

Genetic diversity, productive and reproductive performance in Italian chicken breed Bionda Piemontese

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Introduction:

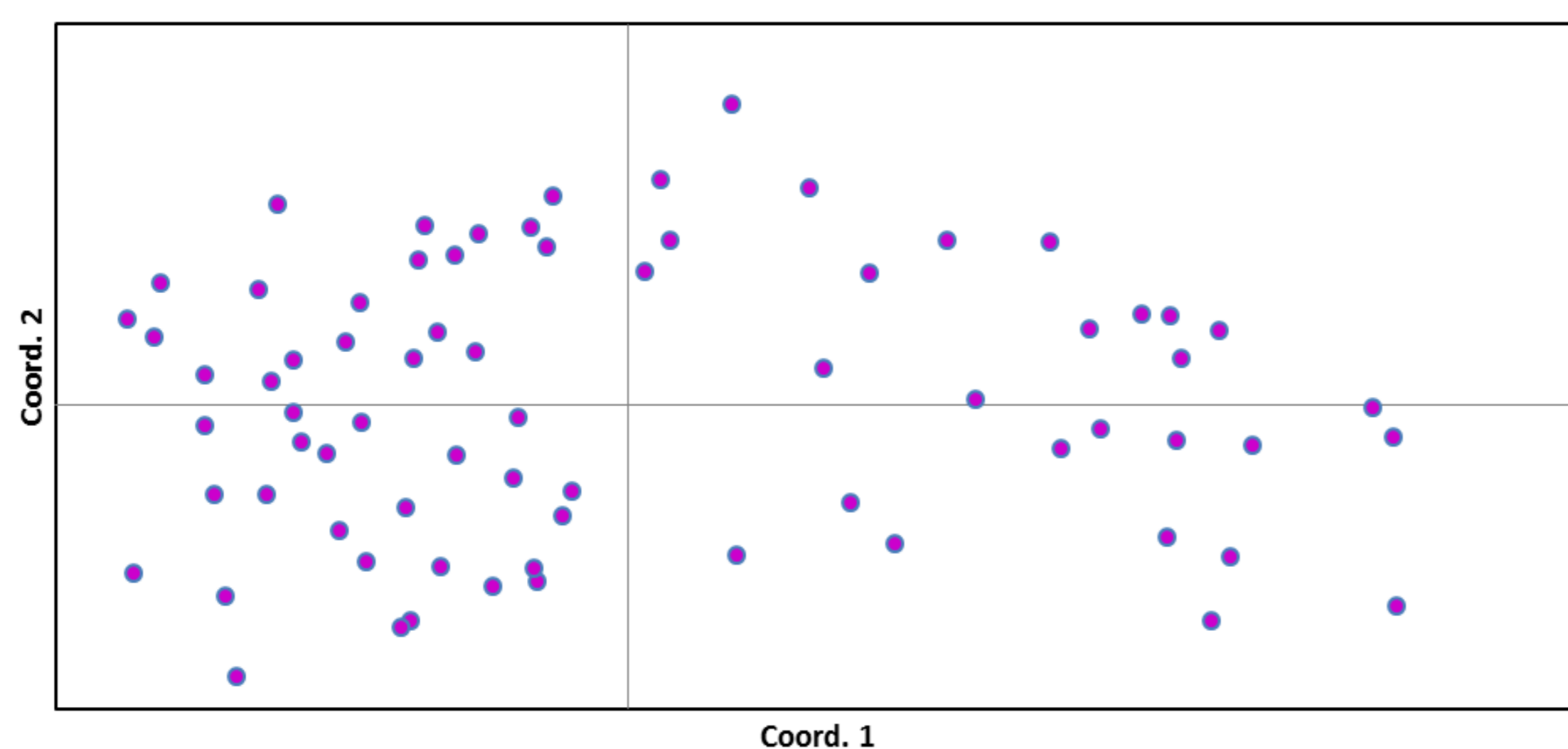
Bionda Piemontese (BP) is a local slow-growing poultry breed that is mainly reared for meat; hens are also bred for egg production. In this study genetic diversity, productive and reproductive performance were examined.

