

# Diagnosis of *Strongyloides papillosus* by using of PCR method and 18S rRNA gen

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## Abstract

*Strongyloides papillosus* is an important intestinal nematodes in ruminants including, calf, sheep and goat that their life cycle alternates between free-living and parasitic generations and autoinfection can occur in hosts. This infection in adult ruminants asymptomatic but in young ruminant (calves and lambs) is causing severe strongyloidiasis and sudden death syndrome. *Strongyloides papillosus* causes sudden cardiac arrest by ventricular fibrillation which is preceded by continuous sinus tachycardia in calves and lambs. The main objective of this study, was to determine the prevalence of *Strongyloides papillosus* infection in livestock faecal samples by using PCR in Kurdistan province. In this present, 30 calf faecal samples, 30 sheep faecal samples and 30 goat faecal samples were examined by PCR with specific primers from the 18srRNA gene of *Strongyloides papillosus*. The results of this study, revealed that 29(96.7%) of calf samples, 12(40%) of sheep samples, and 15(50%) of goat samples infected with *Strongyloides papillosus*. Results of this study revealed an application of PCR method for amplification of 18srRNA gene for diagnosis of *Strongyloides papillosus* nematod is appropriate.

Key words: *Strongyloides papillosus*, PCR, 18S rRNA gen, Kurdistan Province

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