

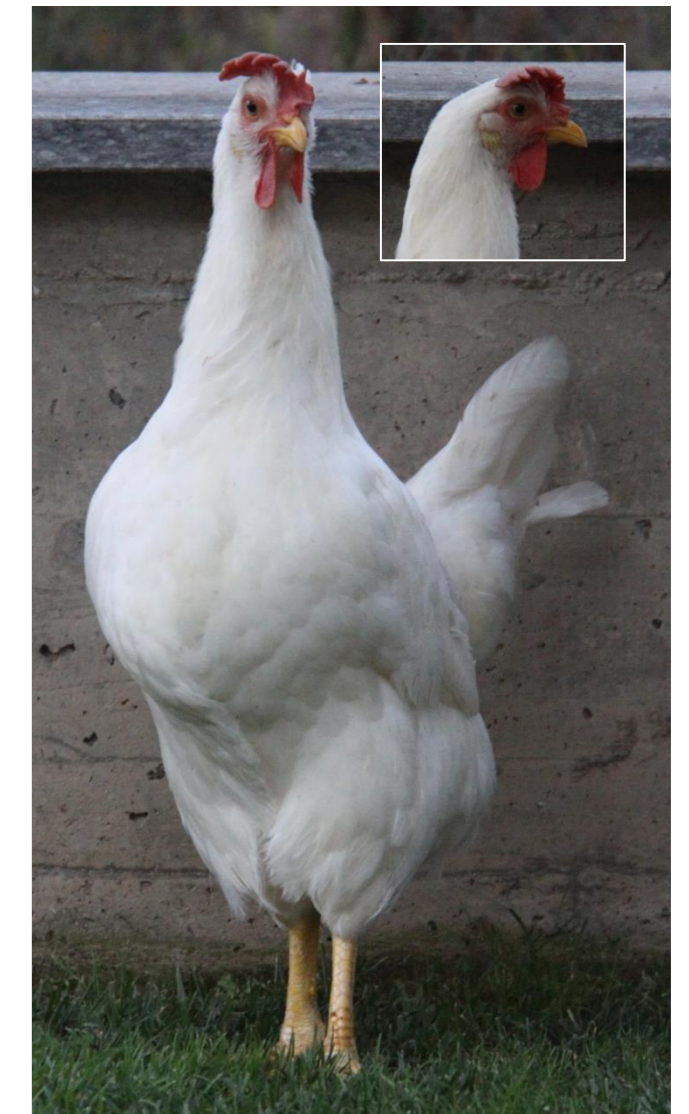
Genetic diversity, productive and reproductive performance in Italian chicken breed Bianca di Saluzzo

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Introduction:

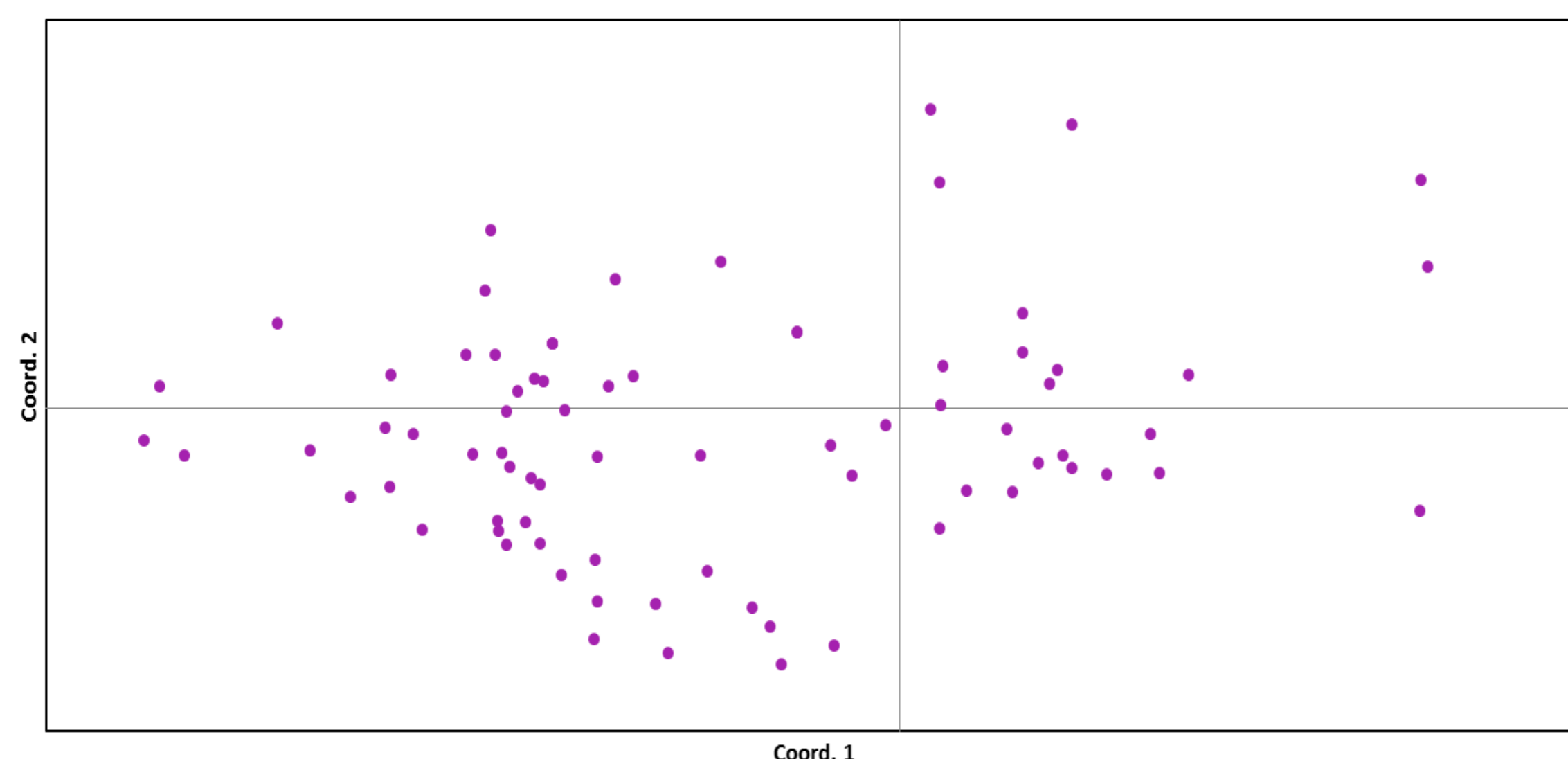
Bianca di Saluzzo (BS) is a chicken breed reared in Piedmont region and its substitution with commercial lines caused a reduction in size, associated with a progressive decline due to inbreeding. In this study genetic diversity, productive and reproductive performance were examined.



