



Communication

[Comunicação]

Frequency of gastrointestinal parasites in Creole horses from the Southern Rio Grande do Sul

[Frequência de parasitos gastrintestinais em equinos da raça Crioula do sul do Rio Grande do Sul]

J.S. Lignon¹, N.S. Martins², T.A.E.M. Cardoso³, M.S. Leão³, T.G. Pellegrin³, J.L.T. Camassola³, T.A. Antunes⁴, F.G. Pappen⁴, D.M. Pinto⁴

¹Médica Veterinária - Universidade Federal de Pelotas - Capão do Leão/RS

²Aluna de pós-graduação - Universidade Federal de Pelotas - Capão do Leão/RS

³Aluno de graduação - Universidade Federal de Pelotas - Capão do Leão/RS

⁴Universidade Federal de Pelotas - Capão do Leão/RS

Brazilian horse breeding annually moves around R \$ 16.15 billion (MAPA, 2016) and boosts the country's primary economic sector. The market for Creole breeding animals has been expanding due to its high zootechnical potential and universality in several equestrian events, which eventually add high financial values. According to MAPA (2016), Rio Grande do Sul has 322,000 Creole breeding units. This breed is considered a symbol for the state population, since the development of this people is intrinsically related to its presence (Gianluppi *et al.*, 2009). In the state, the breeding is typically extensive, often combined with high animal density, which leads to constant infections with various parasites (Reinemeyer, 2009).

The horse is used in several work, sports, and leisure activities, which demand good performance and animal health. One of the facts that change these aspects is the endoparasites presence, which is a frequent threat to the horse's health and well-being. It also can cause abdominal discomfort, retarded growth, decrease in development and performance of the individual, as well as high treatment costs and even death (Madeira de Carvalho, 2006). This study aimed to retrospectively analyze the frequency of gastrointestinal parasites in naturally infected Creole horses in southern Rio Grande do Sul (RS).

The actual study was carried out with results of fecal sample processing, obtained from the

laboratory database of the Parasitic Disease Study Group (GEEP) of the Veterinary School - Pelotas Federal University (UFPel) from July 2017 to July 2018. 585 fecal samples of adult male and female Creole horses from breeding centers located in the southern region of Rio Grande do Sul (RS), Brazil, were used. The samples were analyzed by the Gordon and Whitlock technique (1939) and the result is expressed in eggs per gram of feces (EPG). Eggs were identified according to their morphology, according to Hoffmann (1987).

From the total samples, 89.74% (525/585) were positive for some helminth, with an average count of 349.25 EPG. 57.60% (337/585) of the samples showed eggs from the Strongylidae family, which are the most frequent parasites in the population that was studied. *Parascaris* spp. infections and *Strongyloides* sp., presented frequencies of 2.22% (13/585) and 1.53% (9/585), respectively. Mixed infections were found in 27.42% (144/585) of the samples.

López (2017) in Pernambuco (Brazilian State) and Martins *et al.* (2017) in Pelotas region/RS found similar results, showing that 87.1% and 84.1% of the samples analyzed, respectively, were positive for some helminth eggs. In addition, López (2017) found a frequency of 97.97% of Strongylidae family, which is in agreement with this study, Molento (2005) and Madeira de Carvalho (2001), who mention that the Strongylidae family nematodes are the parasite

gastrointestinal disorders most commonly found in horses.

Thus, it can be observed that the proportion of parasitized horses in the sampled properties is high, emphasizing the importance and necessity of parasite control programs this region, based on the correct diagnosis and proper use of

antiparasitic, as well as the use of preventive measures. Besides that, it is concluded that the most frequent parasites in the horse population in southern of Rio Grande do Sul belong to the Strongylidae family.

Keyword: endoparasites, horse breeding, helminthes

RESUMO

*A criação de equinos brasileira movimenta anualmente cerca de R\$ 16,15 bilhões e impulsiona o setor econômico primário do país. O mercado de animais da raça Crioula vem se expandindo devido ao seu alto potencial zootécnico. No Rio Grande do Sul, a criação é tipicamente extensiva, aliada, muitas vezes, à alta densidade animal, o que favorece as constantes infecções por diversos parasitos. O objetivo deste estudo foi analisar retrospectivamente a frequência de parasitos gastrointestinais em cavalos da raça Crioula naturalmente infectados na região sul do Rio Grande do Sul. Foram utilizadas 585 amostras de fezes de equinos da raça Crioula, adultos, de ambos os sexos, recebidas de criatórios e centros reprodutivos localizados na região. Do total de amostras, 89,74% (525/585) foram positivas para algum helminto. Em 57,60% (337/585) das amostras, observaram-se somente ovos da família Strongylidae. Infecções por *Parascaris spp.* e *Strongyloides sp.*, apresentaram frequências de 2,22% (13/585) e 1,53% (9/585), respectivamente. Assim, pode-se concluir que os parasitos mais frequentes na população equina da região sul do RS pertencem à família Strongylidae.*

Palavras-chave: endoparasitos, equinocultura, helmintos

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