A - 28 **SENSITIVITY PATTERN IN CATTLE AND BUFFALOES TO TUBERCULINS FROM MYCOBACTERIUM KANSASII AND MYCOBACTERIUM INTRACELLULARE**

M. R. M. Pinto[1], D. D. Wanasinge[2], C. Navaratnam[1]

and

J. V. Weliange[1]

([1]*Department of Microbiology, Faculty of Medicine, University of Peradeniya*)
([2]*Veterinary Research Institute, Gannoruwa, Peradeniya*)

Previous studies have shown that there is a high prevalence of sensitization to mycobacterial antigens among livestock in Sri Lanka, as shown by tests using the single intradermal comparative tuberculin test. However, the specific source of such sensitization is yet to be demonstrated. In this study, similar tuberculin testing was carried out using in addition to standard mammalian and avian tuberculins (as in the studies reported earlier), tuberculins prepared from *Mycobacterium kansasii* and *Mycobacterium intracellulare* as well, on the same animal. 1,054 cattle at six different geographical localities (Ambewela, Mahaberiyatenne, Undugoda, Nikaweratiya, Nattandiya and Polonnaruwa) and 292 buffaloes at two different localities (Ridiyagama and Polonnaruwa) were tested.

The results confirmed the high degree of sensitization elicited by all four tuberculins in all the areas studied. Also in both species, in all areas, the largest mean reaction sizes were elicited by a non-mammalian tuberculin ; the largest mean reaction sizes for all four antigens being seen at Polonnaruwa and Nattandiya with cattle and also at Polonnaruwa with buffaloes.

The data was analysed also to determine which antigen evoked the dominant reaction of the four used, in cattle. In all areas tuberculin prepared from *Mycobacterium intracellulare* appeared to elicit the greatest number of the dominant reactions. This suggests that sensitization of cattle occurs most frequently with organism (s) closely related antigenically to *Mycobacterium intracellulare*.