In-house rose Bengal plate agglutination test (RBPT) for a rapid diagnosis of Brucellosis in goats in Malaysia

ABSTRACT

The Rose Bengal Plate Test (RBPT) antigens from Brucella melitensis local isolates (inhouse RBPT) were prepared and compared with RBPT antigen for Brucellosis in sheep and goats prepared by Veterinary Laboratory Agency, UK. Eight hundred fifty-six sera samples, of which were collected from goats were examined with the RBPT and Complement Fixation Test (CFT). The RBPT and CFT results showed that the in-house RBPT antigen was superior to the commercial prepared RBPT antigen (VLA, UK). Out of 856 sera analyzed by in-house RBPT, commercial RBPT and CFT, 30.84, 26.40 and 31.65% were found to be Brucella positive, respectively. The sensitivity calculated for the in-house RBPT compared with CFT was 85.24% whilst that of commercial RBPT was 78.59%. Therefore, it was conclude that inhouse RBPT antigens could be prepared and used for epidemiological surveillance of Caprine brucellosis in Malaysia.

Keyword: Goat; Brucellosis; Rose Bengal plate test (RBPT); Diagnosis; CFT