

Innovative Technologies for Aeration and Feeding of Fish in Aquaculture with Minimal Impact on the Environment

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Abstract : The paper presents a new approach in terms of the circular economy of technologies for feeding and aeration of accumulations and water basins for fish farming and aquaculture. Because fish is and will be one of the main foods on the planet, the use of bio-eco-technologies is a priority for all producers. The technologies proposed in the paper want to reduce by a substantial percentage the costs of operation of ponds and water accumulation, using non-polluting technologies with minimal impact on the environment. The paper proposes two innovative, intelligent systems, fully automated that use a common platform, completely eco-friendly. One system is intended to aerate the water of the fish pond, and the second is intended to feed the fish by dispersing an optimal amount of fodder, depending on population size, age and habits. Both systems use a floating platform, regenerative energy sources, are equipped with intelligent and innovative systems, and in addition to fully automated operation, significantly reduce the costs of aerating water accumulations (natural or artificial) and feeding fish. The intelligent system used for feeding, in addition, to reduce operating costs, optimizes the amount of food, thus preventing water pollution and the development of bacteria, microorganisms. The advantages of the systems are: increasing the yield of fish production, these are green installations, with zero pollutant emissions, can be arranged anywhere on the water surface, depending on the user's needs, can operate autonomously or remotely controlled, if there is a component failure, the system provides the operator with accurate data on the issue, significantly reducing maintenance costs, transmit data about the water physical and chemical parameters.

Keywords : bio-eco-technologies, economy, environment, fish

Conference Title : ICFFE 2021 : International Conference on Fish Farming and Environment

Conference Location : Dubai, United Arab Emirates

Conference Dates : July 29-30, 2021