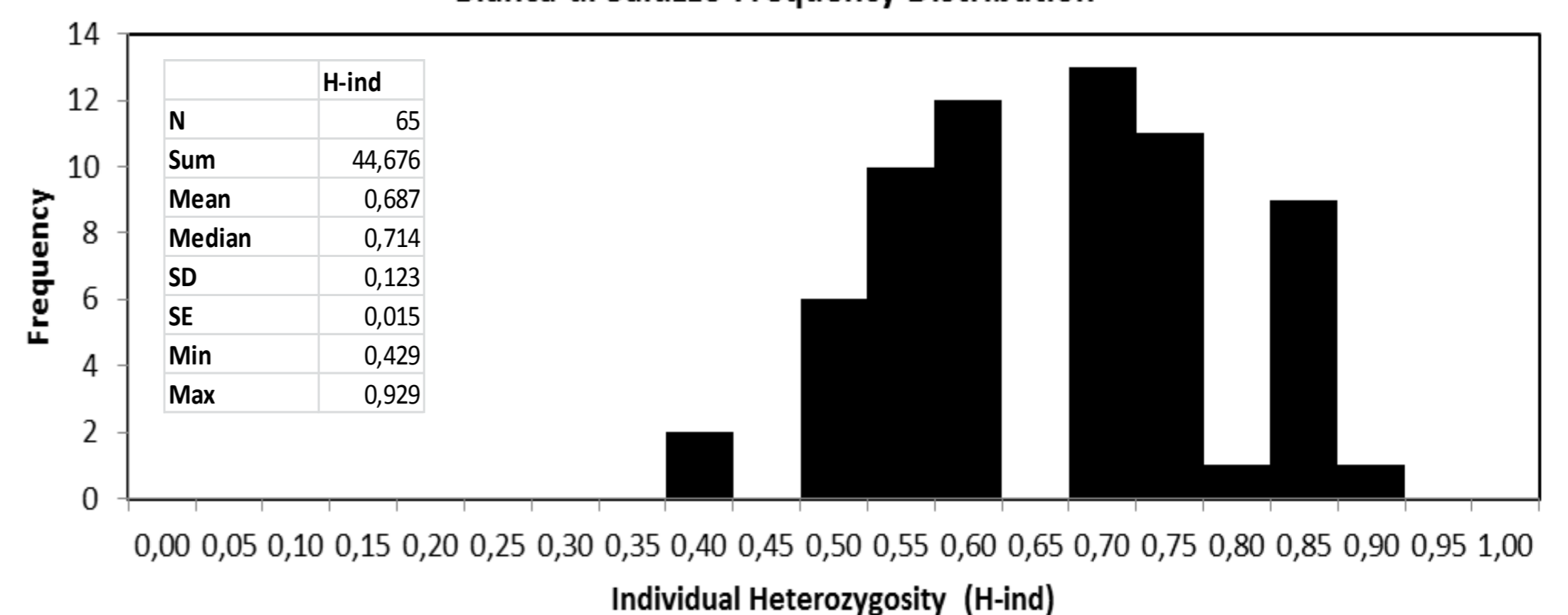
Genetic characterization:

All birds were genotyped by a set of 14 microsatellite markers chosen by their informative content. Data analysis were carried out with the excel software.

