

TuBAvi (2017-20)
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Ministry of agriculture, food sovereignty and forestry –
National Rural Development Programme 2014/2022 – Measure 10.2 –
Conservation, use and sustainable development of genetic resources
in agriculture



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CONSERVATION OF BIODIVERSITY IN ITALIAN POULTRY BREEDS:
deepening and monitoring
TuBAvi-2



Breed data sheet

VALDARNO
Gallus gallus domesticus Sp.

**Origin and morphological,
genetic, reproductive,
and productive traits**



**FONDO EUROPEO AGRICOLO PER LO SVILUPPO
RURALE: l'Europa investe nelle zone rurali**



**MINISTERO DELL'AGRICOLTURA
DELLA SOVRANITÀ ALIMENTARE
E DELLE FORESTE**





The presented data were registered in the nucleus population of Valdarno conserved at the University of Florence (UniFI).

Latest update: November 15th, 2024

Valdarno male and female



Experimental Animal Farms, UniFI



Valdarno

Gallus gallus domesticus Sp.

Breed data sheet: origin and morphological, genetic, reproductive, and productive traits

Breed origin and development

Name of the breed	Valdarno
Synonyms or local names	
Geographic origin	Tuscany, river Arno surroundings
Geographic distribution	
Estimated total population size	50 (Castillo et al., 2021)
Extinction risk status (FAO, 1998)	Critical conserved
Any other specific information	Evidently rural chicken, elegant, lively

Historical origin
The name "Valdarno" derives from the original diffusion area of the breed, the valley extending north of river Arno, between Florence and Pisa. The breed was acknowledged by Italian Aviculture Society (<i>Società Italiana d'Avicoltura</i>), the official authority at that time, in 1905, and was still present in the territory at the end of the 1900s. It became extinct after the second world war. In 1998, the breed was selected again and officially presented at the Italian Poultry Competition.

Qualitative and quantitative morphological traits (individual traits) in adult breeders

Discrete or qualitative traits

Feather morphology	Normal
Feather distribution	Normal
Plumage structure	Quite broad, not too soft, well adherent to the body
Plumage colour	Black
Colour features	Single colour, without sexual dimorphism
Chick plumage colour	
Comb type	Simple comb , quite developed, more than average size, bright red, upright in the male, gracefully falling to one side after the second spike in the female
Comb spikes	Five to six spikes, well formed, broad at the base, quite deeply serrated, forming a regular curve, blade following the line of the head without touching the neck
Ear-lobe colour	Porcelaine white
Beak colour	Black
Iris colour	Orange-red to dark red
Muffs	Absent
Beard	Absent
Tuft	Absent
Skin colour	White
Shank colour	Dark slate
Shank feathering	Free from feathers
Skeletal variants	-
Other specific and distinct visible traits	Face intense red, smooth and free from feathers; wattles bright red, quite long, not split, without folds or wrinkles

Colour pattern
Uniform brilliant black, with strong beetle-green sheen, especially in the male; down slate to black.

Genetic traits

Characterisation of nucleus populations with microsatellites and mating plans

Molecular marker	Microsatellites (26 markers)
Laboratory that performed the analyses	Laboratory of Animal Molecular Genetics Department of Veterinary Science (DSV) University of Turin
Analysed parameters	Ne: effective number of alleles Na: observed number of alleles I: Shannon diversity index H-Ind: individual variability index Ho: observed heterozygosity (average H-Ind) He: expected heterozygosity F: fixation index P: average kinship index
Indexes used to schedule mating plans	H-Ind P

Year		N**	Na	Ne	I	Ho	He	F	P
2023	Mean	51	4.462	2.586	1.004	0.499	0.544	0.082	0.54
	SE*		0.478	0.244	0.086	0.039	0.036	0.034	0.00

*SE: standard error; **N: number of samples