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

Breed data sheet

NERO D'ITALIA

Meleagris gallopavo 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 nucleus populations conserved at the University of Milan (UniMI).

Latest update: January 26th, 2024

Nero d'Italia

Meleagris gallopavo Sp.

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

Breed origin and development

Name of the breed	Nero d'Italia
Synonyms or local names	-
Geographic origin	Lombardy
Geographic distribution	
Estimated total population size	35 (Castillo et al., 2021)
Extinction risk status (FAO, 1998)	Critical conserved
Any other specific information	

Historical origin
Even if the selection of the breed is recent, Nero d'Italia turkeys origin from a black turkey population spread throughout northern Italy before the introduction of American Bronze turkey. It is credible that Nero d'Italia breed could originate from the ancient French breed *Noir de Solange*, once very appreciated in crossbreedings to improve local populations. In the past, Nero d'Italia females were used as brooding females, due to their very good brooding aptitude and to their light weight, which is not dangerous in case of stepping on the chicks.

Qualitative and quantitative morphological traits in adult breeders

Discrete or qualitative traits

Plumage colours	Black
Colour features	Single colour
Poult plumage colour	
Head	Naked in the male, slightly feathered in the female on the central part of the skull
Face	
Neck	Medium-lengthed, arched
Caruncles	Well developed, on the head and the naked part of the neck, larger on the lower part; red, changing to blueish-white when excited. The fleshy protruberance above the beak elongates during excitement, more in the male than in the female.
Throat wattle colour	
Iris colour	Dark
Beak colour	Dark
Skin colour	White
Shank colour	Black in young birds, dark red to purple in the adult
Shank feathering	Free from feathers
Skeletal variants	-
Other specific and distinct visible traits	-

Colour pattern
Brilliant black throughout with black down both in the male and in the female. A slight bronze edging on back and tail feathers is admitted.

Genetic traits

Characterisation of the breed with Single Nucleotide Polymorphisms (SNPs)

Molecular marker	Axiom TurkeyHD Genotyping Array
Laboratory that performed the analyses	Laboratory of Animal Genetics and Genomics Department of Veterinary Medicine and Animal Science (DiVAS) University of Milan
Analysed parameters	MAF: minor allelic frequency Ho: observed heterozygosis He: expected heterozygosis F_{HOM}: inbreeding coefficient

Year		N**	MAF	Ho	He	F_{HOM}
2019	Average	26	0.17	0.248	0.221	-0.118
	SD*					0.32

*SD: standard deviation; **N: number of samples

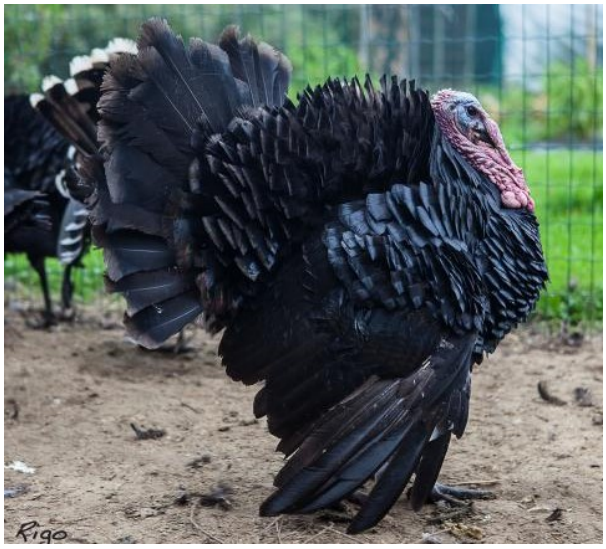
Reproductive and productive quantitative traits

Body weight and growth data

Age (weeks)	Male weight (g)		Female weight (g)	
	Average	SD*	Average	SD*
0 (hatching)				
8				
14	2399	755	1766	373
18	3380	902	2431	437
23	4706	1357	3416	289
27	6596	1328	3794	279
32	7428	1070	4081	236

*SD: standard deviation

Nero d'Italia male and female



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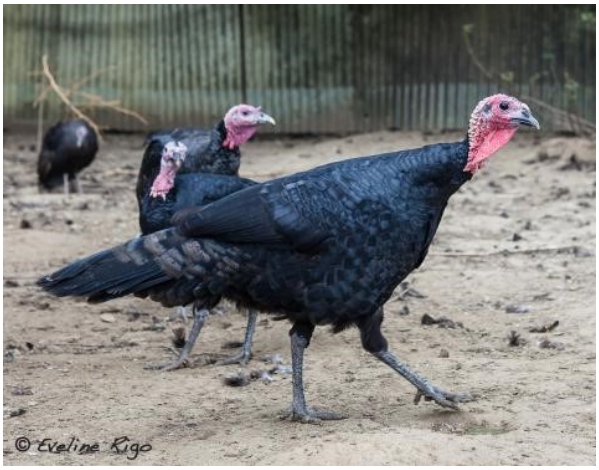

Avian Center for the Conservation of Local Genetic Resources, UniMI

Bibliography

Manuale STANDARD ITALIANO DELLE RAZZE AVICOLE (*ITALIAN STANDARD OF POULTRY BREEDS* Manual, FIAV, 2013-14.

TuBAvI (2017-20)
TuBAvI-2 (2021-24)

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https://ec.europa.eu/agriculture/rural-development-2014-2020_en

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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