

# LATENT Q FEVER IN CATTLE IN SOUTHERN MORAVIA (CZECH REPUBLIC)

I. Literák, B. Calvo Rodríguez

Institute of Epizootiology, University of Veterinary and Pharmaceutical Sciences, Brno, Czech Republic

## SUMMARY

In 1991-92, a complement fixation test technique (titre  $\geq 8$ ) was used in serological assays of antibodies to *Coxiella burnetii* performed in cattle in southern Moravia. Antibodies were ascertained in 6.1 % to 213 aborting cows. The cows with a positive finding after abortion came from 13 different farms. On two of the farms (H. V. and P.), all the cattle were tested. On the H. V. farm, antibodies were ascertained in 4.2 % of 120 cows, in 1 of 36 calves and in none of 93 heifers. On the P. farm, antibodies were ascertained in 14.1 % of 519 cows and 15.2 % of 521 cows in 1991 and 1992 respectively, in 17.4 % of 190 calves and in none of 40 heifers.

*C. burnetii* was ascertained in the milk of 9 of 15 seropositive cows from the P. farm, in all cows with the titre  $\geq 64$ .

On the P. farm, reproduction characteristics of cows were monitored to ascertain possible links with the latent Q fever infection, but no relationship was found in this case.

In 1991, sera of 56 employees from farms with seropositive cattle (in H. V. and P. and from another farm) and 26 employees from an industrial company were tested but the complement fixation tests failed to detect any antibodies.

The *C. burnetii* strain circulating in south Moravian herds at present may be described as little virulent or avirulent.

*Key words:* *Coxiella burnetii*, antibodies, complement fixation test, cattle, milk, people

Address for correspondence: I. Literák, Institute of Epizootiology, University of Veterinary and Pharmaceutical Sciences, Palackého 1-3, 612 42 Brno, Czech Republic