Clinical diagnosis of canine brucellosis is not sensitive enough and a negative blood culture cannot rule out the disease. Indirect methods of serological testing such as agar gel immunodiffusion (AGID), rapid slide agglutination test (RSAT) and indirect enzyme linked immunoassay (IELISA) are preferred for routine diagnosis. Since Brucella canis shares antigenic components with the Brucella ovis and Brucella abortus RB51 strain, it would seem that either strain could be used as antigen. We present data on AGID and IELISA tests using the B. ovis antigen, RSAT and IELISA using the B. canis antigen and IELISA using the B. abortus RB51 antigen. The cut-off values were adjusted by the ROC analysis; the IELISA-B. ovis cut-off value was 23 (%P) and the IELISA-B. abortus RB51, 24 (%P), with 100% sensitivity and 98.8% specificity. RSAT detected 100% of positive cases, while AGID was less sensitive. The sera from dogs treated with antibiotic showed that %P correlated well with the clinical course. Sera from dogs presumptively infected with B. suis were negative in all tests performed with the rough Brucella strains. RSAT is a very sensitive screening test and IELISA-B. canis, B. ovis and B. abortus RB51 could be used as confirmatory tests, since they show good specificity and sensitivity.

Keywords
Brucellosis, B. canis brucellosis, canine brucellosis, diagnosis of canine brucellosis.