

Study of Some Biometric Parameters of the Incubated Eggs and Unhatched Eggs Depending on the Age of Breeding in Domestic Japanese Quail *Coturnix japonica* (Aves, Phasianidae)

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Abstract : The poultry industry (chicken and egg consumption) has become important in Algeria, but that does not prevent other farms from beginning to position themselves on the ground like the turkey, guinea fowl, partridge and quail Japanese. The breeding importance of this last, reside, also in game meat, egg quality and their therapeutic role without forgetting its growth performance. To the same effect, a study was held at the center of Zeralda hunting on various parameters such as the weight and number of eggs laid and this in order to know better the potential of production and reproduction of domestic quail. Egg laying has started from the 8th week of reproductive age, their harvest and their counts are performed daily up to 32 weeks of age and more. We have given the biometrics of incubated eggs and unhatched eggs. The parameters studied were the weight, large and small diameter, density, volume, shell index and the shape index. The work revealed that the maximum weight in males is reached in the 11th week, against the female, he reached the 13th week of age. Indeed, there is a good correlation ($R = 0.79$) between the weight of females and egg production. The rate of unhatched eggs varies between 11 and 43%, these values are recorded respectively in breeding under the age of 25 and 43 weeks. Furthermore, the biometric parameters of hatched and unhatched eggs have differences that are marked, especially during the beginning and end of lay. Further results will be subsequently exploited. Indeed, rearing Japanese quail is easy in technical terms and does not require big investment but its practical application vigilance and daily presence of the breeder within the farm who oversees the hygiene and well-being of its poultry.

Keywords : Japanese quail, biometrics, eggs, unhatching eggs, reproduction

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