

RINGKASAN

AMIROTUN. Penaksiran Nilai Heterosis Karakteristik Ukuran Morfometrik Hasil Persilangan Itik Magelang dengan Tegal. Penelitian bertujuan untuk mengkaji ukuran morfometrik (panjang badan, lingkaran dada, lingkaran perut, panjang leher, lebar pubis, dan panjang *shank*) dan mengkaji nilai heterosis karakteristik ukuran morfometrik pada itik hasil persilangan itik Magelang dengan Tegal generasi kedua (F2). Penelitian dilaksanakan di Experimental Farm Fakultas Peternakan, Universitas Jenderal Soedirman, Purwokerto. Materi yang digunakan yaitu itik hasil persilangan resiprok itik Tegal jantan dengan betina Magelang (Gallang) dan itik Magelang jantan dengan betina Tegal (Maggal). Jumlah itik betina F1 sebanyak 50 ekor terdiri dari 24 ekor itik Gallang dan 26 ekor itik Maggal, itik jantan Maggal dan Gallang masing-masing 6 ekor. Itik F2 sebanyak 50 ekor yang terdiri dari 24 ekor itik Gallang dan 26 ekor itik Maggal. Itik diukur pada umur 12 minggu. Hasil pengukuran morfometrik itik betina Gallang yaitu panjang badan F1 $22,85 \pm 1,92$ cm; F2 $20,58 \pm 1,61$ cm, lingkaran dada F1 $26,47 \pm 1,10$ cm; F2 $27,10 \pm 1,15$ cm, lingkaran perut F1 $29,37 \pm 1,11$ cm; F2 $28,50 \pm 1,07$ cm; panjang leher F1 $20,14 \pm 3,15$ cm; F2 $21,22 \pm 1,82$ cm, panjang pubis F1 $5,60 \pm 0,43$ cm; F2 $4,30 \pm 0,47$ cm, panjang *shank* F1 $5,84 \pm 0,37$ cm; F2 $4,77 \pm 0,35$ cm. Pengukuran morfometrik itik betina Maggal yaitu panjang badan F1 $22,45 \pm 1,69$ cm; F2 $20,71 \pm 1,69$ cm, lingkaran dada F1 $27,60 \pm 1,54$ cm; F2 $26,82 \pm 1,21$ cm, lingkaran perut F1 $29,78 \pm 1,10$ cm; F2 $28,06 \pm 1,37$ cm, panjang leher F1 $20,76 \pm 1,63$ cm; F2 $19,96 \pm 1,81$ cm, panjang pubis F1 $5,62 \pm 0,48$ cm; F2 $4,61 \pm 0,57$ cm, panjang *shank* F1 $5,88 \pm 0,40$ cm; F2 $4,86 \pm 0,54$ cm. Berdasarkan uji “t”, ukuran morfometrik antara F2 itik Gallang dan Maggal serta F1 dan F2 itik Gallang dan Maggal tidak menunjukkan perbedaan ($P > 0,05$). Nilai heterosis karakteristik lingkaran dada dan panjang leher pada itik Gallang yaitu 0,04 % dan 0,11 % sedangkan ukuran lainnya bernilai negatif. Nilai heterosis lingkaran dada pada itik Maggal yaitu 0,04%, sedangkan ukuran lainnya bernilai negatif. Berdasarkan hasil penelitian dapat disimpulkan bahwa ukuran morfometrik itik hasil persilangan itik Magelang dengan Tegal generasi kedua (F2) relatif sama dan nilai heterosis positif pada lingkaran dada dan panjang leher yang menunjukkan ciri itik pedaging.

Kata kunci : Persilangan, heterosis, morfometrik, itik Tegal, itik Magelang

SUMMARY

AMIROTUN. Estimation of Heterosis of Morphometric Characteristic Measurement from Crossbreed Between Magelang with Tegal Ducks. The aim of this research was to assess the size of morphometric (body length, chest circumference, waist circumference, neck length, width pubis and shank length) and to estimate the heterosis characteristic morphometric measurement from crossbreeding Magelang duck with Tegal duck second generation (F2). The research was conducted in Experimental Farm, Animal Science Faculty, Jenderal Soedirman University, Purwokerto. The materials used were reciprocal crossbreeding ducks between male Tegal duck with female Magelang (Gallang) and male Magelang duck with female Tegal (Maggal). Total of F1 female ducks were 50 individuals consisted of 24 Gallang ducks and 26 Maggal ducks, males Maggal and Gallang ducks each 6 individuals. Total of F2 ducks are 50 individuals consisted of 24 Gallang ducks and 26 Maggal ducks. Ducks were measured at 12 weeks of age. The results of morphometric measurement of female Gallang ducks were body length of F1 22.85 ± 1.92 cm; F2 20.58 ± 1.61 cm, chest circumference F1 26.47 ± 1.10 cm; F2 27.10 ± 1.15 cm, abdominal circumference F1 29.37 ± 1.11 cm; F2 28.50 ± 1.07 cm; F1 neck length 20.14 ± 3.15 cm; F2 21.22 ± 1.82 cm, pubis length F1 5.60 ± 0.43 cm; F2 4.30 ± 0.47 cm, shank length F1 5.84 ± 0.37 cm; F2 4.77 ± 0.35 cm. Morphometric measurement of female Maggal ducks were body length of F1 22.45 ± 1.69 cm; F2 20.71 ± 1.69 cm, chest circumference F1 27.60 ± 1.54 cm; F2 26.82 ± 1.21 cm, abdominal circumference F1 29.78 ± 1.10 cm; 28.06 ± 1.37 cm; neck length F1 20.76 ± 1.63 cm; F2 19.96 ± 1.81 cm, pubis length F1 5.62 ± 0.48 cm; F2 4.61 ± 0.57 cm, shank length F1 of 5.88 ± 0.40 cm; F2 4.86 ± 0.54 cm. Based on "t" test showed that morphometric size F1 and F2 of Gallang and Maggal and F2 Gallang and Maggal was not significantly differences ($P > 0.05$). Heterosis values of neck length and chest circumference characteristic in Gallang ducks is 0.4% and 0.11%, while the other measurement was negative. Heterosis value of Maggal ducks chest circumference was 0.04%, while another body size was negative. Based on the result of this research concluded that morphometrics of F2 were same relatively and heterosis value was positive on chest circumference and neck length that showed characteristic of duck meat producer.

Keyword : crossbreeding, heterosis, morphometric, Tegal duck, Magelang duck