



## Novel dual-purpose chicken genotypes under organic conditions - performance, product quality and economic aspects

The practice of culling day-old male chicks of layer lines is a negative consequence of modern egg production. The use of dual-purpose poultry offers a way around this, as their genetic selection, unlike single-purpose genotypes, allows the rearing of male chicks for meat and female chicks for egg production. However, there is still limited knowledge on management, performance, product quality and economic feasibility.

In PPILOW, three novel dual-purpose genotypes have been evaluated under organic conditions, by examining parameters of the laying phase in comparison with a commercial layer and the fattening performance in comparison with a commercial broiler as control.

The laying performance of all three dual-purpose genotypes was 19-25 % lower than the control. Meanwhile, the meat yield of dual-purpose females was 17-27 % higher than that of commercial layers. The dual-purpose males of the different genotypes required 2-6 weeks longer to reach the target weight of 2.1 kg liveweight compared to the broiler, resulting in a 29-45 % higher FCR. The economic analysis showed that the price of an egg was 18-43% higher and the production cost of meat from the dual-purpose genotypes was 26-36% higher than the control. Genotype had no negative effect on technical product quality. As preferences for appearance parameters are diverse and subjective, genotype-specific characteristics of eggs and meat are not a barrier to marketability and can be seen as a marketing advantage as the product has an effective recognition value.



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The PPILOW project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement N°816172.

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