Genetic characterization:

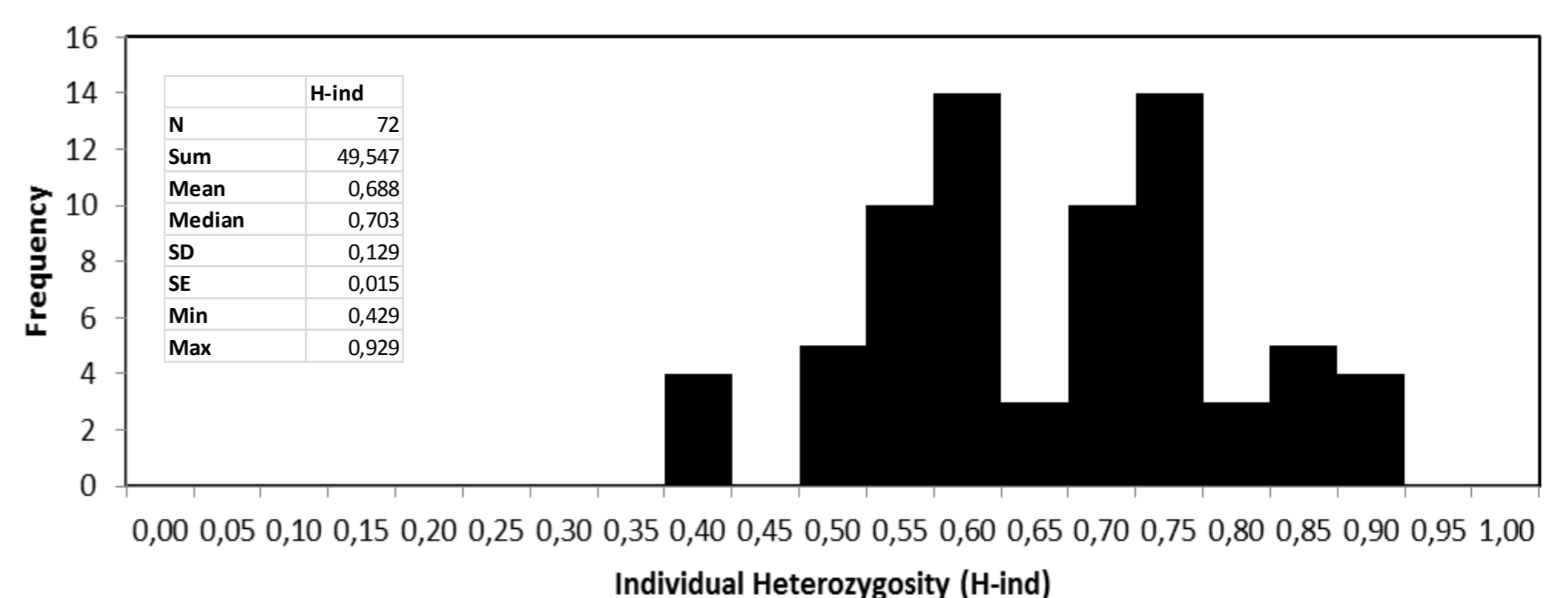
All birds were genotyped by a set of 14 microsatellite markers selected for their high informative content. Data analysis were carried out with the excel software.



Principal Coordinates (PCoA)



