

## Supplementation of Fig Fruit (*Ficus carica* linn.) Extract in Extender on Sperm Motility and Viability of Native Chicken Semen after Cooling

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**Abstract :** Fig fruit is the fruit of a tropical plant with content of flavanoids, vitamins A, C, and E which are antioxidants that effectively prevent and neutralize free radicals. This study was conducted to evaluate the supplementation of fig fruit extract in a physiological NaCl-based diluent on sperm motility and viability of native chicken semen after cooling. Semen was collected from 4 male mature cocks using massage method. Fresh semen evaluated for colour, pH, volume, concentration, mass motility, individual motility, life sperm and sperm abnormality. Semen was diluted with physiological NaCl-based extender supplemented with different levels of fig fruit extract (0, 10, 20 and 30 %) v/v with the ratio of 1 semen: 4 diluter. Semen used had mass motility of 2+ and motility of 70%. Immediately after dilution semen was stored in 3-5 °C and sperm motility and viability percentage were observed at 0, 12 and 24 h. The obtained data were analyze with Analysis of Variant (ANOVA) and Least Significant Difference were determined. The experiment was designed using completely random design (4 treatments and 10 replications). The results showed that the level of fig fruit extract had very significant effect ( $P < 0,01$ ) on sperm motility and viability percentage in 0, 12 and 24 h of cooling. It can be concluded that the best fig fruit extract level for resulting optimal sperm motility and viability was 10%.

**Keywords :** chock, antioxidant, fig fruit extract, sperm

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