

Research program IZS VE 17/13

Infectious pancreatic necrosis virus in Friuli Venezia Giulia freshwater salmonids farms: farming features and risk factors associated with disease exposure

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Infectious Pancreatic Necrosis Virus (IPNV) affects mainly young rainbow trout and other freshwater salmonids held under intensive rearing and may cause high mortalities, loss of production and other costs in fish farming units. Therefore it is important to prevent and control the virus from spreading in the industry.

To date, the prevalence and the distribution of IPNV in the Italian freshwater salmonids have never been investigated and limited information is available on farming features and risk factors associated with virus exposure.

The aims of this project are:

- to investigate the prevalence of IPNV in Friuli Venezia Giulia (northern Italy) freshwater salmonids farms;
- to identify the risk factors for pathogen introduction and spread;
- to evaluate the sensitivity and specificity of diagnostic methods in use (real time RT-PCR, virus isolation) in different specimens (eggs, fingerling, ovaric liquid) to optimize a diagnostic approach for an early detection of virus introduction at farm level;
- to perform a molecular characterization of viral isolates and compare them with other IPNV strains from Italy and Europe; v) to define the spatial distribution of the infection by means of a hydro geographical information system which combines spatial data of farms with basins and river network.