Principal Coordinates (PCoA)



Bianca di Saluzzo Frequency Distribution



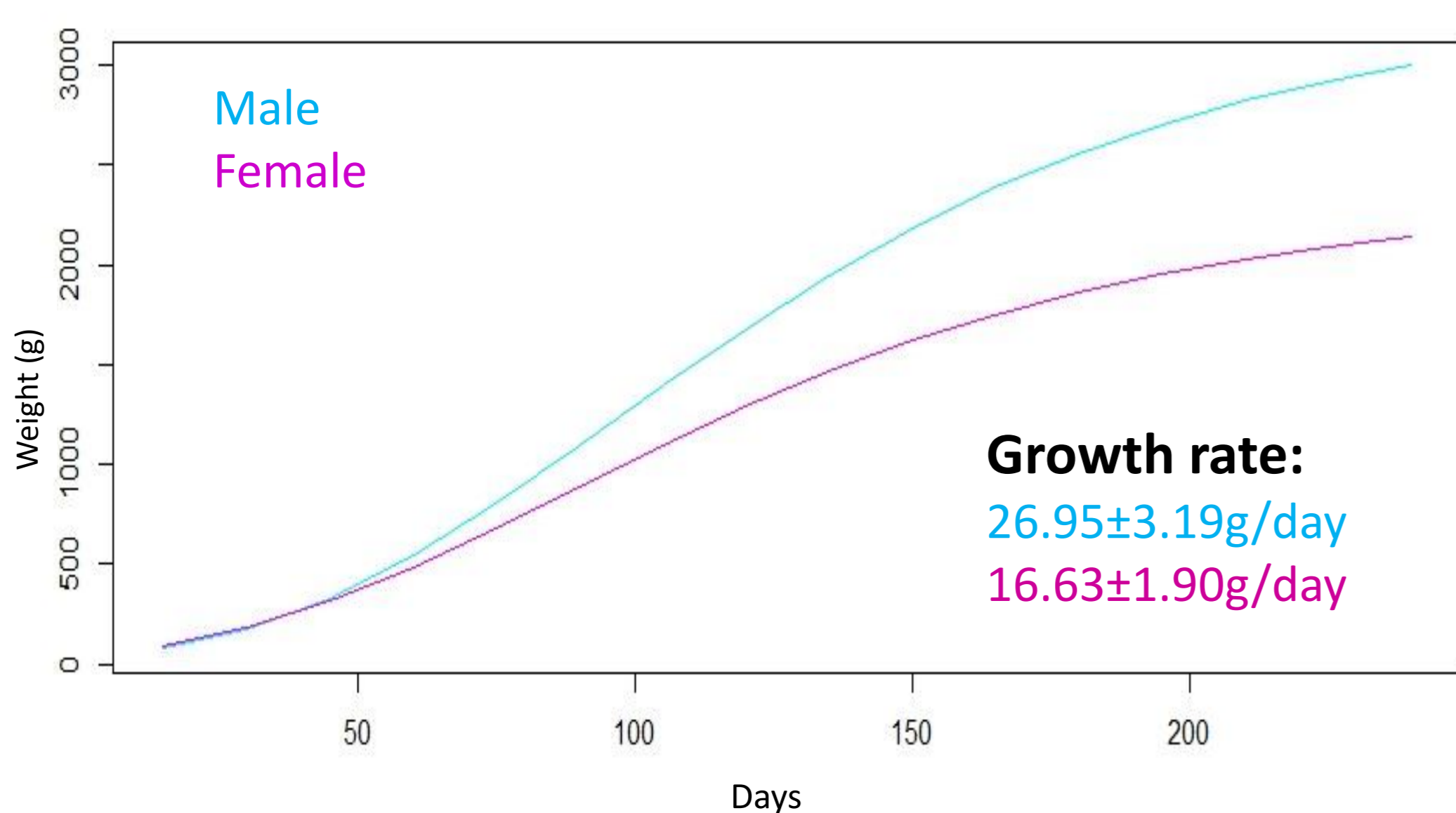
	N	Na	Ne	I	Ho	He	uHe	F
Mean	76,57	6,36	3,61	1,39	0,68	0,68	0,69	-0,01
SE	0,20	0,74	0,37	0,11	0,03	0,03	0,03	0,03