Bionda Piemontese Distribution for H-ind

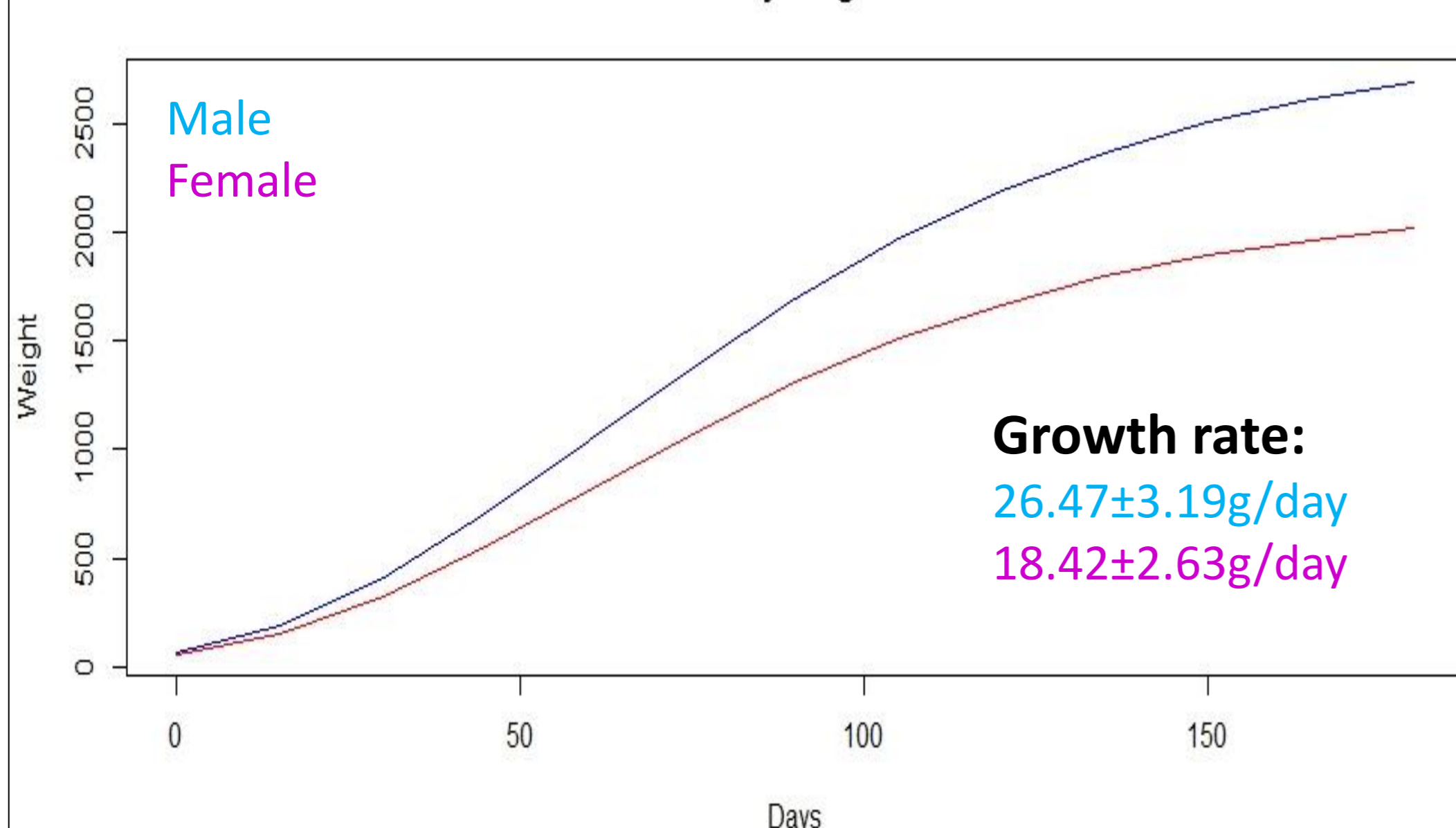


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Mean	70,786	6,500	3,402	1,356	0,684	0,689	0,694	0,012
SE	0,859	0,609	0,228	0,071	0,055	0,020	0,020	0,067

