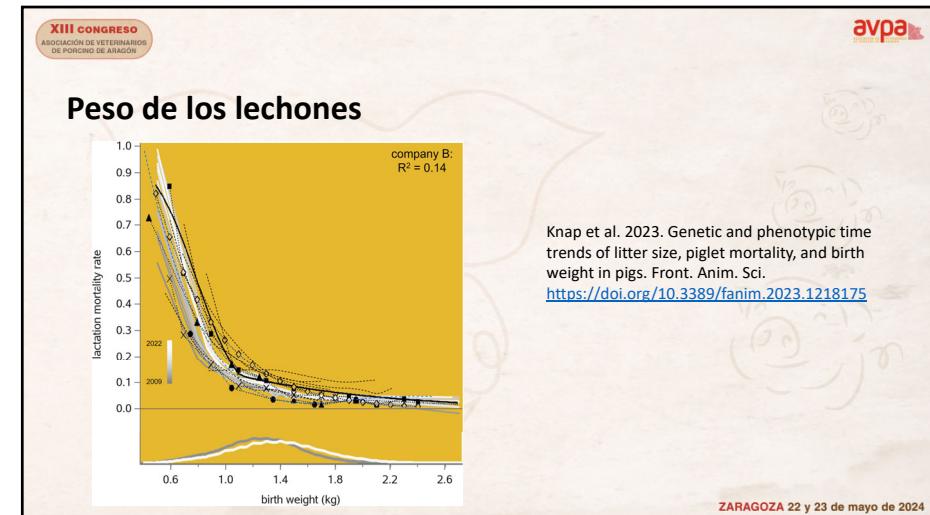
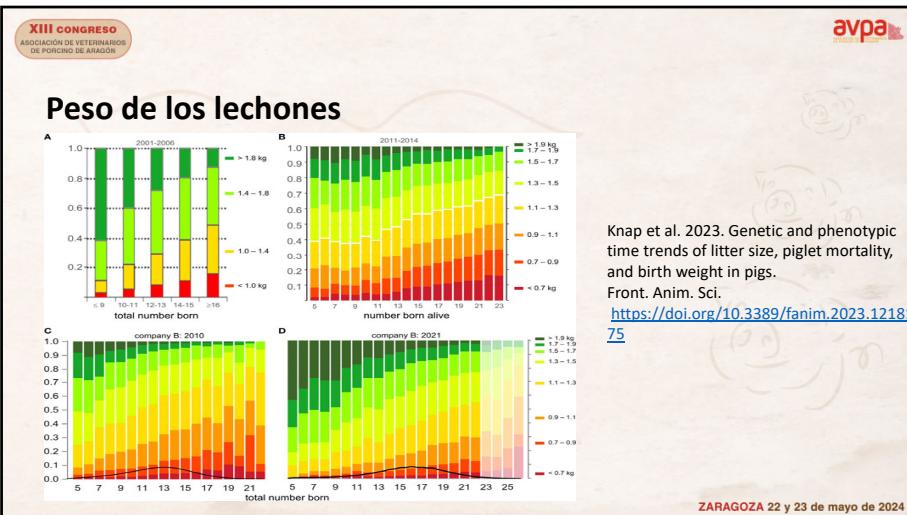
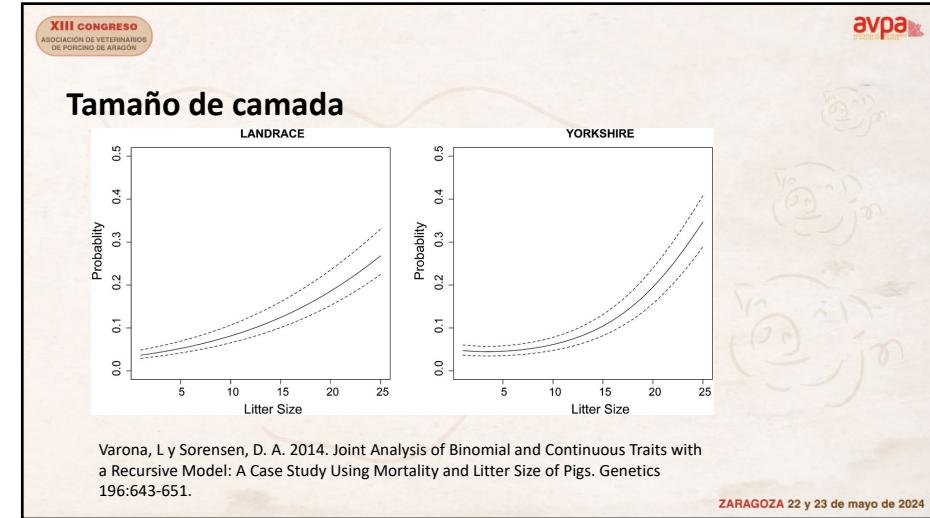
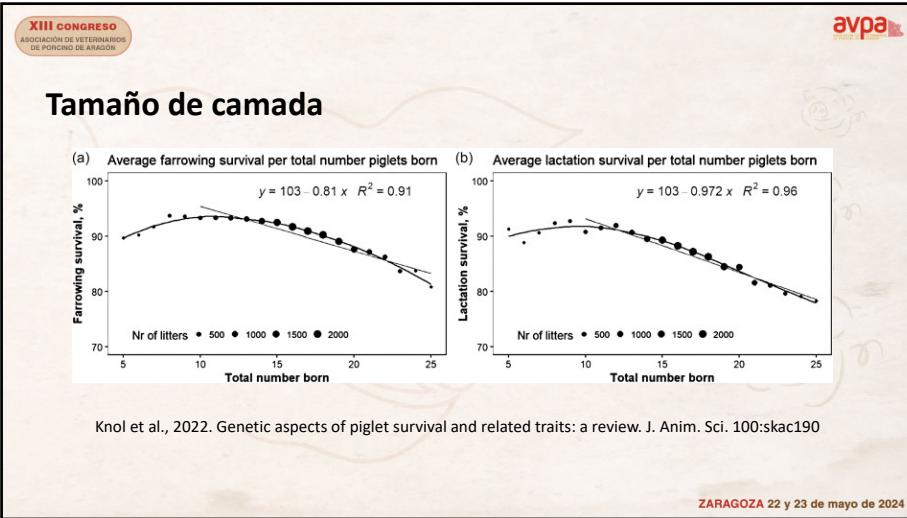


