

Effect of selection for increased body weight on embryonic development during the first two days of incubation in the Japanese quail (*Coturnix japonica*)

S u m m a r y

Egg weight and embryo development stage after 24 and 48 hours of incubation were determined. In total, 426 eggs from 3 lines selected towards increased body weight at the 28th day of age (group S) and 3 control lines (group K) were investigated. Determination of the embryo development stage was carried out according to the modified classification proposed for Japanese quail by Zacchei [17]. Mean egg weight in the selected group was of 0,697 g higher than in the control group (insignificant difference). However, there were significant differences between lines and highly significant differences between females. The advancement of embryo development after 24th hour of incubation amounted on average to 4,30 points in S group and 4,73 points in K group. After 48th hour the respective values were 12,27 and 12,58. There were significant differences between lines within groups after 24th hour of incubation and highly significant differences between females in both examined periods of incubation. A low intraclass correlation of measurements from individual females in case of early embryo development was observed.