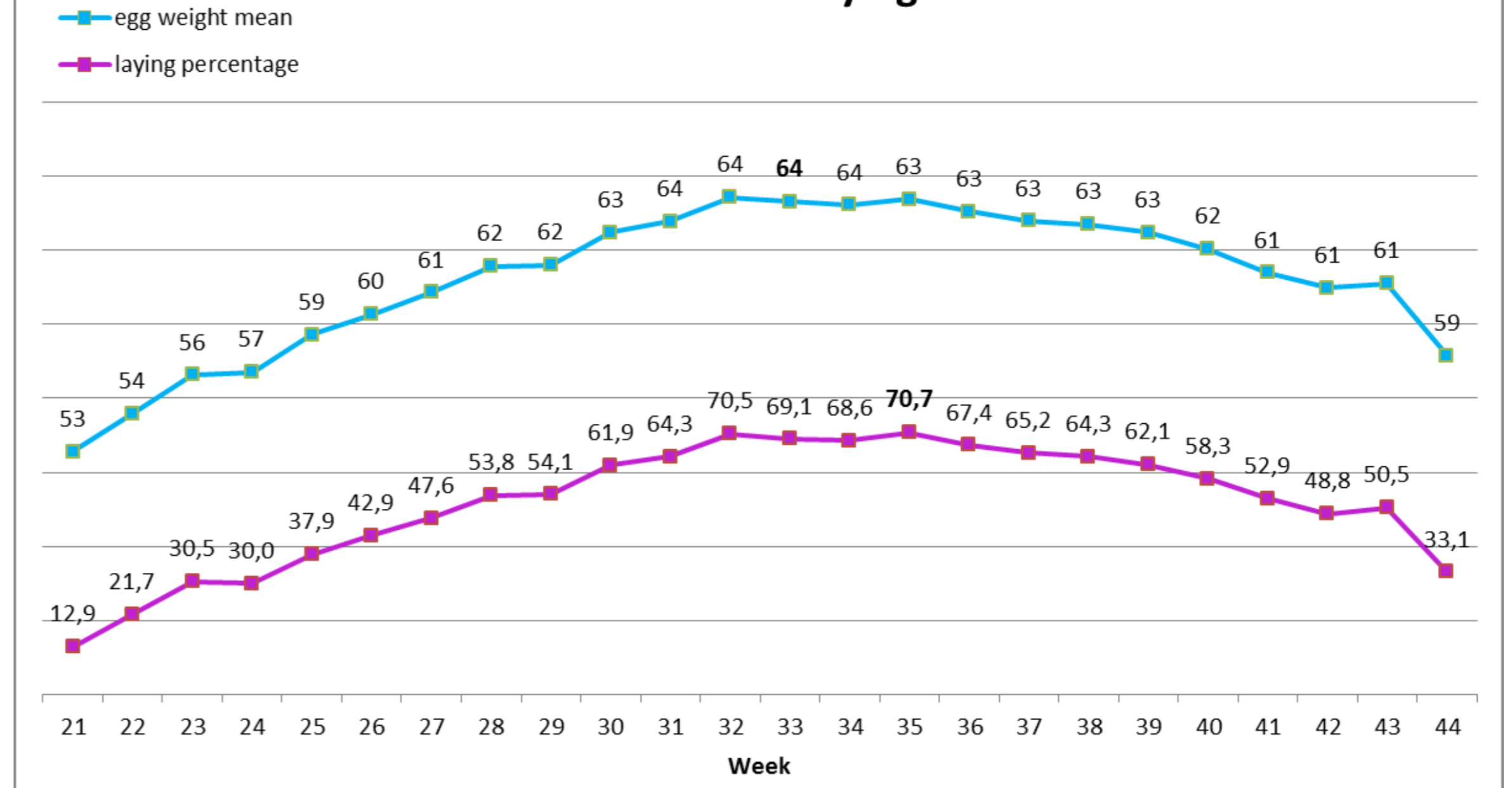
Performance:

At hatching, 218 chicks were weighed and labelled with a wing metal tag. At six weeks of age the chickens were separated by sex and transferred to growing pens with free-access to water and 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 61±3g and laying percentage 51.6% (max70.7%). Fertility and hatchability were 86.5% and 94.2%, respectively showing a good reproductive performance.

Body Weight



Performance of laying hens



Conclusions:

The egg production was lower than that of commercial layers, but it was consistent with a standard of local breeds. In conclusion, the results highlight that BP is local slow-growing and dual-purpose breed with good productive performance.

Acknowledgements

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