Research Note

CLASSIFICATION OF THE BOVINE FARCY ORGANISM

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Farcy is an infectious disease commonly affecting cattle in Africa. The original reports (Nocard, 1888) described the organism responsible for the disease as a Nocardia, but Chamoiseau (1974) has classified it as an atypical Mycobacterium. Recently, Kanetsun and Bartoli (1972) demonstrated the value of a simple mycolic acid determination in differentiating between Nocardia and Mycobacteria and this was applied to strains isolated from bovine farcy in the Sudan.

Lymph nodes affected with bovine farcy were collected from different abattoirs of the Sudan. The pus contained was treated with 5 per cent oxalic acid, washed twice with normal saline and sown on Lowenstein-Jensen (modified from Jensen, 1955).

The cultured medium was incubated aerobically at 37°C and observed for four weeks. Mycolic acid was extracted using the method of Kanetsun and Bartoli (1972) and the melting point recorded.

Macroscopic colonies of some isolates appeared in 10 days, others took 4 weeks to be visible. Eight mg dry weight of mycolic acid were extracted from each g wet weight of the isolates. The melting point was 50–52°C.

The result of these findings supports the view that the etiological agent of bovine farcy is an atypical Mycobacterium species. However, as Chamoiseau has pointed out (1974), the typical morphology of the organism from lesions, its activity on malonamide and the regular pathogenicity for guinea-pigs are exceptional to atypical Mycobacteria. Thus the authors support Chamoiseau in the designation Mycobacterium farcinogenes var tschadense for the slow growing strains with weak activity on amides, and Mycobacterium farcinogenes var senegalense for the rapid growth strains with a strong activity on amides. Further work is in progress.

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