

An Exploratory Field Study on Egg Quality and Yolk Functional Properties in Commercial and Local Laying Hen Breeds Fed Whole Hemp Seed Under Agroecological Conditions

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Supplementary File S1: Additional Information Concerning Local Milanino Breed

Milanino is a synthetic chicken breed originally developed in the early 20th century in the Milan area by crossing White Valdarnese roosters with White Orpington hens, followed by selection for a distinctive phenotype [1,2]. Initially widespread in traditional family farms for both meat and egg production, the breed became extinct during the second half of the 20th century following the replacement of local breeds with highly productive commercial hybrids [3]. The breed was successfully reconstituted by the University of Milan, Department of Veterinary Medicine and Animal Sciences (DIVAS), through the replication of the original crossbreeding scheme described in historical poultry manuals and subsequent phenotypic selection [2]. The breeding stock is currently conserved in situ at the Avian Centre for the Conservation of Local Genetic Resources in Lodi. Milanino chickens are characterized by white plumage and smooth pinkish-white shanks. Adult roosters weight approximately 3.5 kg and exhibit a broad chest and a well-developed red comb, whereas hens weight 2.5–3.0 kg and are characterized by high fertility and a strong brooding instinct.

Figure S1. Picture representing Milanino Breed and its typical traits.



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References

- 1 Cortese M. (1945) Pollicoltura familiare e industriale. Editore U. Hoepli, Milano
- 2 Faelli F. (1923) Animali da cortile. Editore U. Hoepli
- 3 Zanon A., Sabbioni A. (2001) Identificazione e salvaguardia genetica delle razze avicole italiane, Annali della Facoltà di Medicina Veterinaria di Parma, 21, 117-134.