LVARONA_Cómo puede mejorar la genética la viabilidad de los lechones

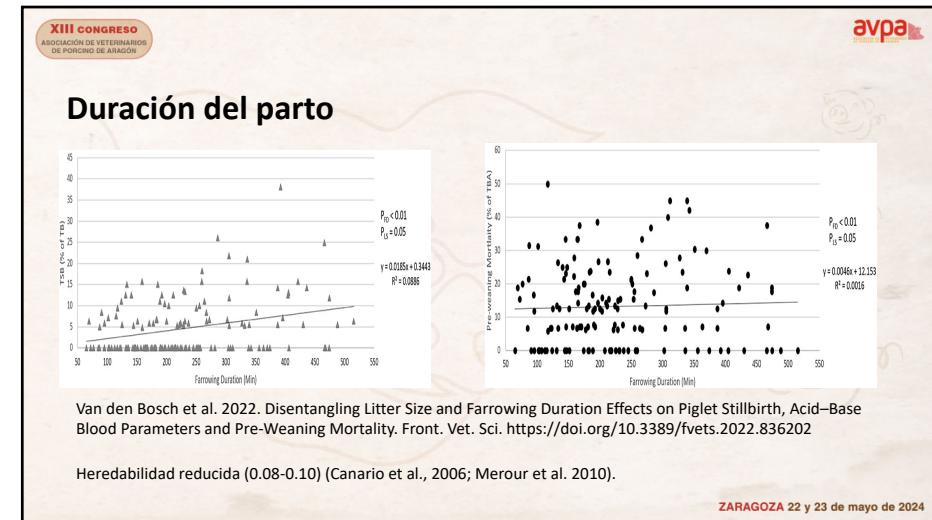
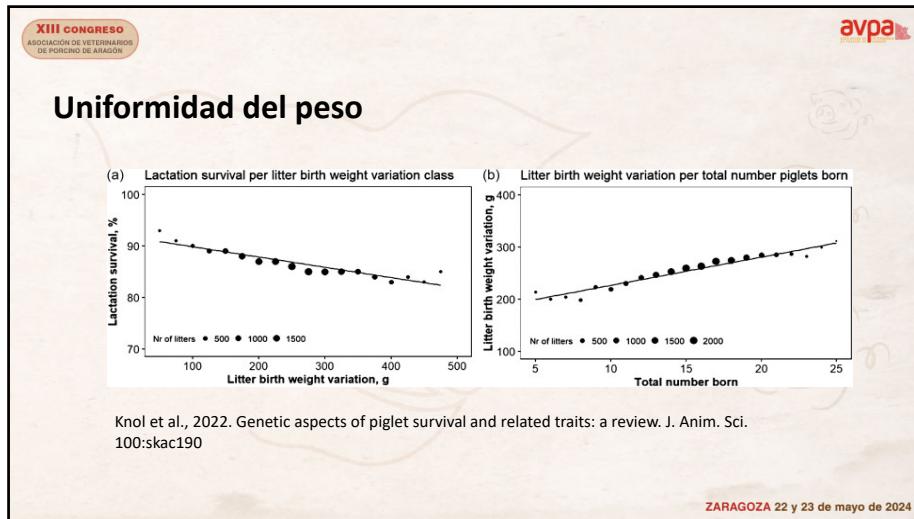


- XIII CONGRESO
ASOCIACIÓN DE VETERINARIOS
DE PORCINO DE ARAGÓN**
- avpa**
- ### Caracteres a incluir para incrementar la supervivencia
- | | |
|---|--|
| Caracteres atribuibles a la cerda <ul style="list-style-type: none"> - Peso al nacimiento - Peso al destete - Tasa de ovulación - Capacidad uterina - Tamaño de la camada - Comportamiento materno - Número de mamás funcionales - Producción leche y calostro - Duración de la gestación - Calidad de la placenta | Caracteres atribuibles al lechón: <ul style="list-style-type: none"> - Peso al nacimiento - Crecimiento hasta destete - Vitalidad - Capacidad de ingesta - Robustez/Resiliencia - Defectos congénitos <ul style="list-style-type: none"> - Hernias - Criptorquidia |
|---|--|
- ZARAGOZA 22 y 23 de mayo de 2024

