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Viral Encephalopathy and Retinopathy (VER) in Mediterranean wild and farmed fish species: the experience of the ‘Istituto Zooprofilattico Sperimentale’ in Sicily

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Betanodavirus infection is widespread in a broad spectrum of fish species worldwide. In Italy, it is responsible for outbreaks of Viral Encephalo-Retinopathy (VER) that causes mortality and economic losses in sea fish farming. The infection is also widespread in the wild and not only in managed systems, where there are generally no observed clinical manifestations.

In this study we report the results obtained from the decennial activity of ‘Istituto Zooprofilattico Sperimentale’ of Sicily on the research of betanodavirus infection in wild fish of the Mediterranean Sea and in farmed fish. Among the fish species analysed, *Gobius niger*, *Mullus barbatus* and *Trisopterus minutus capellanus* tested positive for the virus. These species could be reservoirs in which the virus can survive for long periods of time. The betanodavirus isolation from pelagic species such as *Pagellus erythrinus*, *Sardina pilchardus*, *Trachurus trachurus*, *Epinephelus marginatus*, and *Epinephelus aeneus* resulted interesting because these species could play a more significant epidemiological role, being able to move over long distances.

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