

## INTISARI

### TINGKAT FERTILITAS DAN PERKEMBANGAN EMBRIO BURUNG PUYUH UMUR 14 HARI SAMPAI 16,5 HARI

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Burung puyuh dengan nama latin *Coturnix – coturnix japonica* banyak memiliki potensi yang dapat dimanfaatkan baik daging maupun telurnya. Strain *Japanese quail* lebih dikenal dengan potensi telur yang dapat dihasilkan. Penelitian ini dilakukan untuk mengetahui tingkat fertilitas telur burung puyuh dan untuk mengetahui perkembangan embrio burung puyuh.

Dua puluh satu telur burung puyuh telah diinkubasi pada mesin tetas konvensional. Beberapa embrio burung puyuh dalam telur diambil setiap hari dan diukur panjang kepala, paruh, badan, sayap, kaki dan jantung. Tingkat fertilitas burung puyuh pada penelitian ini diukur dengan melihat presentase telur fertile yang berkembang pada hari ke 14 sampai hari ke 16,5.

Hasil penelitian menunjukkan bahwa Tingkat fertilitas telur burung puyuh umur 14 – 16,5 yaitu sebesar 76,2%. Hasil penghitungan panjang bagian tubuh embrio umur 14 hari adalah panjang kepala  $3,9 \pm 0,14$  cm, paruh  $0,41 \pm 0,01$  cm, badan  $3,95 \pm 0,64$  cm, sayap  $1,5 \pm 1,5$  cm, kaki  $1,7 \pm 0$  cm dan jantung  $0,55 \pm 0,07$  cm. Hasil penghitungan panjang bagian tubuh embrio umur 15 hari adalah panjang kepala 4 cm, panjang paruh 0,6 cm, panjang badan 4 cm, panjang sayap 1,7 cm, panjang kaki 2,2 cm dan panjang jantung 0,6 cm. Hasil penghitungan panjang bagian tubuh embrio umur 16 hari adalah panjang kepala  $4 \pm 0$  cm, panjang paruh  $0,6 \pm 0$  cm, panjang badan  $4,25 \pm 0,35$  cm, panjang sayap  $1,9 \pm 0,14$  cm, panjang kaki  $2,3 \pm 0,28$  cm, dan panjang jantung  $0,65 \pm 0,07$  cm. Hasil penghitungan panjang bagian tubuh embrio umur 16 hari adalah panjang kepala  $4 \pm 0,70$  cm, panjang paruh  $0,6 \pm 0$  cm, panjang badan  $4,5 \pm 0$  cm, panjang sayap  $2,05 \pm 0,21$  cm, panjang kaki  $2,05 \pm 0,21$  cm dan panjang jantung  $0,7 \pm 0,14$  cm. Tingkat fertilitas telur burung puyuh umur 14 – 16,5 hari tergolong rendah yaitu sebesar 76,2%. Embrio burung puyuh umur 14 – 16,5 hari tidak terlalu terlihat adanya perbedaan dalam hal perkembangan morfologinya. Seluruh bagian tubuh telah lengkap, berkembang dengan sempurna dan dapat diukur panjangnya mulai dari panjang kepala, paruh, badan, sayap, kaki dan jantung. Selain itu, tubuh embrio pun telah ditumbuhi bulu.

**Kata Kunci:** *Burung Puyuh, Tingkat Fertilitas Telur, Perkembangan Embrio*

**ABSTRACT**  
**FERTILITY RATE AND QUAIL EMBRYO DEVELOPMENT**  
**AT 14<sup>th</sup> UNTIL 16,5<sup>th</sup> DAYS OF INCUBATION**

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The quail, who has a Latin name *Coturnix – coturnix japonica*, has a lot of potency that can be utilized both meat and eggs. *Japanese quail* is known as a strain of quail which is a good producer of eggs. This research was aimed to observe the fertility rate of the quail egg and the development of the quail embryo.

Twenty one quail eggs were incubated in a conventional incubator. Some quail embryos were taken every day, then the length of the head, beak, body, wings, legs and heart of the embryos were measured and observed. The fertility rate of the quails were measured by calculating the percentage of fertile eggs that developed at 14 to 16.5 days of incubation.

The results showed that the fertility rate of quails eggs at 14 to 16.5 days of incubations are relatively low at 76.2%. The development of quail embryos between 14 to 16.5 days showed their feathers had grown evenly in almost all parts of the body. The measurement of the length of the head, beak, legs, wings and heart showed the length of the head, beak, legs, wings and heart increased once the embryos got older.

The results of the measurements of 14-day-old embryos were  $3.9 \pm 0.14$  cm of head length,  $0.41 \pm 0.01$  cm of beak length,  $3.95 \pm 0.64$  cm of body length,  $1.5 \pm 1.5$  cm of wings length,  $1.7 \pm 0$  cm of legs length and  $0.55 \pm 0.07$  cm of heart length. The results of the measurements of 15-day-old embryos were 4 cm of length head, 0.6 cm of beak length, 4 cm of body length, 1.7 cm of wing length, 2.2 cm of legs length and 0, 6 cm of heart length. The results of measurement of 16-day-old embryos were the length of the head was  $4 \pm 0$  cm, the length of the beak was  $0.6 \pm 0$  cm, the length of the body was  $4.25 \pm 0.35$  cm, the length of the wings was  $1.9 \pm 0.14$  cm, the length of the legs was  $2.3 \pm 0.28$  cm, and the length of the heart was  $0.65 \pm 0.07$  cm. The results of measurements of 16.5-day-old embryos were the length of the head was  $4 \pm 0.70$  cm, the length of the beak was  $0.6 \pm 0$  cm, the length of the body was  $4.5 \pm 0$  cm, the length of the wings was  $2.05 \pm 0.21$  cm, the length of the legs was  $2.05 \pm 0.21$  cm and the length of the heart was  $0.7 \pm 0.14$  cm. The quail embryos aged from 14 to 16.5 days has showed less visible differences of their morphological development. All parts of the body has completed, fully developed, can be measured and the embryo's body had been covered with feathers.

**Keywords:** *Quail, Egg Fertility Rate, Embryonic Development*