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Comportamiento Materno

Animal (2008) 2:9, pp. 1273–1280 © The Animal Consortium 2008
doi:10.1017/S1751731108002704

Genetic aspects regarding piglet losses and the maternal behaviour of sows. Part 1. Genetic analysis of piglet mortality and fertility traits in pigs

B. Hellbrügge¹, K.-H. Iolle², J. Bennewitz¹, C. Henze^{1†}, U. Presuhn³ and J. Krieter¹
¹Institute of Animal Breeding and Husbandry, Christian-Albrechts-University (D-24114) Kiel, Germany; ²Chair of Agriculture Schleswig-Holstein, Altona, Germany

Table 1 Description, number (n) and percentage (%) of the survival rate, the different causes of piglet losses (LOSS) and the explanatory notes on body constitution

Trait	Description	n	%
Survival rate (SR)	Survival of piglets from birth to weaning	11,778	84.3
LOSS			
Crushing (CRUSH)	Piglets died by crushing under the sow	1,733	12.4
Crushing – early (CRUSH_E)	Piglets died by crushing during the first three days of life	1,230	8.8
Crushing late (CRUSH_L)	Piglets died by crushing after the third day of life	503	3.6
Crushing heavier piglets (CRUSH_H)	Piglets with more than 800 g birth weight died by crushing	1,525	10.9
Observations			
Underweight piglets (UW)	Piglets that died and had less than 800 g birth weight or that were given the explanatory note 'weak'	361	2.6
Runt (RU)	Piglets died because of starvation or piglets had an individual 21-day weight of less than 3 kg	307	2.2

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(Received 9 July 2007; Accepted 11 April 2008; First published online 8 July 2008)

Table 4 Heritabilities (\pm s.e.), additive genetic variance (σ^2_A), random permanent sow effect (σ^2_{SP}), random common litter effect (σ^2_L) and repeatability (t) for the different causes of piglet losses (LOSS)

LOSS	$H^2 \pm$ s.e.	σ^2_A	σ^2_{SP}	σ^2_L	t (%)
Survival rate (SR)	0.03 ± 0.01	0.03	0.02	0.09	12
Crushing (CRUSH)	0.03 ± 0.01	0.03	0.01	0.07	10
Crushing – early (CRUSH_E)	0.04 ± 0.02	0.05	0.02	0.10	15
Crushing – late (CRUSH_L)	0.01 ± 0.01	0.02	0.02	0.05	7
Crushing heavier piglets (CRUSH_H)	0.03 ± 0.01	0.03	0.03	0.05	10
Underweight (UW)	0.03 ± 0.02	0.04	0.07	0.12	18
Runt (RU)	0.05 ± 0.03	0.06	0.07	0.09	18

σ^2_A was set equal to 1.

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Número y morfología de mamas y calidad del calostro

J. Anim. Sci. 2016;94:3636–3644
doi:10.2527/jas2016-0458

Heritability of udder morphology and colostrum quality traits in swine¹

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Udder morphology

COL	528	25.5	3.50	15.1	35.0	0.35 (0.07)
SAMER	987	104.5	14.45	62.2	154.0	0.37 (0.06)
SAMER SD	987	21.62	7.94	4.8	74.8	0.18 (0.03)
LEN	986	16.1	3.00	7.0	31.3	0.46 (0.04)
LEN SD	986	2.81	2.21	0.0	11.34	0.42 (0.1)
DIA	987	10.5	1.70	4.6	16.2	0.53 (0.02)
DIA SD	987	1.77	1.38	0.1	9.4	0.11 (0.03)
AML	987	61.2	10.88	30.0	105.0	0.22 (0.04)
AML SD	987	17	4.95	5.0	47.8	0.19 (0.03)
OR	987	0.9	0.21	0.0	1.0	0.14 (0.03)
NoFun	987	0.04	0.05	0.0	0.4	0.22 (0.05)
TT	987	15.6	1.12	12.0	19.0	0.42 (0.02)
DEV	987	2.24	0.51	1.0	3.0	0.25 (0.04)

¹SACF = sow age at current farrowing; GLEN = sow gestation length; NBA = number of piglets born alive; TBO = total number of piglets born; LWO = litter weight at birth excluding stillborns; LS10 = litter weight at 10 d after farrowing; LS100 = litter weight at 100 d after farrowing; LWD = litter weight at weaning at 10 d after farrowing; COE = colostrum IgG concentration; SAMER = interteat distance within the same row; LEN = teat length; DIA = teat diameter; AML = teat distance from the abdominal midline; OR = proportion of teats oriented perpendicular to the udder; NoFun = proportion of nonfunctional teats; TT = total number of teats present in both rows; DEV = udder development score; ADG = ADG during gilt 30 to 100 kg (g); BFAT = backfat thickness at end of test.
²Number of observations.

