

## A SURVEY OF EQUINE GASTROINTESTINAL PARASITES IN THE WAGGA WAGGA DISTRICT OF NSW

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Virtually all grazing horses harbour gastrointestinal parasites which are major factors in the aetiology of equine gastroenteric disease (Duncan and Love 1991). Adequate control of these parasites is necessary to ensure the successful growth and health of horses, but this is often not very well managed. The first step in improved internal parasite control is the identification of the parasites present. Therefore the objective of this study was to determine the species of gastrointestinal parasites, detectable by faecal egg count and differentiation of third stage larvae, present in normal adult horses grazing non-irrigated pasture in the Wagga Wagga district during autumn and winter.

Fresh faecal samples were collected from 500 horses and subjected to faecal egg counts and larval differentiation to determine the level and species of parasitic infection present respectively. The egg count technique was a modified McMaster technique (Anon 1988). *Parascaris equorum* eggs were able to be identified at this stage, while larval cultures were necessary to allow identification of the strongyle species. The faecal culture technique also followed that of Anon (1988) and the third stage larvae were identified according to the key of Soulsby (1965) with *Cyathostomum* spp. replacing *Trichonema* spp. (Lichtenfels 1975).

Seven species and three genera were identified: *Parascaris equorum*, *Trichostrongylus axei*, *Gyaloecephalus capitatus*, *Oesophagodontus robustus*, *Strongylus equinus*, *S. edentatus*, *S. vulgaris*, *Cyathostomum* spp., *Poteriostomum* spp., and *Triodontophorus* spp.

**Table 1. Prevalence of equine gastrointestinal parasites**

Parasite	Number of horses (*)	Percentage	Parasite	Number of horses (*)	Percentage
<i>Cyathostomum</i> spp.	358	71.6	<i>S. edentatus</i>	18	3.6
<i>Poteriostomum</i> spp.	105	21	<i>G. capitatus</i>	18	3.6
<i>T. axei</i>	87	17.4	<i>S. equinus</i>	8	1.6
<i>Triodontophorus</i> spp.	64	12.8	<i>O. robustus</i>	7	1.4
<i>S. vulgaris</i>	57	11.4	<i>P. equorum</i>	5	1

\*An individual horse may have more than one parasite present

*Cyathostomum* spp. was the most prevalent parasite occurring in over 70% of surveyed horses, and was the sole parasite detected in 34% of horses. The magnitude of *Cyathostomum* spp. infection ranged from 20 to 4,140 larvae per gram of faeces. The variation in parasite burdens found in this study may be attributed to the varying management practices in use on the properties surveyed, however the high prevalence of *Cyathostomum* spp. indicates they are of major importance and one of the equine gastrointestinal parasites to be targeted in future control programs.

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