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A FORUNCOLOSIS EPISODE OCCURRED DURING A BROWN TROUT (*SALMO TRUTTA*) STOCKING ACTIVITY

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Fish stocking is the practise of releasing reared fish into the natural environment with the purpose of regenerating or building up fish population or for recreational fishermen entertainment. However, alive animals stocking come with the potential risk of pathogens introduction in the wild, that may cause diseases for both wild population and for aquaculture facilities nearby. The existing legislation (Council Directive 2006/88/EC), to prevent this risk, provides for notifiable diseases prevention and control measures. Instead, other diseases are not proper regulated, since the law only specifies that fish has to be clinically healthy before restocking and has to come from a hatchery where unexplained mortality rates are not occurred. Frequently, some aetiological agents in latent form are difficult to detect in fish which appear to be healthy and in these circumstances accidental pathogens releasing in the environment increased. At the end of July 2016, seventeen brown trout (*Salmo trutta*) were found dead in 3 pools of Carpasina stream (IM), placed in the municipalities of "I Carpi", "Mulino d'Arianna" and "Roccai". The unusual mortality occurred following a programmed fish stocking down the stream. Analyses were performed at the fish diseases laboratory of the Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta. Numerous samples were not well-preserved, consequently only four fish were analysed. Fish did not show any macroscopic lesion on the skin or on the internal organs. Columbia blood Agar (CA) was inoculated with kidney samples from the 4 fish and incubated at 22°C for 72 h. Isolated culture were cloned and identified through the Analytical Profile Index (API, bioMérieux) tests and serological test (rapid agglutination test, Bionor). *Aeromonas salmonicida*, the aetiological agent of forunculosis, were found in all four samples. Otherwise, no mortality events occurred neither in the wild population before the fish stocking activity nor in the farm where brown trout came from. It is impossible to exclude the pathogen presence in the environment, but the mortality event cannot be considered a natural episode since its rapid appearance. The most likely scenario is that the *A. salmonicida* was already presence in a latent form in the stocked fish or that it was present in a not diagnosed sub-acute form. That explains how the disease has occurred as a consequence of the stress caused to the fish by manipulation and the transport. This recent case define how diseases control and regular monitoring are essential to ensure wild and farmed fish health, in particular, during fish stocking activity or fish transport, that may cause significant losses. Moreover, fish intended for public waters restocking should be control for a period of time useful to establish the presence of a disease and accompanied by a certificate of the result. With all the proper measures will be possible to avoid the introduction of affected fish in the natural habitat and consequently avoid possible pathogens spreading that may affect the natural population.