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ARABE-BARBE HORSE'S SPERM MOTILITY IMPROVEMENT USING HONEY

Mohamed Amine Ayad¹, Mohamed Said Saim¹, Samia Meliani^{2*}, Fatima Zohra Demni¹, Sofiane Derrar¹

¹The Veterinary Sciences Institut, Ibn Khaldoun University of Tiaret, 14000, Algeria;

²Nature and life sciences faculty, Ibn Khaldoun University of Tiaret, 14000, Algeria;

*Corresponding Author Samia Meliani, email: meianisamia@hotmail.com;

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ABSTRACT

The aim of this study was to evaluate the effect of extender supplementation with different concentrations of Algerian honey on post-thawed sperm motility, and viability. Sperm samples collected from Arabe-Barbe stallions were subjected to cryopreservation with a modified Kenney, without any supplementation (control) or supplemented with 1%, 2%, 3%, 4% and 5% of Algerian honey. After thawing, all samples were maintained at 37 °C, while analyses were performed at 0, 30', 60' and 120'. Sperm motility percentage, and viability index percentage, of each sample were determined by conventional laboratory methods. Compared to the control group, supplementation with Algerian honey (2% and 3% significantly improved post-thaw sperm motility, at 0, 30', 60' and 120'. For all semen parameters, the lower concentration of honey (1%) and higher concentration (4% and 5%) did not show any significant differences compared with the control. These works showed that extender supplementation with Algerian honey provided a good protection of sperm parameters against cryopreservation injury, in comparison to the control groups.

Keywords: Arab-Barbe, Semen, cryopreservation, Honey, Motility.