MICROBIOLOGICAL PROFILE OF COMMERCIAL SEMEN OF BULLS IN THE REGION OF UBERABA-MG

(PERFIL MICROBIOLÓGICO DE SÊMENS COMERCIAIS DE TOUROS DA REGIÃO DE UBERABA-MG)

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The microorganisms present in the reproductive tract of cattle can contaminate semen and reduce the number and quality of embryos produced, resulting in diseases in recipient animals and their babies. The bull, being the source of infection, may trigger the direct transmission but other means contamination, such as the environment, employee handling and the water used to prepare the diluent cannot be ruled out. The present study aimed to detect the main agents present in commercial semen assessed in sperm cultures and the number of colony forming units per mL (CFU/mL). We conducted a retrospective study using the sperm culture records maintained in the Laboratory of Preventive Veterinary Medicine of the Veterinary Hospital of Uberaba in the period 2006-2012. These samples were subjected to serial dilution base 10 for counting colonies using the pour plate technique and plates containing between 30 and 300 colonies were selected for further identification of microorganisms. The colonies were subjected to Gram staining method, evaluated by optical microscopy (100x) in gram-positive and/or negative and submitted to specific biochemical tests. From the 225 semen samples analyzed, 146 (64.9%) had microorganisms growth. The most prevalent agents were *Enterobacter* spp (52.74%) and *Acinetobacter* spp (20.55%). From the positive semen samples, 82.19% showed growth above 500 colony forming units/mL (CFU/mL). The result is somewhat concerning because studies in the literature report that the acceptable contamination range is up to 500 CFU/mL. This study shows the importance of investigating the types of microorganisms present in samples throughout the industrialization process of semen, so that control measures are put in place in order to minimize financial losses and preserve animal health.

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