

The Effect of the Use of Marigold Flower Additives (*Tegates spp*) and Paprika Flour (*Capsicum annuum*) in Feed on the Physical Quality of Duck Eggs

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ABSTRACT

*This study aims to determine the use of marigold flour (*Tegates spp*) and paprika flour (*Capsicum annuum*) in feed on the physical quality of duck eggs. The material used was 60 Mojosari ducks, with a Completely Randomized Design (CRD) and Analysis of Variance (ANOVA) method, using 4 treatments and 5 replications, each treatment and replication consisting of 3 Mojosari ducks, marigold flowers (*Tegates spp*) and paprika flour (*Capsicum annuum*). The treatments given were P0 (no treatment), P1 (added astaxanthin 0.02%), P2 (added paprika flour 1%), P3 (added marigold flour 1%). The parameters observed in this study were egg weight, haugh unit, egg white index, egg yolk index, and egg yolk color. The research data were analyzed using RAL and if there were significant differences, further tests were carried out using the Duncan Multiple Range Test (DMRT). The results of the study showed that the use of marigold flour and paprika flour had a significant effect ($P < 0.05$) on the physical quality of duck eggs, including the egg white index and yolk color, and had no significant effect ($P > 0.05$) on the physical quality of duck eggs, including egg weight, Haugh unit, and yolk index. The conclusion of this study is that the addition of astaxanthin, paprika flour, and marigold flour as feed additives can improve the quality of egg yolk color. The advantage of this study is that the use of astaxanthin, marigold flour, and paprika flour can be effective feed additives to increase the value of the egg white index and egg yolk color.*

Keywords: *Mojosari duck, marigold flour, paprika flour, physical quality of eggs*