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Phlebovirus detection in phlebotominae vectors captured in endemic areas

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The *Toscana Virus* (TOSV), is a common human pathogen widespread in the Mediterranean area which causes a mild three-day fever. Sand flies, which represent the only reservoir for phleboviruses, are recognised carriers for *Leishmania*. To prevent outbreaks of these harmful agents, especially in high endemic regions, active epidemiological and entomological surveillance systems need to be set-up to both monitor and prevent the virus from spreading.

Sandfly collections from the leishmaniosis endemic area of Lampedusa were analysed for TOSV. Pools of samples were tested by Nested-Polymerase Chain Reaction (PCR) and sequencing. The specimen that tested positive for TOSV were sequenced and the data was analysed with Clustlaw software. The study confirmed the presence of TOSV DNA. Entomological investigations, to support epidemiological data, should be improved to monitor the spread of phleboviruses.

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