

A COMPARATIVE ANALYSIS OF MODIFICATIONS OF McMASTER METHOD FOR DIAGNOSIS OF GASTROINTESTINAL NEMATODES IN PIGS

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Summary. The study was designed to compare the seven modifications of McMaster faecal egg counting (FEC) method to evaluate *Ascaris suum* eggs in pigs faeces. Thirty fresh faecal samples positive to *A. suum* for each modification were evaluated. The analysis was based on the number of positive samples, total number of *A. suum* eggs, variation of the total egg counts per gram (EPG) of faeces and the ease of use of each of the modifications. The following modifications were evaluated as reported by: (I) – Henriksen ir Aagaard (1976), (II) – Kassai (1999), (III) ir (IV) – Urquhart (1996), (V) ir (VI) – Grønvold (1991) bei (VII) – Thienpont (1986).

The highest EPG was obtained by method (I) modification. To this result was given the grade of the highest efficiency equaled to 1. The efficiency coefficient of each modification was calculated, which varied from 0,34 to 1. The lowest variation of egg counts were found by method (V).

The results from this study demonstrated that from seven modifications method (VII) was the easiest and quickest but least sensitive, and method (I) was most complex, but most sensitive. Our study demonstrated, that examining two or three chambers of the McMaster chamber resulted in increased sensitivity for all methods.

Key words: *Ascaris suum*, McMaster, EPG, efficiency, pigs.