Detection of mycoplasma from Goat lungs collected from Abattoir samples

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Abstract
Respiratory diseases are a major cause of death in goat kids and decreased productivity in older goats. Several *Mycoplasma* species cause respiratory diseases in goats. Respiratory *Mycoplasma* infections have not been reported in Sri Lankan goats. However, previous studies have reported relatively high prevalence of respiratory *Mycoplasma* infection among goats in neighboring countries. The highest incidence was reported in Pakistan (20%) followed by India and Bangladesh (8%). PCR is a rapid and simple method of detection and identification of the *Mycoplasma* species. The present study investigated the occurrence of *Mycoplasma* in goats using randomly selected lung samples obtained from Colombo municipal slaughterhouse using PCR. A total of 36 lung samples obtained from the slaughterhouse along with one sample from a goat that died of atypical pneumonia were used in this study. The DNA was extracted using DNeasy blood and tissue DNA extraction kit (Qiagen) according to manufacturer's instructions and PCR was performed using genus-specific primers for *Mycoplasma* and species-specific primers for *Mycoplasma arginini, Mycoplasma ovipneumoniae* and *Mycoplasma mycoides* subspecies *capri* according to previously described protocols. It was observed that 63.8% (23/36) of the samples were positive for *Mycoplasma* genus. The clinical case was also positive for *Mycoplasma* genus. This study has provided preliminary evidence for the presence of *Mycoplasma* from respiratory tract of goats in Sri Lanka. Further studies are necessary to identify specific pathogenic *Mycoplasma* spp. causing respiratory infections in Sri Lankan goats.

Keywords: Abattoir samples, Incidence, *Mycoplasma*, PCR, Primers

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