

FIELD STUDIES FOR BLUETONGUE AND ENZOOTIC HAEMORRHAGIC DISEASE IN TURKEY

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The objective of this study was to detect the presence of new serotypes of bluetongue (BT) circulating in Turkey. A cross-sectional study was conducted between March and May 2008 in the provinces of Adana, Mersin, Antalya, Osmaniye, and Hatay (Mediterranean region). The serosurvey was only performed in cattle. This species was not vaccinated and the presence of antibodies would indicate that the animal had been infected by field strains of BT virus. Only animals born after the outbreaks were sampled. The epidemiological unit was the village, which was the lowest level for which census data was available. Random sampling was carried out in 146 villages and eight samples were collected in each village.

A competitive enzyme-linked immunosorbent assay (cELISA) was used for detection of BT antibodies. Preliminary results of the study were presented. From a total of 1096 serum samples

collected, 352 (32.1%) were positive to BT. The seroprevalence by province ranged from 15% in Antalya (45/257) to 88% in Osmaniye (77/88). In animals under two years old, the seroprevalence was 25%, whereas in adult animals it was 52%. The differences in the seroprevalence detected between the five provinces could be attributed to the different density of vector, cattle and small ruminant populations. The high seroprevalence in unvaccinated cattle indicated that BT infection was widespread in the ruminant population of Turkey. The young animals presented a lower prevalence than the adults, suggesting that the adults had probably been exposed to the virus before the last two years, whereas the presence of positive seroconversion in young animals indicated that BT virus had been circulating in the two-year period.

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