High prevalence of myiasis by Oestrus ovis in the Balearic Islands

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Sir, Oestrosis is a myiasis of world-wide distribution, caused by the infestation of the larvae of Oestrus ovis Linnaeus, 1761 (Diptera: Oestridae) into the nasal cavities of sheep and goats. The Oestrus ovis infestation produces severe losses in wool, meat and milk production in animals (Horak et al., 1976). In 2008, we carried out the first survey of ovine oestrosis in the island of Majorca (Spain). We found the highest prevalence rates of ovine oestrosis in Spain and probably one of the highest reported in the Mediterranean region. From the 206 adult sheep (> 2 years old) examined, 87.6 % and 81.2 % (September and October, respectively) were infested with Oestrus ovis larvae. Our data strongly indicates that control measures should be immediately applied to protect both animals and human populations.

Material and methods
During September and October, 2008 we examined 206 sheep (> 2 years old) heads from the island of Majorca (the largest of the Balearic archipelago), obtained from 25 free ranging flocks, from seven localities in September and 17 flocks, from nine Majorcan localities in October. Animals were examined at the city’s largest slaughter house. Heads were cut in a mid-sagittal plane, and larvae were searched in the nasal cavities, turbinates, middle meatus, septum, and sinuses of the animals. Larval stages were collected and identified following the key of Zumpt (1965).

Results and discussion
These preliminary results show a high prevalence by O. ovis larvae on sheep in the island of Majorca during September and October, 2008. In September, we found that 78 of the 89 animals examined were infested with O. ovis (87.6 %) larvae. In nine of the 17 farms surveyed this percentage reached 100 %. With a single exception, more than 50 % of the animals appeared infested in all Majorcan farms surveyed. A decrease in prevalence values have been observed in October, the same year, when 95 of the 117 (81.2 %) animals examined were positive to the infestation. In total, 1851 larvae were collected from the 206 heads examined.

The authorities from the Balearic government have pointed out a high number of veterinary staff that has been affected by oestrosis. Further studies should be focussed on seasonality of O. ovis larval stages, to determine the first instars active, diapause and exit phases (Scala et al., 2002). Risk factors and human prevalence are also required to understand the epidemiology of the oestrosis in the Balearic Islands and to establish effective control measures.

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REFERENCES


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