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BATH-VACCINATION AGAINST VIBRIOSIS

Biblioteket

by

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Various vaccination methods for fish have been described, most of them implying a certain degree of stress for the animal. As stress is a serious problem in fish farming, it should be avoided as much as possible. We have described a simple and non-stressing vaccination method for salmonids against vibriosis.

The fish tanks where the vaccination is to be applied are supplied with oxygenation. The water flow is stopped and the water level in the tanks are lowered.

The vaccination diluted in a bucket of water is splashed into the tanks and the fish is left swimming in the vaccine solution for about two hours. Then the waterflow is re-installed.

Our vaccine is produced from local Vibrio anguillarum strains. The cells are grown in a fermentor, harvested by centrifugation and proteolysed with trypsin. The cell fragments thus obtained are preserved with formalin. Before use the vaccine is diluted to a density of 90 % transmission at 580 nm. Four litres of this is used for about 20 kgs of fish in 750 litres of water.

Vaccination is performed three to four weeks before the transfer from fresh to sea water, in Norway this means that vaccination mostly takes place in April - May. The acquired immunity last for four to seven months. Re-vaccination can take place in the sea using the equipment described for bath against salmon lice.