J. Vet Malaysia (1990) 2(2): 147-148

LETTER TO EDITOR

SEASONAL OCCURRENCE OF CAPRINE PNEUMONIC PASTEURELLOSIS IN CENTRAL PENINSULAR MALAYSIA

SIR: Pneumonic pasteurellosis is an important disease of goats that has been reported to occur in many countries (Ojo, 1977). Many stress factors such as transportation and climate have been shown to influence the disease occurrence in many species of animals particularly sheep (Jubb *et al.*, 1985). This is to report the relation between the number of caprine pneumonic pasteurellosis cases and the rain distribution in central Peninsular Malaysia.

A total of 565 post-mortem examinations on goats that died from six farms in southern Perak, Selangor and Negeri Sembilan over a 5 - year period from 1985 to1989 were analysed for pneumonic pasteurellosis. One thousand four hundred and forty nasal swabs were collected within a period of 1 year from the same farms for the isolations of *P. haemolytica*. The monthly case of pneumonic pasteurellosis was expressed as a percentage of the total goat cases submitted for post-morterm examinations in the particular month and the bacterial isolation was expressed as a percentage of total nasal swabs examined for the month. The percentages were examined graphically and correlated with the monthly rainfalls to determine whether there were any consistent seasonal patterns.

The average monthly percentage of deaths due to pneumonic pasteurellosis within the 5-year period was 31.5% (11 - 49%) and the average annual percentage was 32.4% (21.6 - 40.6%). The highest annual percentage of pneumonic pasteurellosis was observed in 1988 whereas the lowest in 1986.

There was a consistent seasonal pattern of caprine pneumonic pasteurellosis in each of the five years under study. Similar seasonal pattern was observed for the intra-nasal isolations. Highest and lowest levels correlated well with the highest and lowest levels of rainfall (Fig. 1). The highest levels of pneumonic pasteurellosis and intra-nasal isolations were observed during the rainy seasons from March to April and from September to December, whereas the lowest levels were observed during the dry seasons from January to February and from June to August. The different levels of pneumonic pasteurellosis and intra-nasal isolation between the two seasons were statistically significant ($p<0.01$).

The results of this study agree with observations made on pneumonia of sheep by McIlroy *et al.* (1989) that there is a consistent seasonal pattern of pneumonia in sheep and goats. Reduction of climatic stress such as transporting animals in the dry season will probably reduce the incidence of this disease.

ACKNOWLEDGEMENTS

Thanks to Basri Kasim, Kamaruzzaman Ahmad, Hajaraih Selamat and Norlida Abu Bakar for their technical assistance. Financial support from IRPA grant number 50245 is gratefully acknowledged.

JASNI, S., ZAMRI-SAAD, M., KAMAL HIZAT, A.*, MUTALIB, A.R., SALIM, N.and SHEIKH-OMAR, A.R.

Faculty of Veterinary Medicine and Animal Science, Universiti Pertanian Malaysia, 43400 UPM Serdang, Selangor and *Animal Research Division, MARDI, P.O. Box 12301, 50774 Kuala Lumpur.

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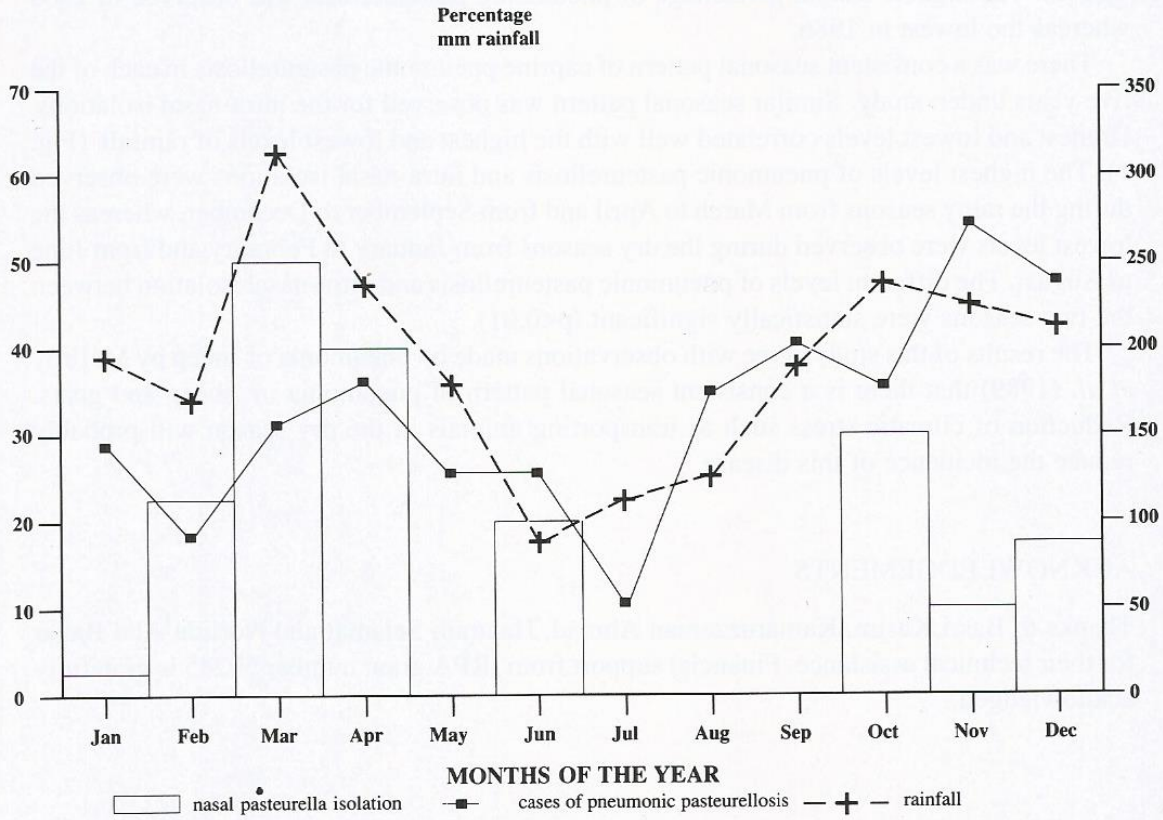

FIG. 1. The average monthly prevalence of pneumonic pasteurellosis and nasal pasteurella isolation in relation to the rainfall.