# THE BLACK CASTILIAN

The chicken of Cristopher Columbus

GANECA

Amigos de la Gallina Castellana Negra

By: Jose Luis Yustos, President of Ganeca – Friends of the Black Castilian

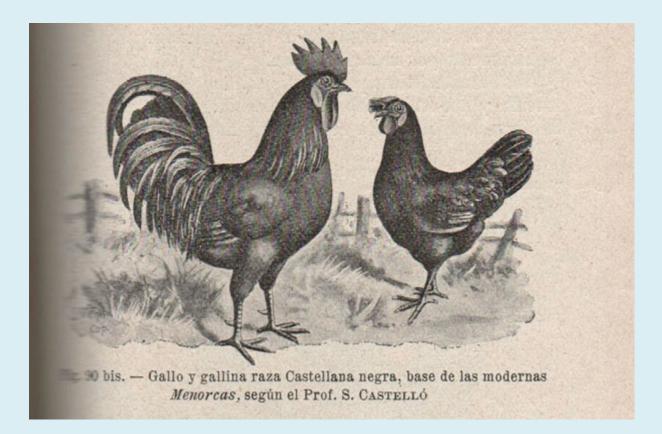
Ganeca is a Spanish National Association of breeders and supporters of the local breed Castellana Negra (Black Castilian) chickens. We want to share our interest with anyone who wants to learn more about the breed, raise this breed of chickens and promote it in shows and exhibitions.

The Black Castilian is one of most famous chicken breeds. This ancient Spanish breed is known not only in Spain but in all Europe, having fanciers in Spain, England, Austria, Germany etc. In 2010 the members of 'Black Castilian's Friends' of Spain (**GANECA**) travelled to Germany to visit the 'SV der Züchter der Kastilianer', the oldest association of Black Castilian breeders. This association was founded in 1960 and they celebrated their 50<sup>th</sup> anniversary with a Jubilee exhibition. GANECA participated in this exhibition and won a prize for Best of Breed.

## Origins of the Black Castilian

The Black Castilian (which is a Red Face Spanish) is one of the oldest European breeds of chickens. Christopher Columbus travelled to America with these chickens in the 15<sup>th</sup> century because they were the favourite of Queen Isabel "the Catholic". These chickens also got to Flanders in the time of the Spanish King Charles I. Many of the current black-coloured chickens that exist in Europe come from our Black Castilian. This assertion, popular among enthusiasts and breeders, has been confirmed by genetic studies that have been made in recent years by the National Institute of Agrarian Research in Spain.

More recent proof is the definition of its first standard in 1926 by D. Enrique P. Villamil, an important person linked to the Spanish poultry. It is therefore one of the first European chicken breeds that has a clearly defined standard.



## Year 1923. Illustration on the standard of Black Castilian<sup>1</sup> by S. Castelló.

In the first half of the twentieth century, the Castilian was one of the most commonly kept chicken breeds in Spain, used for egg production (white eggs, around 220 – 225/ year).

This breed was forgotten because of the advent of industrial poultry breeding and hybrids in cages. The production of white eggs became a monopoly of the Leghorn. The Black Castilian got on the edge of extinction, according to FAO data (Food and Agriculture Organization of the United Nations).

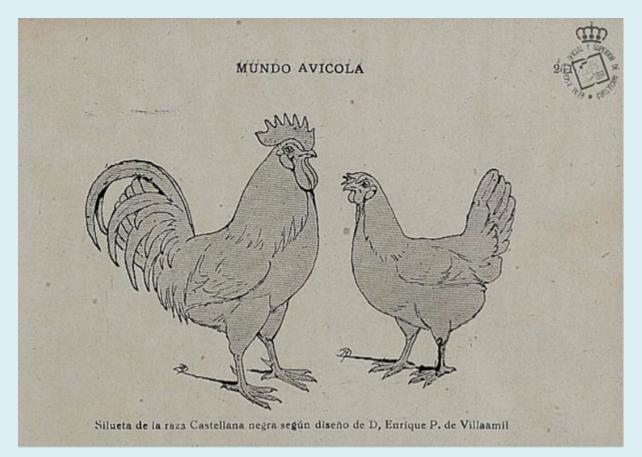
Currently, the Black Castilian is included in the National Program for conservation, improvement and promotion of livestock breeds (Royal Decree 2129/2008), under Annex I, in the Official Catalog Livestock Breeds of Spain. The Black Castilian is listed as endangered.