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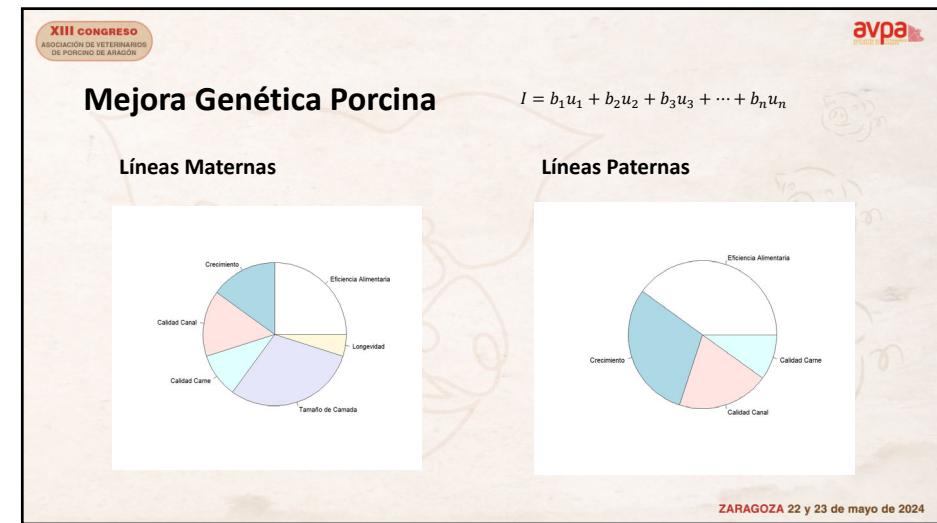
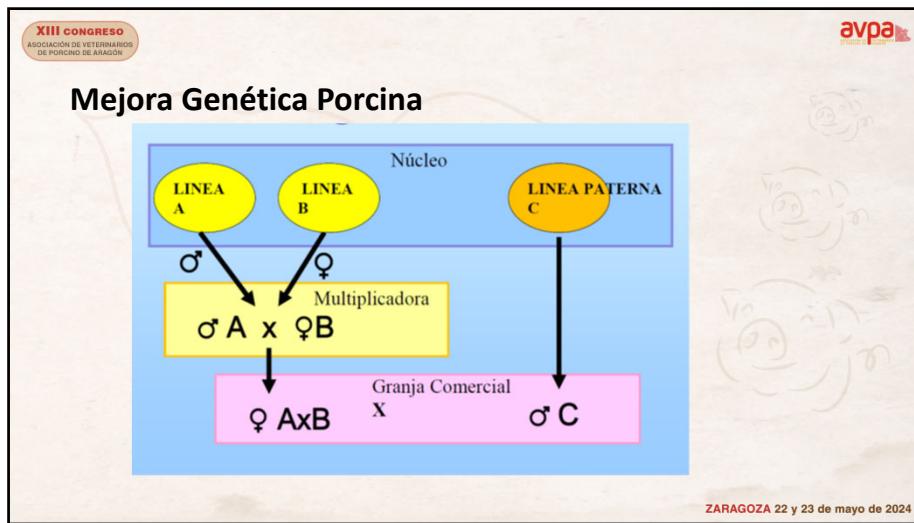
Defectos congénitos

- Criptorquidia
- Hernias escrotales e inguinales.
- Heredabilidad (0.26-0.31)

Sevillano et al., 2015. Genome-wide association study using deregressed breeding values for cryptorchidism and scrotal/inguinal hernia in two pig lines. *Genet. Sel. Evol.* 47:18.

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Caracteres a incluir para incrementar la supervivencia

Caracteres atribuibles a la cerda	Caracteres atribuibles al lechón:
- Peso al nacimiento	- Peso al nacimiento
- Peso al destete	- Crecimiento hasta destete
- Tasa de ovulación	- Vitalidad
- Capacidad uterina	- Capacidad de ingesta
- Tamaño de la camada	- Robustez/Resiliencia
- Comportamiento materno	- Defectos congénitos
- Número de mamás funcionales	- Hernias
- Producción leche y calostro	- Criptorquidia
- Duración de la gestación	
- Calidad de la placenta	

