

Pigs, sheep, goats, buffalo and a variety of wildlife and farmed species are susceptible to *Mycobacterium bovis*. Intra-vitam tests which are officially used to detect bovine tuberculosis in cattle are skin test and IFN- $\gamma$  assay. The need of a repeated immobilization, the difficulties in the reading and interpretation and the black color of the bristles complicate the routine use of the skin test in black Nebrodi pigs (especially if they are feral pigs, wild boars or crossbreed) (Pesciaroli et al., 2012). The authors compare the use of both tests for the detection of *Mycobacterium bovis* infection in pigs evaluating the possibility to use the IFN- $\gamma$  assay as alternative for the in vivo diagnosis of the infection in this species. 124 pigs were submitted to in vivo e post- mortem investigations for bovine tuberculosis. The skin test was carried out on the external surface of the ear canal, before the inoculation of bovine PPD a blood sample for the INF- $\gamma$  assay was collected. On the same animals an anatomo-pathological examination was conducted. Tissue samples were collected and processed for bacteriological investigations. Statistical analysis about concordance of skin test and IFN- $\gamma$  assay was performed using classical concordance tests Cohen's Kappa index and McNemar's test. Forty- five resulted positive to skin test while 48 to IFN-  $\gamma$  assay. Moreover comparison between skin test and IFN- $\gamma$  assay of the 124 subjects showed a concordance of 89.5% and a Cohen's Kappa index of 0.786. During the abattoir inspection twenty nine carcasses showed tuberculous-like lesions while *Mycobacterium* spp. was isolated in 44 animals. The McNemar's test between the two in vivo tests of the latter showed a value of  $\chi^2=1.8$  with a p-value of 0.1797. This low  $\chi^2$  value indicates a non-significant difference. The correlation was of 88.6% and the Cohen's kappa index was 0.77. This means that in our case the two tests tend to have overlapping performances. We, also, considered the 20 subjects positive for *Mycobacterium bovis*. In this case 18 subjects resulted positive while 2 were negative to both tests. Therefore the correlation was 100% and K=1.00. Overall, we can hypothesize that the results obtained by the two tests are equivalent, making possible the use of IFN- $\gamma$  assay as alternative to skin test in situations where the control of bovine tuberculosis in pigs is required.