Performance:

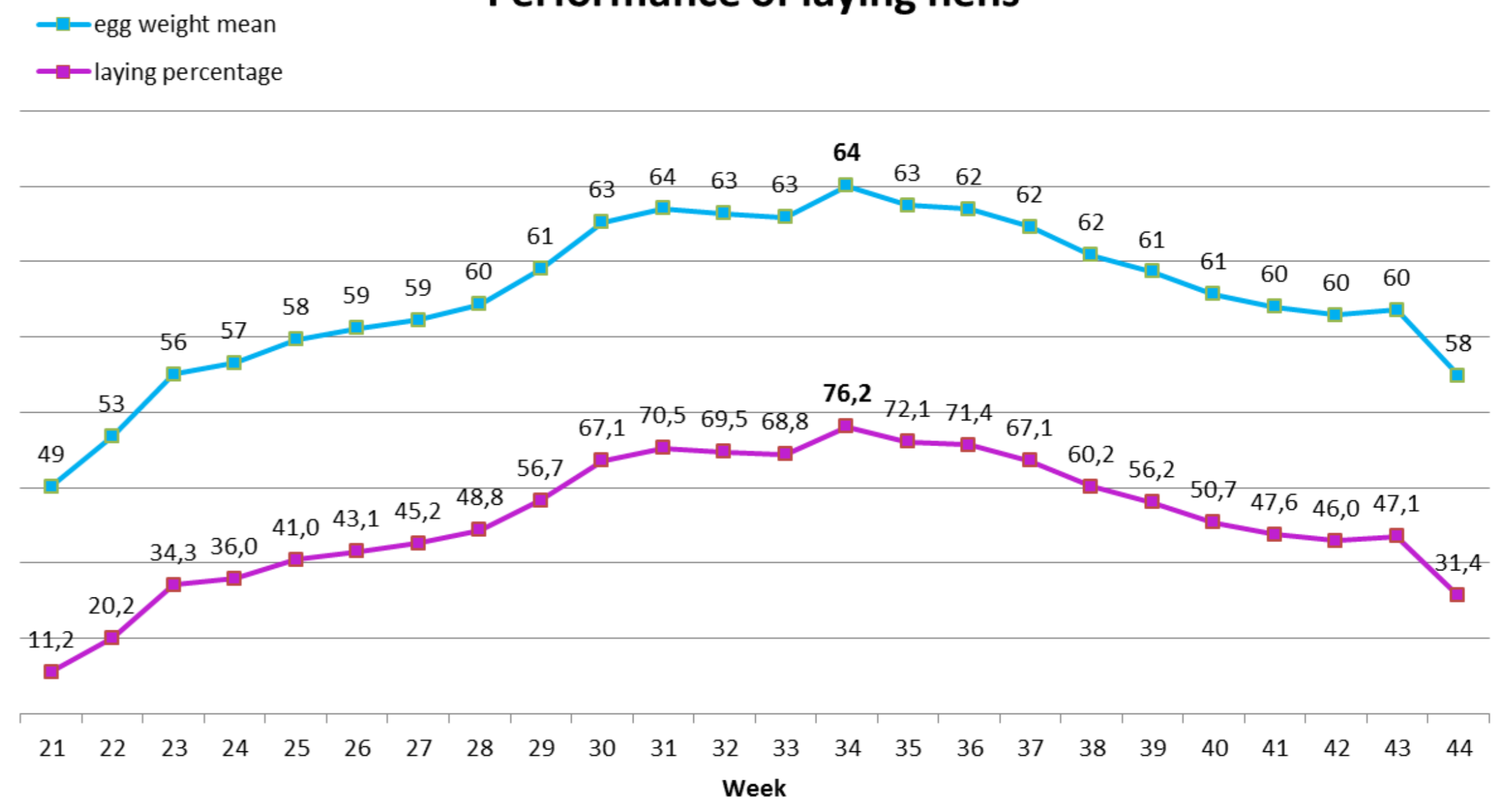
At hatching, 177 chicks were weighed. At six weeks of age they were separated by sex and transferred to growing pens with free-access to water, then they were fed with a standard commercial starter diet *ad libitum* followed by a growing diet. Body weight (BW) was recorded every two weeks from hatching to the age of 27 weeks. Gompertz model was used to define the growth rate.

The performance of laying hens was monitored over a period of 6 months. The age at first lay ranged between 5 and 6 months, and egg number/month was 14.5, mean egg weight 60±3g and laying percentage resulted 51.6% (max 76.2%). Fertility and hatchability were 87.2% and 92.3%.

Body Weight



Performance of laying hens



Conclusions:

These results provide an important insight on genetic and productive characteristic of this local poultry breed that can be used for managing new mating schemes aimed to preserve variability and increase productivity.

Acknowledgements

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