Right: Comparative silhouettes Black Castilian (red line), Andalusian (black) and Minorca (yellow line). Left: Illustration of the standard of Black Castilian by Villamil (1926)<sup>2</sup>.



CASTELLANA / trazo rojo/ y de la MENORCA (trazo amarillo)



Above: Original illustration of the standard of Black Castilian by Villamil, 1926.<sup>3</sup>



Above: Ancient painting in the Romanesque church of Saint Climent of Taull (Spain).

## The first works in Spain to rescue the Black Castilian Chickens

Fortunately, in 1975 began the work that has been developing the Conservation's Program of Spanish Chicken Breeds at the *Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria* (National Institute for Agricultural and Food Research and Technology) ever since, in conformity with the need to support the genetic diversity of the domestic chicken breeds (<u>www.inia.es</u>).

Ganeca has always had the technical support and advice of the Conservation Program of Spanish Chicken Breeds to avoid the problems of inbreeding and genetic deterioration of the breed. The best researchers of the Conservation Program of Spanish Chicken Breeds (J.L. Campo Chavarri, M. García Gil, J. Santiago Moreno, O. Torres, S. García Dávila) have been present to hold conferences for the partners of Ganeca.

#### **Right: J.L. Campo's conference about the Conservation Program of Spanish Chicken Breeds.**

Below: The Conservation Program of Spanish Chicken Breeds winner in the 'Challenges on good innovative practices' in food and sustainability that they are developing in Spain. The Secretary of Agriculture, Food and Environment, Isabel García Tejerina, presenting the prize to J.L. Campo Chavarri, in the Pavilion of Spain of the Universal Exhibition of Milan 2015.





from 1975 Every year The Conservation's Program of Spanish Chicken Breeds works with Black Castilians. This breed would most likely have died out had it not been for the conservation programme started up in INIA's Animal 1975 by Genetic Improvement Department, which keeps examples of these chickens at its poultry experimentation station at El Encín, in Alcalá de Henares. Since 2009 it has had a sperm bank with frozen samples from 12 breeds, including the Black Castilian.

But they are not only being recovered and preserved for scientific or practical reasons, so to speak. Each of them is unique and tells a particular history of its territory, María García Gil points out: 'These are the reasons the FAO gives for conservation: biodiversity, cultural and historical reasons.'

## Genetic description by the Conservation Program of Spanish Chicken Breeds

The black colour is due to the pigment eumelanin. This pigment, when it is expressed as black feather colour, is located in elongated granules (vessicles), called melanosomes, in the cells. The black Castilian carries the allele E (Extended black), helping totally black plumage, from the e (Extension) gene/locus series of alleles. The best known alleles of this gene are E, E^R (birchen), e^Wh (wheaten), e+ (normal/wildtype), e^b (brown), e^bc (buttercup) and e^y (recessive wheaten). Another gene that helps the black colour in Castilian is melanotic (MI, dominant mutation). Shank colour is based on the normal dermal melanin gene (id+, sexlinked) and the normal white skin gene (W+).

Genetic distance (fixation index): 0.35 (White Leghorn), 0.64 (commercial white egg layer) and 0.70 (wild chicken).

(Note by the editor: this index varies between 0 and 1. A value of 0 indicates that two populations are genetically identical whereas a value of 1 indicates that two populations are different species.)



Left: Clucking with a local accent. At the El Encín chicken farm (Alcalá de Henares), INIA's researchers monitor the growth of Spanish breeds of cockerels and hens from the moment they hatch.

## The Black Castilian: a sustainable breed

The Black Castilian chicken is a strong, light, resistant, well-adapted native breed. Black Castilian are easy to raise, they can support the extreme temperatures of the Mediterranean continental climate (-15°C, very cold, +40°C, very hot).

"The leading poultry companies breed selectively to achieve higher meat and egg production, and we can't compete with that, but it's always advisable to preserve biodiversity, because you never know what can happen. If there's a major worldwide epidemic of avian flu, the first to die will be the more selectively bred chickens, as their defences are not so well adapted", states María García Gil, a researcher of the Programme for the Conservation of Spanish Chicken Breeds.

