Assessment for listing of Infection with ostreid herpesvirus-1 (including OsHV-1 μvar) as an emerging disease

Infection with ostreid herpesvirus-1 (including OsHV-1 μvar) was assessed against the criteria for listing an emerging aquatic animal disease in Article 1.2.2. of the Aquatic Code.

Case definition

An increased mortality in Pacific oysters associated with the presence of OsHV-1 or OsHV-1 μvar in affected animals.

Criterion 2: An infectious agent is strongly associated with the disease, but the aetiology is not yet known

OsHV-1, including μvar (Segarra et al., 2010), has been predominantly associated with increased mortality of Pacific oysters. This suggests that OsHV-1 infection is one of the causative factors. However, it may not be sufficient by itself as other factors appear to be important (EFSA, 2010; García et al., 2011). OsHV-1 μvar has not been sufficiently characterised to be defined as a new genotype but may be considered as a different strain. OsHV-1 μvar seems to be the dominant viral strain in the 2008-2010 increased mortality events, but it is not clear if this is a result of increased virulence or other epidemiological factors (EFSA, 2010). There are observations indicating emergence of different OsHV-1 variants (Martenot et al., 2011).

Criterion 4: Significant spread in naïve populations of wild or cultured aquatic animals

Since 2008, severe mortality events in cultured Pacific oyster were reported from the main European producing countries. Information provided to OIE (WAHIS) shows that in 2009, Ireland and France experienced mortality rates ranging between 15-95% and 50-75% respectively. In 2010, United Kingdom reported mortalities of 60%. New Zealand also reported increased mortality ranging between 50-80%. In 2011, reports were received from the Netherlands and Australia. In Australia, mortality has been 100% for spat and 95% for market sized stock.
Conclusion

Infection with ostreid herpesvirus-1 including OsHV-1 μvar is eligible for listing as an emerging disease because it meets the criteria 2 and 4.

Note

Diagnostic methods are listed in the draft Aquatic Manual chapter Infection with ostreid herpesvirus-1. Definition of a confirmed case should require the identification of the variants involved.

References


EFSA PANEL ON ANIMAL HEALTH AND WELFARE (AHAW); Scientific Opinion on the increased mortality events in Pacific oyster (Crassostrea gigas). EFSA Journal 2010;8(11):1894. [60 pp.]
