

Accepted Manuscript

Title: Parasites of farmed marals in Kazakhstan

Authors: Aida M. Abdybekova, Akhmetzhan A. Sultanov, Nurgul M. Dzhusupbekova, Aigerim A. Abdibayeva, Ainur A. Zhaksylykova, Raushan A. Kerimbaeva, Gulnazi D. Akhmetova, Paul R. Torgerson



PII: S0921-4488(17)30170-0
DOI: <http://dx.doi.org/doi:10.1016/j.smallrumres.2017.06.011>
Reference: RUMIN 5503

To appear in: *Small Ruminant Research*

Received date: 23-3-2017
Revised date: 11-6-2017
Accepted date: 12-6-2017

Please cite this article as: Abdybekova, Aida M., Sultanov, Akhmetzhan A., Dzhusupbekova, Nurgul M., Abdibayeva, Aigerim A., Zhaksylykova, Ainur A., Kerimbaeva, Raushan A., Akhmetova, Gulnazi D., Torgerson, Paul R., Parasites of farmed marals in Kazakhstan. *Small Ruminant Research* <http://dx.doi.org/10.1016/j.smallrumres.2017.06.011>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Parasites of farmed marals in Kazakhstan

Aida M. Abdybekova¹, Akhmetzhan A. Sultanov, Nurgul M. Dzhusupbekova¹, Aigerim A. Abdibayeva, Ainur A. Zhaksylykova¹, Raushan A. Kerimbaeva¹, Gulnazi D. Akhmetova², Paul R. Torgerson³

¹Kazakh Scientific Veterinary Research Institute, Almaty, Kazakhstan

²Kazakh National Agrarian University, Almaty, Kazakhstan

³Section of Veterinary Epidemiology, Vetsuisse Faculty, Zürich University, Winthurerstrasse 270, Zurich, Switzerland

Highlights

- The farming of maral (a type of red deer- *Cervus elaphus*) is an expanding livestock industry in Kazakhstan.
- This study investigated the gastrointestinal parasites of 508 farmed marals Kazakhstan
- This study revealed 6 species of nematodes: *Bunostomum phlebotomum*, *Capillaria bovis*, *Haemonchus contortus*, *Nematodirus spathiger*, *Oesophagostomum venulosum* and *Trichuris skrjabini*.
- Two cestode species were identified: *Moniezia benedeni* and *Moniezia expansa*.
- Three species of coccidia: *Eimeria cervi*, *E. gallivalerioi* and *E. robustus* were found.

Abstract

The farming of maral (a type of red deer- *Cervus elaphus*) is an expanding livestock industry in Kazakhstan. However, to date there is little knowledge of the parasitic fauna that infect farmed deer in Kazakhstan. This study investigated the gastrointestinal parasites of 508 farmed marals from the south and east of Kazakhstan between spring and autumn 2015. When fecal samples were being collected, the presence of any ectoparasites were also noted and specimens taken for identification. This study revealed 6 species of nematodes: *Bunostomum phlebotomum*, *Capillaria bovis*, *Haemonchus contortus*, *Nematodirus spathiger*, *Oesophagostomum venulosum* and *Trichuris skrjabini*. Two cestode species were identified: *Moniezia benedeni* and *Moniezia expansa*. Three species of coccidia: *Eimeria cervi*, *E. gallivalerioi* and *E. robustus* were found. Ectoparasites recovered were the deer ked *Lipoptena cervi*, larvae of *Hypoderma diana* and *Booponus borealis* and the tick *Dermacentor marginatus*.

Key words:

Maral, *Cervus elaphus sibiricus*, parasites, helminths, coccidia, Kazakhstan, *Bunostomum*, *Capillaria*, *Haemonchus*, *Nematodirus*, *Oesophagostomum*, *Trichuris*, *Eimeria*, *Lipoptena*,

Download English Version:

<https://daneshyari.com/en/article/5544111>

Download Persian Version:

<https://daneshyari.com/article/5544111>

[Daneshyari.com](https://daneshyari.com)