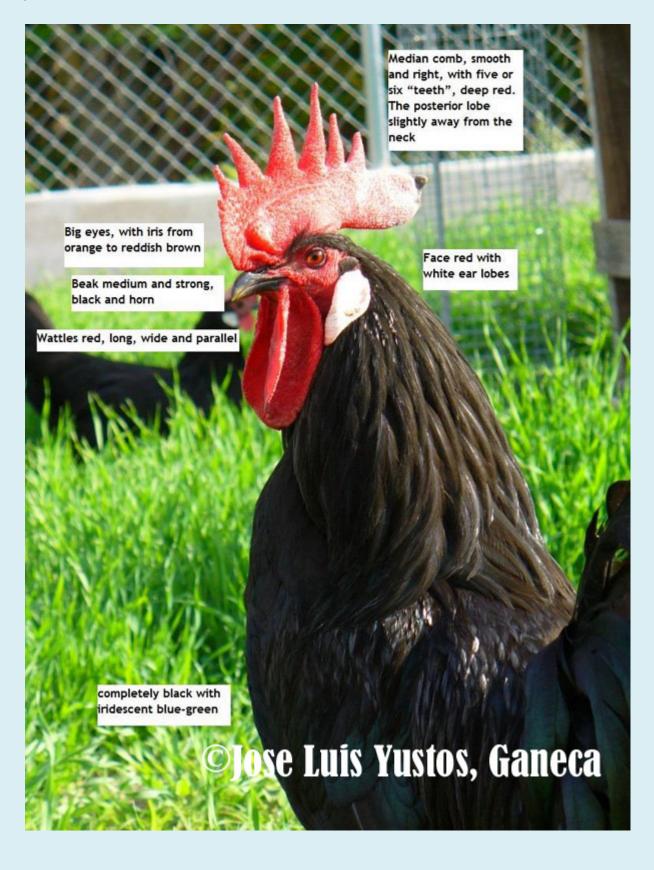
One of the natural behaviours of chickens is scratching the ground to uncover seeds, insects and worms to eat. The Black Castilian is highly regarded for its soil-turning abilities. They can also be used to help turn compost. This behaviour can help the gardener by keeping pest populations under control.



More emphasis must be placed on the recovery of organic waste in homes. Black Castilian can eat all vegetable scraps as well as remains of fish and red meat. And their excrements are very good to activate the compost.

## Our Black Castilian<sup>4</sup>

These chickens are completely black with iridescent blue-green sheen, more pronounced in the cock. It is a lightweight, dynamic, vigorous and proud breed. The chickens are so light that they can fly up in trees, to sleep and be safe from predators.



## MALE CHARACTERISTICS

Face: red with white ear lobes.
Comb: medium size, smooth and straight, with five or six serrations, deep red.
The posterior lobe slightly away from the neck.
Wattles: red, long, wide and parallel.
Beak: medium and stout, black and horn.
Eyes: big, with iris from orange to reddish brown.
Neck: long and slightly arched.
Back: long, sloping slightly to the tail.
Breast: wide and prominent.
Tail: arched and almost at right angles (a "squirrel tail" is considered a fault).
Wings: large and tight.
Shanks: thick, free of feathers, dark slate with four straight toes. Toe nails can be white or black.
Ring size: 18 mm.
Weight: around 3 kilos.

**FEMALE CHARACTERISTICS**: The hen is smaller than the rooster. The rear half of the comb falls to one side, but without covering the eye. Ring size is 16 mm.



To improve the breed we should exclude those birds with any white, red or brown in their plumage. Only pure black specimens will serve in the breeding pen. Do not breed from a female with perfect straight comb or excessively lopping. Feathered shanks are another serious defect. Good selection can remove all these defects.

#### Photo:



## GANECA: Association of breeders of Black Castilian

After years of a large group of people who had years of breeding this breed decided to create an The chicks can have a bit of yellowish down and some white feathers that they will lose after moulting to mature plumage.



association called "Association of Friends of the Castilian Negra Chickens" GANECA.

The aims and objectives of the association of breeders are:

- Breeding, recovery, improvement and dissemination of the race.
- Collaboration with public administrations on projects for the conservation of indigenous breeds.
- The promotion of outreach activities and exhibitions to bring citizens a better knowledge and welfare of indigenous breeds.
- The promotion of awareness through cultural events about indigenous breeds with special attention to the schools and juniors.

