

**TuBAvi (2017-20)**  
**TuBAvi-2 (2021-24)**

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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**

**BRONZATO COMUNE**  
*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 the nucleus population conserved at  
"Sasse Rami" Experimental Farm, in Ceregnano (Rovigo).

Latest update: December 29<sup>th</sup>, 2023



## Bronzato Comune

*Meleagris gallopavo Sp.*

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

### Breed origin and development

Name of the breed	Bronzato comune
Synonyms or local names	-
Geographic origin	Veneto
Geographic distribution	Veneto
Estimated total population size	445 (Castillo et al., 2021)
Extinction risk status (FAO, 1998)	Threatened conserved
Any other specific information	Very good brooding aptitude

Historical origin
<p>Bronzato comune is an ancient breed from the Veneto region, locally widespread and successfully exploited for biological productions, as it easily adapts to natural breeding. Today turkeys derive from wild turkeys of the <i>Meleagris</i> genus, domesticated by Aztec people and brought to Spain from the Americas at the beginning of the XVI century (bronze turkeys with white in tail, <i>Meleagris gallopavo gallopavo</i>). From Spain, turkeys quickly spread throughout Europe in several newly-selected colours, and then went back to north-America at the beginning of the XVII century with colonists. At present, bronze turkeys are included in several European countries' standards (e.g. Italy, UK, Germany).</p>

## Qualitative and quantitative morphological traits in adult breeders

### Discrete or qualitative traits

Plumage colours	Bronze
Plumage features	Single colour
Chick plumage colour	Straw yellow
Head	Free from feathers in the male, slightly feathered in the female, with a fleshy protruberance, and red caruncles
Face	Free from feathers, bluish-red
Neck	Free from feathers
Caruncles	Well-developed, spread on the head and on the part of the neck free from feathers; the colour is bluish-red, changeable with excitement.
Throat wattle colour	Red, fleshy
Iris colour	Dark
Beak colour	Horn; strong and long
Skin colour	White
Shank colour	Dark brown in the young, pink to flesh coloured in the adult
Shank feathering	Free from feathers
Skeletal variants	-
Other specific and distinct visible traits	Spurs very developed in the male

Plumage pattern
Breast, neck, and saddle brilliant black with intense iridescent bronze sheen. From the shoulders and back down to the tail, each feather has a bronze band with gold to purple-red luster extending across it near the end, the feather ending in a narrow velvet-black and dark brown-brown edging. Feathers on shoulders and on the sides of the breast show an intense velvet black edging, that can be dark brown in the female. Wings crossed with a broad olive-green band, feathers terminating with a brilliant velvet black band. Primaries grey-white, crossed with typical black bands. Main tail feathers broad, brown-black with black bands and one-two centimeters-wide barring followed by dark-grey to golden-black edging. Tail coverts with a bronze band across the feathers. Feathers of the legs black, bronze on the end with a velvet black edging, that is dark brown in the female. Black down.

### Bronzato comune male and female



Picture from the archives of Prof. Gabriele Baldan and of Prof. Massimo De Marchi, UniPD



Picture from the archives of Prof. Gabriele Baldan and of Prof. Massimo De Marchi, UniPD

### Quantitative traits

Parameters	Male		Female	
	Average±SD*	Min-max	Average±SD*	Min-max
Body weight (g)	7940±418.3	7440-8640	5028±1266	3980-7880
Body length (cm)	66.4±2.7	64-70	55.3±1.8	52-57
Chest circumference (cm)	59.3±2.7	56-66	46.5±1.4	44-49
Shank length (cm)	14.3±1.0	13-15	11.6±0.6	10-12
Shank diameter (cm)	-	-	-	-
Wing span (cm)	71.3±3.7	67-77	59.9±3.8	53-67

\*SD: standard deviation

### 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 <sub>HOM</sub> : inbreeding coefficient

Year	N**	MAF	Ho	He	F <sub>HOM</sub>	
2019	Average	24	0.14	0.178	0.194	0.089
	SD*					0.115

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

### Bibliography

Lehner F (2022) Turkey color genetics.

British Poultry Standards. Sixth Edition. Blackwell Publishing

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

## Reproductive and productive quantitative traits

### Oviposition, brooding and incubation data

Age at sexual maturity of females (weeks)	28
Annual egg production per female (min-max)*	70-100
Incubation length (days)	28

\*As measured during the first year of age, min-max of family line

### Egg-quality traits

Parameters	First oviposition cycle*	
	Average	Min-max
Egg weight (g)	76.5	70-85
Shell colour	Cream with brown speckles	

\* Total n. of measured eggs: 360

### Reproductive traits

Incubation traits	First oviposition cycle
	Average
Fertility (% produced eggs)	92.2
Hatchability (% fertile eggs)	90.9
Hatchability (% produced eggs)	83.8

\*Per family line

### Slaughter data (age: 194 days)

Slaughter parameters	Male		Female	
	Average	SD*	Average	SD*
Live weight (g)	5793	307	3374	193
Carcass weight (eviscerated) (g)	4385	232	2530	145
Carcass weight (eviscerated) yeald (%)	75.7	2.98	75.0	2.89

\*SD: standard deviation

## Rearing traits

Breed type	Rustic
Growth speed	Precocious
Feathering speed	Tardive
Broodiness	Very good
Parental care attitude	Present
Ease of breeding	Good
Male:female ratio for breeding	1:12
Tolerance or resistance to diseases and parasites	
Tolerance to extremes of temperature	