Relationship between parasites and performance in nutrias (*Myocastor coypus*) under intensive production system

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Statement of the Problem: The nutria (*Myocastor coypus*) is a semiaquatic rodent indigenous to South America, and has been introduced around the world for fur and meat farming. Concerning the parasitological aspects, little data has been published in the literature of nutria farms. There is also lack of data regarding to relationship between parasites prevalence and performance of nutrias. The purpose of the study was to evaluate incidence of parasites in nutria farms in the Czech Republic, and then to compare performance of animals with a high and a low parasites occurrence.

Methodology & Theoretical Orientation: The study was conducted on 13 farms from which, feces samples were collected for three years. After analyses, the farms were divided into two groups, farms with a high respectively a low prevalence of parasites, where fertility and growth of young nutrias were evaluated.

Findings: The evaluation of the farms indicated infection with the following parasites: *Trichuris* sp., *Stryngyloides* sp., *Trichostrongylus* sp., *Eimeria seidelli*, *Eimeria nutriae*, *Eimeria coypi* and *Eimeria myopotami*; however, animals did not show clinical sings of the parasitic infections. In farms with the high parasites prevalence, litter size approximately 16% and number of weaned nutrias 18 % were lower than in farms with the low prevalence. Slaughter weight of young nutrias at the age of eight months was to 18% lower in males and 24 % in females from a group with a high prevalence of parasites.

Conclusion & Significance: The results of the present study indicate that even the farmed nutrias did not show clinical sings of parasitic infections, are a reservoir of parasites. A high prevalence of parasites decreases fertility and growth of nutrias. Therefore, it is important to pay an attention to prophylaxis in farms to reduce spreading of parasites and improve performance.

Speaker Biography

Eva Tumova works on interaction of genotype and environmental conditions, including nutrition, in poultry, rabbits and nutrias. Her recent research is oriented on the effect of quantitative feed restriction in chickens, rabbits and nutrias on digestive physiology and meat quality. She also conducts experiments with housing systems, oviposition and egg quality in laying hens. Her teaching activities are in Bachelor, Master and Doctoral programmers in poultry, rabbits and fur animal husbandry.

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