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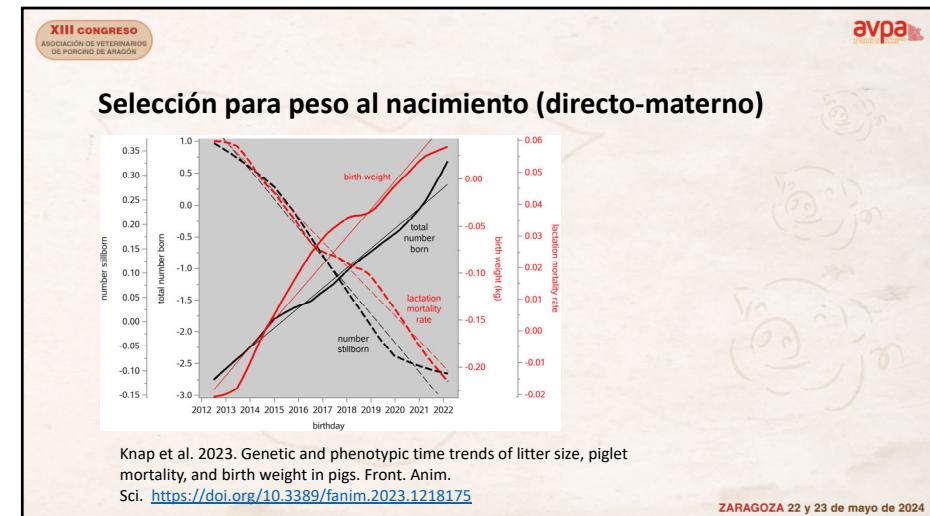
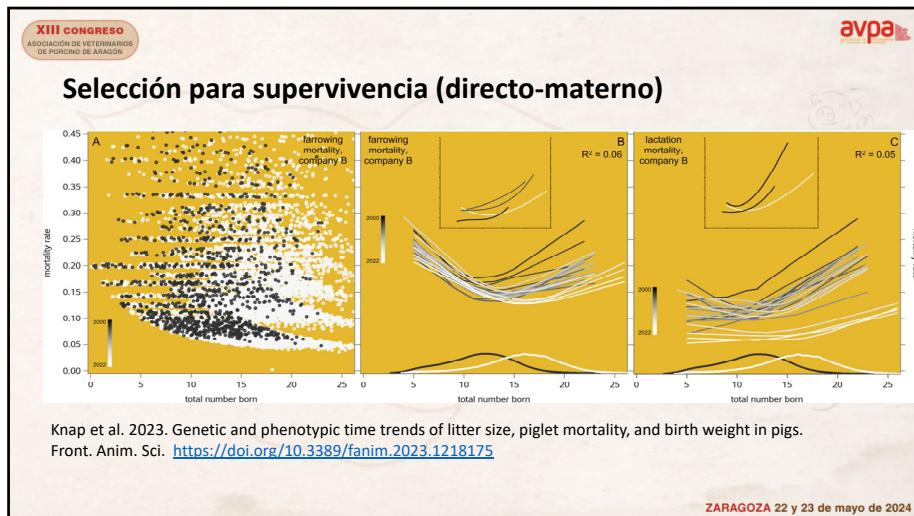
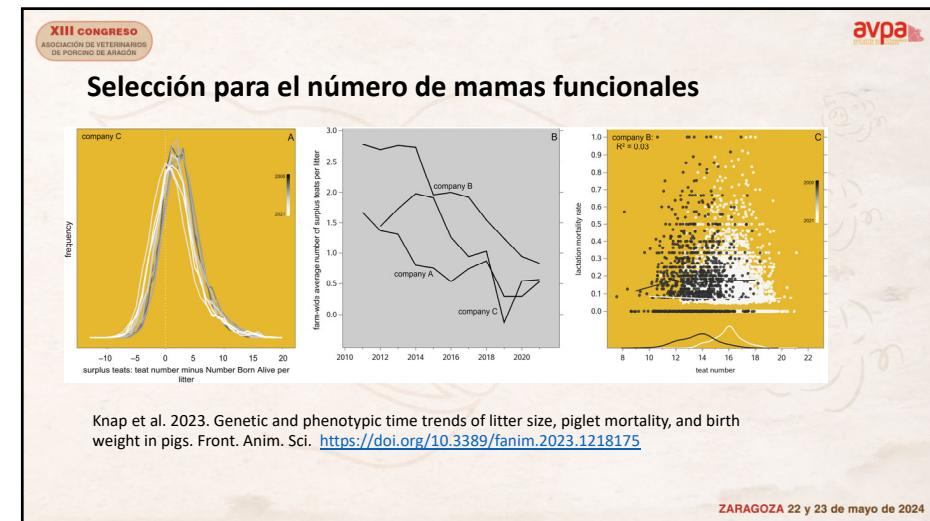
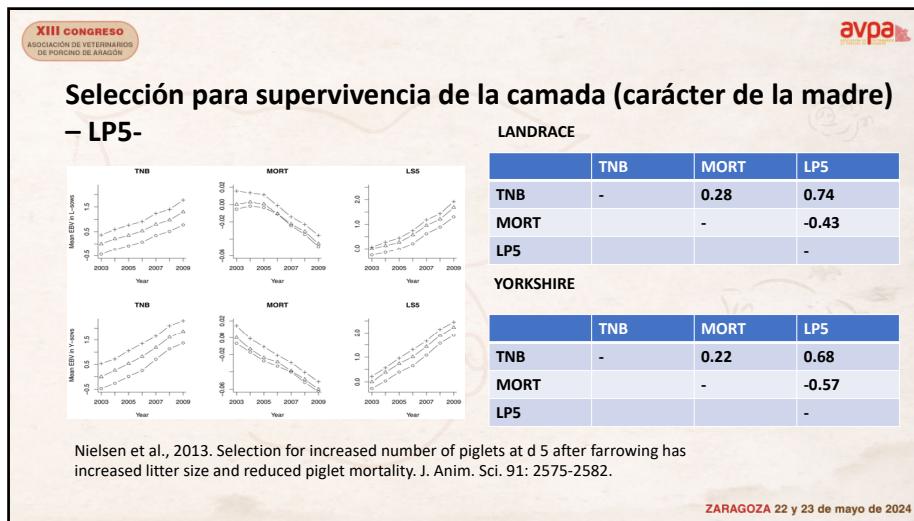
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Simplificando

