Prevalence of Gastrointestinal Helminthiasis in Beef Cattle During Dry Season in Bangkalan Regency, Madura, Indonesia

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Abstract. This study aims to observe and determine the risk factor of gastrointestinal helminthiasis among Madura beef cattle and Madura-Limousine crossbreed cattle in Bangkalan Regency during dry season. A cross sectional method was applied in this study design. A total of 240 feces from 240 beef cattle were collected during dry season (July to August 2020). Observation of worms in the feces was conducted using the McMaster method. In addition, the sedimentation method was used to identify worms from the Trematode class. Data were analysed descriptively and statistically using chi-square method. The results showed that the prevalence of helminthiasis during dry season reached 20 %, with the most prevalence eggs type belongs to Strongyle spp. (14.5 %), Fasciola sp. (3.3 %), Trichostrongylus sp. (1.25 %), Strongyloides sp. (0.8 %), and Paramphistomum sp. (0.8 %). The degree of infection observed from the average number of worm eggs, was mild. Average geometric number of worm eggs per gram of feces (EPG) was Trichostrongylus sp. 233 (range 100 to 400), Strongyle spp. 122 (range 50 to 350), Strongyloides sp. 75 (range 50 to 100), Paramphistomum sp. 25 (range 1 to 50), and Fasciola sp. 1 (range 0 to 1). Hekminthiasis among beef cattle in Bangkalan Regency was not affected by the type of cow but was significantly affected by gender and age.

Keywords: Animal husbandry, Gastrointestinal disease, livestock, parasite infection

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