ISOLATION AND CHARACTERISATION OF Dichelobacter nodosus FROM FOOTROT INFECTED SHEEP IN MALAYSIA

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Introduction
Dichelobacter nodosus is the causative agent of severe footrot, a contagious debilitating disease which affects ruminants particularly sheep and goats. The disease is characterised by separation of the horn of the hoof from the underlying soft tissues resulting in lameness, loss of body condition and reduced wool production (Rood et al. 1996). The first case of footrot in Malaysia was detected in early 1994 at Institut Haiwan Kluang farm and the disease is now known to be present in several other farms. Information on the etiological agent of the disease is important to understand the situation in Malaysia enabling of suitable measures to control and if possible to eradicate footrot. This study involved isolation, identification and characterisation of D. nodosus isolates.

Materials and Methods
D. nodosus isolates were obtained from sheep suffering from footrot from three farms in Johor, Kedah and Terengganu. Lesion materials were inoculated onto 4% hoof agar (HA) plates (Egerton and Roberts, 1971) and incubated anaerobically at 37°C for 3-4 days. Suspected colonies were purified on 4% HA. Serogrouping was done by slide agglutination test as described by Claxton et al. (1983) and the serotype was determined by the microtitre plate agglutination test. Confirmation of field isolates was done by PCR using specific primers. The elastase and gelatin gel test were applied to isolates in order to determine the virulence. Isolates in-"