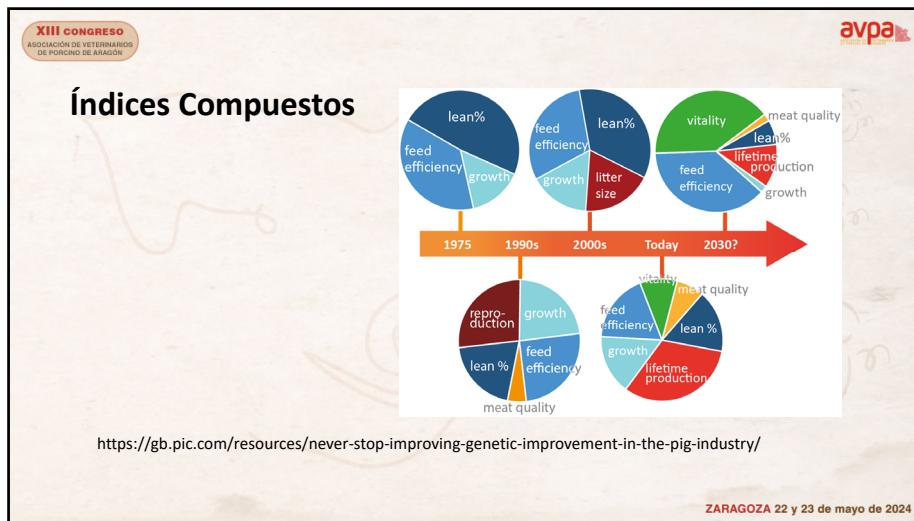
	MADRE	LECHON
Lechones vivos al día 5 (LP5)	X	
Número de mamas funcionales	X	
Peso al nacimiento		X
Supervivencia individual (Categórico)	X	X

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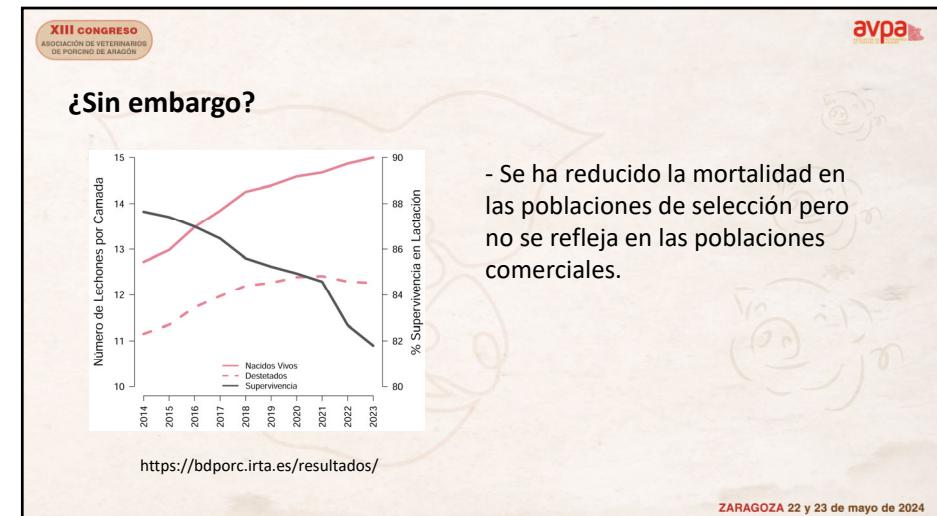
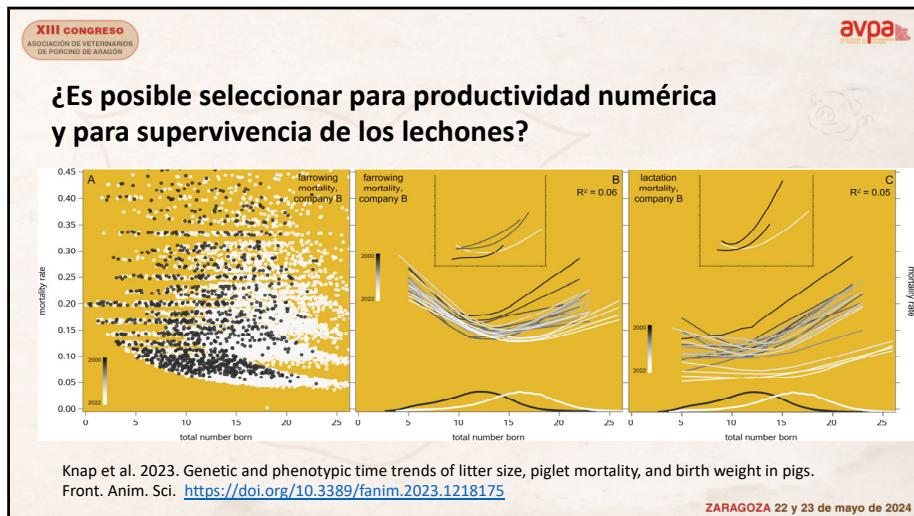
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Breeding organization	Reproduction	Survival	Source
Danbred	20	29	
Danish Genetics	13	22	https://tinyurl.com/lbxaxfp43
German Genetic: Landrace	36	40	https://tinyurl.com/ye3ccxr
German Genetic: Large White	26	46	https://tinyurl.com/48c3bbz2
Hypor	27	30	
PIC	20	59	
PIG Austria	36	20	https://tinyurl.com/2w359fb5
PrimeGro Genetics	38	32	https://tinyurl.com/2xhzwzad
Suisag: Landrace	18	39	
Suisag: Large White	17	37	https://tinyurl.com/ycckmdw4r
TopigsNorsvin	19	27	

