

RINGKASAN

ANIS FARADILLA. Penelitian dengan judul “Nilai Heterosis Karakteristik Bobot dan Produksi Telur Hasil Persilangan Resiprok Itik Tegal dan Magelang”, dilaksanakan mulai tanggal 19 Desember 2016 sampai 13 Maret 2017 di Experimental Farm, Fakultas Peternakan, Universitas Jenderal Soedirman, Purwokerto. Penelitian ini bertujuan untuk mengetahui nilai heterosis karakteristik bobot dan produksi telur itik hasil persilangan resiprok itik Tegal dengan Magelang. Materi yang digunakan dalam penelitian adalah itik hasil persilangan resiprok itik Tegal dengan Magelang generasi populasi awal (F0) dan generasi F1. Itik Tegal jantan yang disilangkan dengan itik Magelang betina keturunannya disebut itik Gallang, sedangkan itik Magelang jantan yang disilangkan dengan itik Tegal betina keturunannya disebut itik Maggal. Itik jantan sebanyak 16 ekor dan itik betina sebanyak 100 ekor. Itik Gallang dan Maggal sebanyak 100 ekor, itik yang digunakan adalah itik periode *laying* umur 24 minggu. Produksi telur dicatat sejak awal sampai 12 minggu peneluran. Metode penelitian yang digunakan adalah metode eksperimen tanpa rancangan. Hasil penelitian menunjukkan bahwa itik Gallang dan Maggal memiliki rata-rata bobot telur masing-masing sebesar $60,54 \pm 3,72$ g dan $62,30 \pm 3,48$ g, serta produksi telur sebesar $49,67 \pm 21,55\%$ dan $43,92 \pm 19,21\%$. Hasil uji t untuk karakteristik bobot dan produksi telur tidak menunjukkan perbedaan antara anak dan tetuanya ($P \geq 0,05$). Nilai heterosis bobot dan produksi telur pada itik Gallang masing-masing sebesar -5,34%, 15,66% dan pada itik Maggal sebesar -2,59%, 0,80%. Berdasarkan hasil penelitian dapat disimpulkan bahwa karakteristik bobot dan produksi telur antara itik Tegal, Magelang dan hasil persilangannya relatif sama. Terdapat nilai heterosis yang negatif pada karakteristik bobot telur dan positif pada karakteristik produksi telur dari hasil persilangan resiprok itik Tegal dan Magelang.

Kata kunci : heterosis, bobot telur, produksi telur

SUMMARY

ANIS FARADILLA. The research was entitled “Heterosis Value of Characteristics Weight and Egg Production as The Result of Reciprocal Crossbred Tegal and Magelang Ducks” was conducted since December 19th 2016 until March 13th 2017 in the Experimental Farm, Faculty of Animal Science, Jenderal Soedirman University, Purwokerto. The aim of this research was to assess the heterosis value of characteristics weight and egg production as the result of reciprocal crossbred Tegal and Magelang ducks. The material used were reciprocal crossbred between Magelang and Tegal ducks that consisted of two generations, the generation of initial population (F0) and F1 generation. The reciprocal crossbred between male Tegal duck and female Magelang duck called Gallang ducks, while the reciprocal crossbred between male Magelang duck and female Tegal duck called Maggal ducks. The male duck as much as 16 birds and female duck as much as 100 birds. The Gallang and Maggal duck as much as 100 birds. The duck used were laying period duck at the age of 24 weeks. The egg production was recorded start from initial until 12 weeks of egg laying. The research was conducted by using experimental method without design. The result of this research showed that Gallang and Maggal duck have an average egg weight respectively were 60.54 ± 3.72 g and 62.30 ± 3.48 g and also the egg production respectively were $43.92 \pm 19.21\%$; $49.67 \pm 21.55\%$. The result of T test toward weight and egg production characteristics showed did not significantly affect between child and parent ($P \geq 0,05$) . The value of heterosis for weight and egg production of Gallang respectively were -5.34%, 15.66%, and for Maggal were -2.59%, 0.80%. Based on the result of this study it could be concluded that characteristic of egg weight and egg production is relatively same between Tegal duck, Magelang duck and their crossbred. It can be found the negative heterosis on the characteristic of egg weight and positive heterosis on the characteristic of egg production as the result from reciprocal crossbred Tegal duck and Magelang duck.

Keywords: *heterosis, egg weight, egg production*