

An Aquaculture System For Rearing Aquatic Species And A Method Thereof

Abstract

According to various embodiments, an aquaculture system for rearing aquatic species is provided. The aquaculture system includes a rearing tank for rearing the aquatic species, the rearing tank adapted to contain water and the aquatic species therein, an intermediate tank in fluid communication with the rearing tank, the intermediate tank configured to extend from a proximal end to a distal end opposite the proximal end, such that the intermediate tank is adapted to receive the water at the proximal end and channel the water towards the distal end, a nitrification unit in fluid communication with the intermediate tank, such that the nitrification unit is configured to receive the water from the intermediate tank and return the water into the rearing tank, a denitrification unit in fluid communication with the intermediate tank, such that the denitrification unit is configured to receive the water from the intermediate tank and return the water into the rearing tank, a toxin removal unit in fluid communication with the intermediate tank, such that the toxin removal unit is configured to receive the water from the intermediate tank and return the water into the intermediate tank, such that the intermediate tank is configured to pump the water therein into the rearing tank.

Fig. 1