

# VACCINATION AND ADAPTIVE IMMUNE RESPONSE OF LUMPFISH (CYCLOPTERUS LUMPUS L)

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Farmed lumpfish (*Cyclopterus lumpus* L.) is with great success used for biological control of salmon louse (*Lepeoptheirus salmonis*). Along with the rapid increase in the farming of lumpfish in Norway bacterial disease problems has emerged. The most commonly isolated pathogenic agents are *Vibrio* sp., atypical *Aeromonas salmonicida* and *Pasteurella* sp. To further the efficiency of the use of lumpfish in the net pens, efficient vaccines are required. Analysis of the lumpfish adaptive immune responses upon immunization and vaccination indicate that vaccination will be successful for this species.

## KEYWORDS

Lumpfish, vaccination, bacterial diseases, adaptive immunity, serology.

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