Re-orientation of parasite-management in adult horses in Switzerland

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The indication for use of pyrantelum against strongyle nematode in horses are the summer months (August / September), where the reduction in the number of faecal eggs (FECRT) was much higher (99.77%).

The standard parasite management of horses based on regular anthelmintic treatments, has resulted in a worrying expansion of resistant cyathostomin populations, which may considerably impair control. The aim of this study was to obtain a retrospective (2010 – 2016) nationwide analysis of faecal egg count (FEC) data from the Swiss adult horse population, related to horse age and geographic region. Thirteen labs provided a total of 16,387 FEC data of horses, aged four to 39 years. In addition, 3,813 questionnaire feedbacks from owners covering equine management practices were analyzed in the year 2017. Independent of the annual sample size the yearly patterns of the FEC were very similar. Seventy-eight percent (N= 12,840) of the samples were negative and 90% (N=14,720) showed a FEC below or equal to 200 EPG. The annual mean strongyle FEC ranged between 60 and 88 eggs per gram (EPG) with a total mean of 75 EPG. With 222 EPG the mean FEC in the French part of Switzerland was significantly higher ($P<0.05$) than in German-speaking region (60 EPG). Sixty-eight percent (N=8,476) of the horses were dewormed without diagnosis, two percent (N=240) were not dewormed at all, whereas for 30% (N=3,721) the selective anthelmintic treatment (SAT) concept was applied. The SAT implementation rate differed significantly ($P<0.0005$) between regions, with 33, 20 and 25% for the German, French and Italian speaking areas, respectively. The rate of horses spending 16–24h on pasture per day was higher in the French-speaking region compared to the German speaking part ($P<0.0001$). In addition, pasture hygiene was practiced at a significantly lower rate in the French-speaking part compared to the German and Italian speaking regions (both $P<0.0001$). The shift towards the SAT-strategy represents a very promising development with respect to mitigating the further spread of anthelmintic resistance in Switzerland.