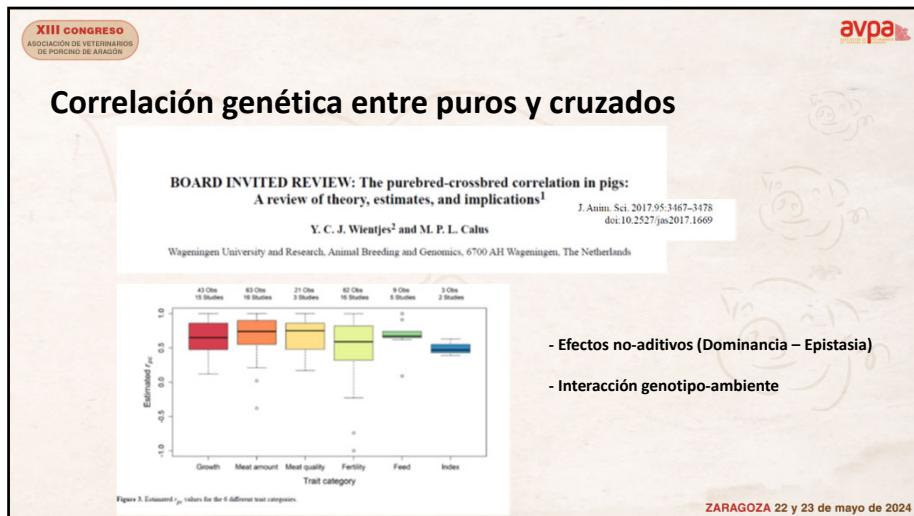
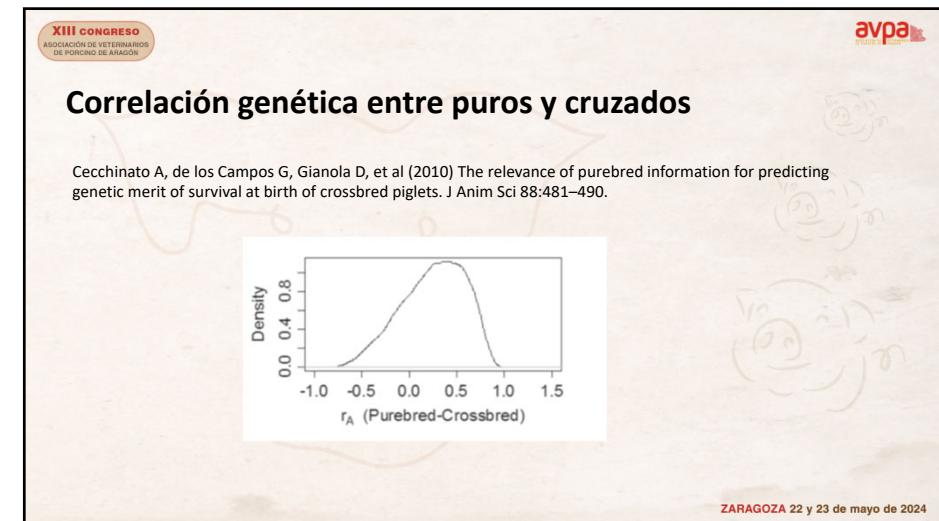
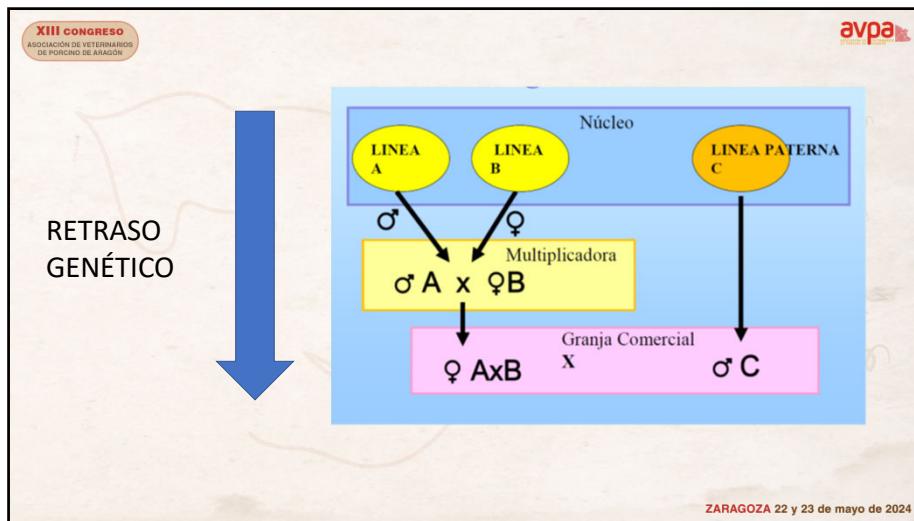
All sources were accessed on 4 May 2023.

