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(57) Abstract :
ABSTRACT: Title: Virus Control in Shrimp Cultivation based on Internet of Things The present invention discloses a system for the detection of virus formation in shrimp cultivation pond. The system comprises shrimp pond installed with a pond system 101 components in connection with the pond water that includes an underwater image capturing means 102, a wireless transmitter 103, a water parameter sensing means 104, a controller 105 and an alert means 106. The system 100 further comprises a cloud processing means 107 and an external terminal 108. The cloud processing means utilizes artificial intelligence to detect the virus formation. Thus, the proposed system provides a low cost investment to detect the virus formation and allows the farmer to take proactive decisions in advance to stop generation of virus.

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Patent Search

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Abstract:

ABSTRACT: Title: Virus Control in Shrimp Cultivation based on Internet of Things The present invention discloses a system for the detection of virus formation in shrimp cu
pond. The system comprises shrimp pond installed with a pond system 101 components in connection with the pond water that includes an underwater image capturing
102, a wireless transmitter 103, a water parameter sensing means 104, a controller 105 and an alert means 106. The system 100 further comprises a cloud processing mea
and an external terminal 108. The cloud processing means utilizes artificial intelligence to detect the virus formation. Thus, the proposed system provides a low cost invest
to detect the virus formation and allows the farmer to take proactive decisions in advance to stop generation of virus.

Complete Specification

Claims:CLAIMS:

We Claim:

1. A system to identify virus formation in shrimp cultivation pond, comprising:

an underwater image capturing means positioned in the pond configured to continuously capture images of surroundings inside the pond;

a wireless transmitter configured within said underwater image capturing means to transmit captured images wirelessly;

a cloud processing means configured to receive and process the captured images from said wireless transmitter to detect any virus formation and root cause of the virus generation using artificial intelligence and communicate the detected result wirelessly to the external terminal;

a water parameter sensing means configured with multiple sensors along with said underwater image capturing means to sense and transmit various water parameters

a controller configured to receive said various water parameters from said water parameter sensing means to automatically control various devices or inform the pond in charge to thereby maintain the water parameters to be in equilibrium in the pond; and

whereby said early detection of virus formation and root cause of the virus generation allows the farmer to take proactive decisions in advance to stop generation of viru

2. The system to identify virus formation in shrimp cultivation pond as recited in claim 1, wherein said cloud processing means is build with a Convolutional Neural Netw which is trained with various images such as solid food waste ,fungus ,waste produced from shrimp, decomposed material and thereof.

3. The system to identify virus formation in shrimp cultivation pond as recited in claim 2, wherein said Convolutional Neural Network is first allowed to improve its quality using Generative Adverse Networks before it gets trained.

View Application Status

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Policy and Promotion**
Government of India