

S9 Eels

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Poster



PREVALENCE OF VIRUS IN WILD EUROPEAN EELS (Anguilla Anguilla) FROM MAR MENOR (WESTERN MEDITERRANEAN, SPAIN)

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Fish viruses can cause disease or even mortality when fish are under stressful conditions. The aim of this study was to investigate the presence of viruses in wild European eels from Mar Menor, a permanent hypersaline coastal lagoon. A total of 150 eels (117 yellow eels and 33 silver eels), with average length and weight of 558±113.50 mm and 328.74± 207.67g respectively, were sampled between November 2015 and March 2016. All individuals were apparently healthy. A tissue pool (spleen, liver, kidney and gills) from each eel was sent to the National Reference Laboratory for Fish, Crustacean and Shellfish Diseases (The Netherlands) where the prevalence of Anguillid Herpesvirus 1 (AngHV-1), eel virus European (EVE), and eel virus European X (EVEX) was determined by real time-PCR.

Results showed a prevalence of 25.33% (38/150) and 12.67% (19/150) for EVEX and AngHV-1 respectively while EVE, never previously reported in wild eels, was not detected. Considering the results by size classes, the higher percentages of virus-positive fish were observed in the older individuals; 72.73% (24/33) among silver stages and 25.64% (30/117). Nevertheless, EVEX positive fish were more prevalent among younger individuals (63.16%) as 24 of the 38 EVEX positive eels were yellow ones. Finally, three individuals (silver eels) showed a mixed viral infection (EVEX and AngHV-1).

The results confirm eel's carrier nature and point out the risk of transferring virus into waters in which the virus has not arrived yet when eel introduction in river basins or lagoons is conducted without previous virus monitoring.

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