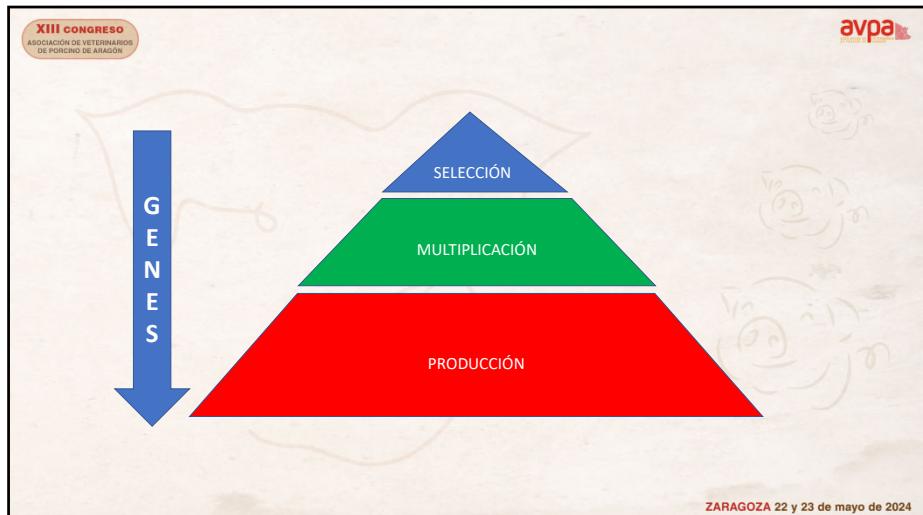
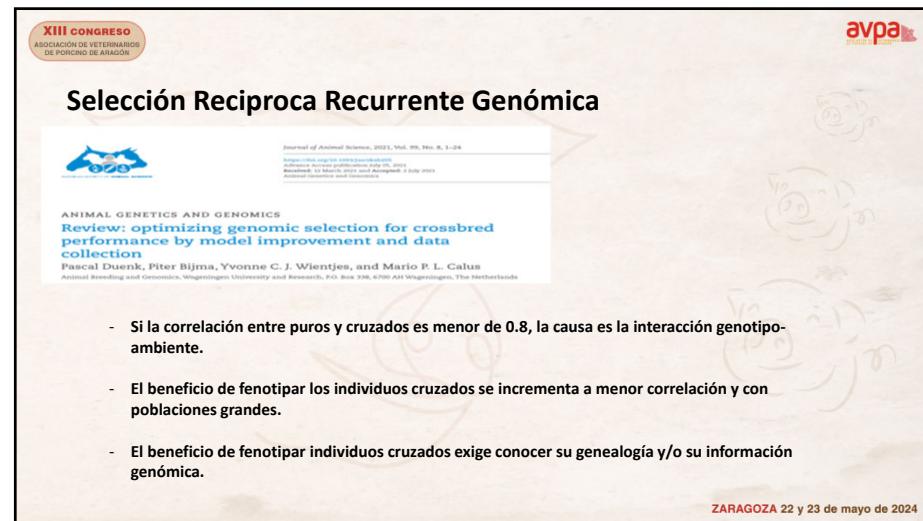
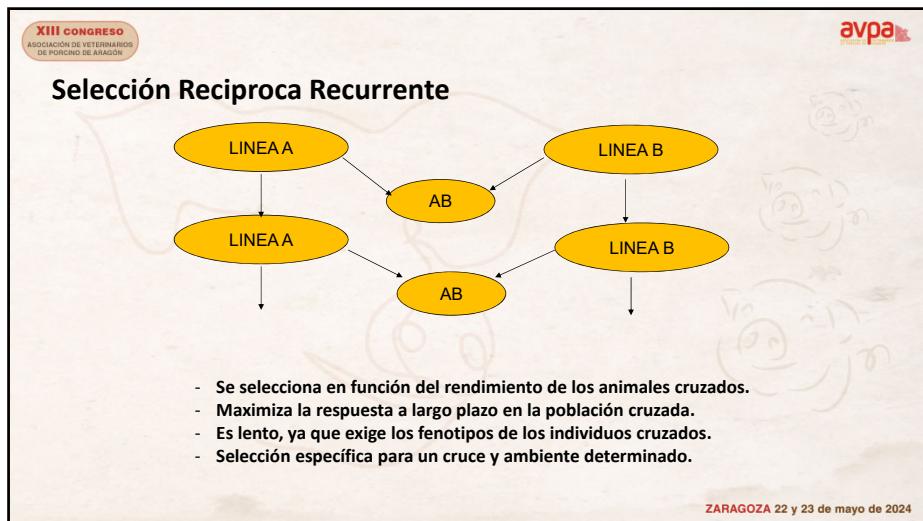
Knap et al. 2023. Genetic and phenotypic time trends of litter size, piglet mortality, and birth weight in pigs. Front. Anim. Sci. <https://doi.org/10.3389/fanim.2023.1218175>

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