Serological ELISA for SBV currently being evaluated

Recent developments in the disease situation surrounding Schmallenberg virus (SBV) in northern Europe are discussed in the latest outbreak assessment from the International Disease Monitoring (IDM) team at Defra.

In the assessment, which was published on 23 Apr 2012, the IDM team says that AHVLA laboratories are currently validating a serological ELISA that has become commercially available in Europe. Defra is considering how the test could be used for surveillance and whether there is a potential cost-benefit to such use. The team adds that the geographical distribution of the disease is still restricted to north-west Europe, but that this could still change as more cattle that were infected last year continue to give birth, or as serological surveillance gives a clearer picture of past exposure.

The assessment also notes that infected midges, including _Culicoides dewulfi_ and _Culicoides obsoletus_, have been identified in Belgium, Denmark and Italy. Germany has reported finding antibodies to SBV in red and roe deer but, the IDM team says, the significance of this in terms of a potential wild reservoir host for SBV is not yet known. Meanwhile, investigations at the Robert Koch Institute in Germany of 60 sheep farmers who had been in close contact with infected animals had found no evidence of infection using an immunofluorescent antibody test and a serum neutralisation test. [In the meantime, human involvement has been further excluded by Dutch investigations.]

Regarding the pattern of infection, the IDM team notes that Germany, the Netherlands and Belgium continue to report outbreaks in cattle, but there have been fewer reports of affected sheep. The same pattern has been seen in the UK, it says, and coincides with the end of the lambing season in at-risk areas.

Noting that all of the cases confirmed in the UK have been found in counties that were within zones at risk of the incursion of infected midges in 2011, the IDM team adds: 'It should be noted that it is possible native midges also became infected at the same time over last summer and could have contributed to some of the infections'.

The AHVLA reported on its website that, by 30 Apr 2012, 254 farms in England had reported cases of SBV. Of these, 219 were sheep farms and 35 were cattle farms.