

COMPARATIVE ANALYSIS OF DIFFERENT MODIFICATIONS OF MCMASTER METHOD

Antanas Vyšniauskas, Asta Pereckienė, Vida Kaziūnaitė

*Lietuvos veterinarijos akademija, Veterinarijos institutas, Parazitologijos laboratorija, Mokslininkų g. 12,
LT – 08662, Vilnius; tel./faks. (+370 5) 272 9727; el. paštas: helmint@ktl.mii.lt*

Summary. The efficiency of seven modifications of McMaster method was compared. Investigations were based on analysis of horse faeces infected with strongyle eggs. Each modification was evaluated after examination of 30 faecal samples. The evaluation was based on the number of positive samples, total number of eggs, variation of EPG and complexity of modifications. Examination by S. A. Henriksen & K. Aagaard (1976) and G. M. Urquhart (1996) modifications have shown the largest number of positive samples. The highest EPG was obtained by G. M. Urquhart (1996) modification. To this result was given the grade of highest efficiency equalled to 1. Other modifications were evaluated dividing results of EPG by EPG obtained by G. M. Urquhart modification. Further, the efficiency coefficient of each modification was calculated. It varied from 0.98 to 0.66. The smallest variations of egg counts were obtained by S. A. Henriksen & K. Aagaard (1976) modification. It was concluded that D. Thienpont (1986) is the simplest, and S. A. Henriksen & K. Aagaard (1976) modification is the most complex, but with the highest performance. S. A. Henriksen & K. Aagaard (1976) modification of McMaster method had a lower efficiency coefficient according to EPG, and was most suitable for research as the results obtained by this modification were more reliable. Examination by S. A. Henriksen & K. Aagaard (1976) modification detected 100% of positive samples with minimal EPG variation, but for analysis it was spent more man-hours compared to the remaining methods.

Keywords: horses, McMaster method, modifications, strongyle eggs.