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PNEUMONIA DUE TO PASTEURELLA HAEMOLYTICA IN A HERD OF GOATS

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Although pneumonia is considered an important health hazard affecting goat production, no systematic investigations into this problem have been carried out in Sri Lanka. Horadagoda¹ after having examined a number of lungs of slaughtered animals suggested that pneumonia could be an important health problem among goats in Sri Lanka. He isolated *P. haemolytica* from 75% of lungs of slaughtered animals which had pneumonic lesions.

We describe the clinical and bacteriological findings of an investigation into a problems of chronic pneumonia in a herd of goats at the New Zealand Farm Ambewela.

At the time of investigation the herd consisted of about 200 goats of all ages and both sexes. All the animals belonged to Sannan breed. The animals were reared under semi-intensive system; housed in the nights and sent out to pastures only during dry weather.

The records at the farm showed that in 1984 about 30% of the goats of all ages (1 month to adults) had pneumonia and cough and the incidence increased gradually until at time of investigation (May 1986) almost all animals except kids below 2 weeks were affected. The affected animals had responded to prolonged antibiotic treatment but succumbed to the condition shortly after treatment was withdrawn. Although the mortality was very low the growth of the affected animals was unsatisfactory. Untreated animals usually died.

A detailed investigation was undertaken in May 1986, with a view to control the disease. All the animals (about 200) were examined physically. It was observed that almost all animals except very small kids (below 2 weeks) had husky unproductive cough.

A very few animals had thin watery nasal discharges too. Rectal temperatures of all animals were in the normal range for the species. There were no other external symptoms. The dung samples were negative to gastro-intestinal parasites. The blood smears did not show the presence of any blood parasites. Naso-pharyngeal swabs taken from twenty five animals representing all age groups, showing varying intensities of cough were cultured on blood agar. *P. haemolytica* was isolated from all swabs and a streptococcus species was also isolated from about 30% of the cases. An animal having cough; typical of the sick groups was slaughtered and swabs collected from trachea, bronchi, bronchioles and heart blood were cultured on blood agar. *P. haemolytica* was isolated from all swabs. Agglutination tests showed that all these organisms belonged to *P. haemolytica* type II. At post mortem examination increased pleural and pericardial fluid, adhesion of pleura to pericardium, pericarditis, atelectasis of portions of epical lobes and intermediate lobes of lungs were the only lesions observed. Histopathological studies of some affected areas of lungs showed evidence of fibrinous bronchopneumonia.

It was concluded that *P. haemolytica* played a significant role in the pneumonic condition among the goats in this herd. It was also thought that an auto-vaccine with the *P. haemolytica* would reduce the severity of the disease among the affected animals and would prevent new infections in the newborns.

Reference

1. Horadagoda, N.U. (1981) *M.V.Sc Thesis*, Univ. Sri Lanka, Peradeniya