



COMPARISON OF CHEMICAL COMPOSITION AND PHYSICOCHEMICAL PROPERTIES OF PEKIN DUCK AND CHERRY VALLEY DUCK EGGS

Dalibor Bedekovic¹, Zlatko Janjecic¹, Dubravko Filipovic¹✉,
Ante Galic¹, Stjepan Pliestic¹

¹University of Zagreb Faculty of Agriculture, Svetosimunska 25, 10000 Zagreb, Croatia

✉dfilipovic@agr.hr

<https://doi.org/10.34302/crpfst/2020.12.3.7>

Article history:

Received:

5 July 2019

Accepted:

15 June 2020

Keywords:

Duck eggs;

Chemical composition;

Physicochemical

properties;

Yolk color.

ABSTRACT

The aim of this study was to determine and compare chemical composition and physicochemical properties of duck eggs obtained from the two common duck breeds in Croatia, the Pekin duck and Cherry Valley duck. A total sample of 120 eggs (60 eggs of each duck breed) was collected from one year old free range raised ducks. The Cherry Valley duck eggs were significantly heavier than Pekin ducks and had higher percentage of albumen, while the Peking duck eggs had higher percentages of yolk and shell. The crude protein and total ash contents in the yolk were recorded to be significantly higher at Cherry Valley duck eggs, while crude fat and carbohydrate contents were significantly higher at Pekin duck eggs. The Cherry Valley duck eggs had significantly higher crude protein content in the albumen, while Pekin duck eggs had significantly higher carbohydrate content. Total ash content in the egg shell was significantly higher at Pekin duck eggs. No significant differences of albumen and yolk pH were observed. The Pekin duck egg yolks had higher intensity of the red color.
