

ABSTRACT

COMPARISON OF TWO SCREENING METHODS FOR INTERFERON-GAMMA ASSAY FOR THE DIAGNOSIS OF BOVINE TUBERCULOSIS

A study to compare two interferon-gamma assay screening methods to detect bovine tuberculosis was conducted. Blood samples were drawn from 2,439 Holstein cattle from a *Mycobacterium bovis* infected herd. Methods studied were one bovine optical density value minus one avian optical density value compared to the mean of two bovine values. Each screening test's positive cattle were evaluated at optical density values of ≥ 0.1 and ≥ 0.05 . Each screening was compared to the manufacturer's recommended assay protocol. Each screening method detected all cattle confirmed positive by histopathology and culture. The mean of two bovine optical density values detected all positive animals at optical density value ≥ 0.1 , but had a greater number of false positive cattle compared to the other screening method. The screening of one bovine optical density value minus one avian optical density value at cut-off point of ≥ 0.05 proved to detect fewer false positive responders.

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