The majority of the breeders and members of the club are living in <u>Castile and</u> <u>León</u>, although there are members from all regions of Spain.

All partners get involved in the selection of the breed from two perspectives: the phenotype (its external appearance) and the genotype (its genetics). With this selection we can maintain the rustic traits of the birds and improve egg laying abilities to reach the levels that the breed had in early twentieth century.

Thanks to his important work of selection, Jesus Rabadán, GANECA founding partner, has achieved national awards in Spain, three consecutive Mediterranean, several European and European Show 2010 in Germany.

## Right: Best Black Castilian hen, Spanish National Champion, 2014.

#### Prizes

- 2015. First prize, Black Castilian rooster. Championship Autochthonous breeds of Castilla y León (Alba de Tormes, Salamanca).
- Primer premio. Campeonato Nacional (Talavera de la Reina) 2014
- 2014. First prize, Black Castilian hen. National Championship native Spanish breeds (Talavera, Toledo).
- 2013. First prize, Black Castilian hen. National Championship native



Spanish breeds (Sariñena, Huesca).

- 2013. First prize, Black Castilian pair. International Championship Aviculture (Valls, Tarragona).
- 2012. First prize, rooster Black Castilian rooster. National Championship Autochthonous breeds (Alba de Tormes, Salamanca).
- 2012. Second prize, Black Castilian. Championship native Spanish breeds (Colmenar Viejo, Madrid).
- 2011. First prize, Black Castilian rooster. International Championship Aviculture (Castropol, Asturias).



Left: 2015. First prize, Black Castilian rooster. Championship native Spanish breeds of Castilla y León.

## Inbreeding

In 2010, several members travelled to Germany to find quality breeding males and avoid the problems of inbreeding that are generated when individuals with kinship are being crossed repeatedly. In GANECA the loss of genetic variability in reared specimens is prevented.

To improve the quality every year, individuals with faults are selected out and we breed only the best. Thus, GANECA achieves a good selection, getting high-quality chickens that would get a high score at any exhibition.



Right: Conference about organic aviculture by Carmelo García (Annual Assembly 2014)



Left: Conference about the standard breed by Jesús Rabadán (Annual Assembly 2014)



But GANECA chickens do not only "look pretty." We know that the viability of the breed, according to the provisions of Royal Decree 2129/2008, is considered the real value. So now we already have two partners who are producing certified organic eggs by Organic Agriculture Regulatory Council of Castile and Leon. In addition, trials are being used in determining the true potential of the black Castilian, concerning its value as a utility breed.

#### **Right and former page: Certified organic eggs of Black Castilians (European label)**

Another objective of GANECA, contained in its statutes, is the dissemination and knowledge of the breed. By means of participating in local and regional exhibitions and fairs, we reveal the Black Castilian. The older visitors fondly remember their grandparents had this breed of chickens in the backyards.

Below: Annual assembly of partners 2015.





Right: Ganeca also raises chicks with broodies.

November 2015, some fanciers of GANECA travelled to the European Show in Metz.





There they met fellow fanciers from the German Specialty Club for the Black Castilian.

In the photo, left to right: José Luis Yustos (Ganeca), Christopher Hiebel (SV der Züchter der Kastilianer, Duitsland) and Ángel Moreno (Ganeca).



Left: A GANECA member and one of the German specialty club (SV der Züchter der Kastilianer) posing in front of the Ganeca flyer at the European show in Metz.

Latest news: At the National Championship of Autochthonous Spanish breeds in Villafranca del Penedés, 18-20 December 2015, a Castilian cockerel of Avicultura Jose and Sergio Yustos won Best in Show, and a Castilian hen (photo below) of José Luis Yustos won Second Best in Show. All are members of Ganeca.

For more information, please contact: José Luis Yustos



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Facebook: Ganeca Amigos de la gallina castellana negra (open group)

#### Sources:

1 "Avicultura". Carlos Voitellier. Ed. Salvat. 1923, Barcelona (España)

2 "Mundo Avícola". Enrique P. de Villaamil. Real Escuela de Avicultura. Nº 57. Septimbre, 1926. Barcelona (España)

3 "Mundo Avícola". Enrique P. de Villaamil. Real Escuela de Avicultura. Nº 57. Septimbre,1926. Barcelona (España)

4 All about standard of Black Castilian: http://www.ganeca.org/patron.html

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