7th International SOVE Congress







Filariasis

NEW TECHNOLOGY CONQUERING OLD VECTORS?





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- Book of Abstracts -



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Culicoides composition in different host-environment and updated checklist in Morocco

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In Morocco, Culicoides biting midges were responsible for African horse sickness (AHS) outbreaks in the 1960s and the most recently in the late 1980s. They are also involved in enzootic transmission of bluetongue (BT) virus since 2004. A cross-sectional survey is currently ongoing in about 150 cattle farms to produce abundance maps at the national scale for the most abundant Culicoides species. The objectives of the present study were to compare species collected in ruminant with those in horse farms and to assess potential use of abundance maps derived from sampling in ruminant farms to generate risk maps for both AHS and BT viruses. A 48-consecutive hours collections were carried out in three locations close to Rabat (33°59'20.9" N, 6°51'07.9"W) every 15 days from May to October 2016: a cattle farm, a goat farm and a horse-ridding center. Then, we followed up Culicoides collections in the horse-ridding center during a whole year to establish precisely the Culicoides population dynamics and to link abundance with meteorological parameters. Culicoides imicola, Culicoides newsteadi, Culicoides puncticollis, and Culicoides kingi were the most abundant species in the three sites. Most of individuals, which were identified as Culicoides obsoletus/Culicoides scoticus, belong to Culicoides obsoletus s.s. Only the uncommon species, namely Culicoides longipennis, Culicoides stigma or Culicoides albihalterus, were found inconstantly depending on the collection site. In addition, Culicoides paolae – reported in the literature as associated with Barbary fig trees, was recorded for the first time in Morocco, and its identity was confirmed by molecular assay.

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