

DETECTION OF *Cryptosporidium parvum* IN MARES AND FOALS

(DETECÇÃO DE *Cryptosporidium parvum* EM ÉGUAS E POTROS)

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The first description of infection by *Cryptosporidium* in Arabian horse foals was reported for immunocompromised patients. The occurrence of cryptosporidiosis may vary according to geographic location, climate, management, population and diagnostic method used. Information about the molecular epidemiology to investigate the zoonotic potential of protozoan infection in these hosts is scarce. In order to characterize molecularly the protozoan *Cryptosporidium* spp in horses, 92 foals were examined (56 males and 36 females) aged three to 330 days and 24 mares from 11 farms in northwestern São Paulo, Brazil. The animals were of the following breeds: Quarter Horse, Mangalarga Marchador, Paint Horse, Crioula and Pampa. Fecal samples were collected directly from the rectum of animals and frozen for carrying out the nested-PCR with amplification of the fragments of the 18S subunit of the ribosomal RNA gene. Positive samples were subjected to sequencing for identification of *Cryptosporidium* species. The study was approved by the Ethics Committee on Animal Experiments of the College of Dentistry of Araçatuba - UNESP (No. 2009-002165). The *Cryptosporidium* spp infection rates were 21.7% and 29.1%, in foals and mares, respectively ($P \geq 0.05$). There was no difference between positives and the variables, gender and age ($P \geq 0.05$). No significant association was found between mares and their foals. The sequencing of the three positive samples detected *Cryptosporidium parvum*. Two positive foals had diarrhea, but it is not possible to assert that these symptoms were caused by the protozoan, as no tests were performed to determine the occurrence of other possible etiologic agents. In Brazil, this is the first study of molecular characterization of this parasite in horses, with identification of the species of the parasite.

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