Silkworm Growth Monitoring Smart Sericulture System based on Internet of Things (IoT) and Image Processing

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Abstract

The art of culturing silkworm for the production of silk is termed as sericulture. Globally, the second biggest manufacturer of silk is India. In India, sericulture acts as the base for financial, social, political and intellectual advancements. Moistness and temperature take part a critical position in the progression of solid silkworms in each stage, particularly in the duration of the improvement of hatchling. Sterilization is one of the basic parameter to be considered for solid and effective silkworm nurturing. The proposed framework introduces an Internet of Things (IoT) empowered Wireless Personal Area Network (WPAN) system in order to deal with a continuous observation of silkworm development in sericulture and picture handling innovation to recognize the phases of silkworm life cycle. The proposed model is employed utilizing Arduino Software and sensors to gauge the environmental circumstances within the arrangement of silkworms according to the prerequisites for each and every stages of silkworm life cycle. The entire model will be fabricated utilizing the Arduino Board stack integrated with moistness and temperature sensors in the company of a camera to catch the photos and to examine it utilizing a picture preparing technique to confirm the condition of sericulture progression.
References


Index Terms

Computer Science Information Systems

Keywords

Sericulture, WPAN, IoT, Arduino, Sensors, GSM900 module, Image processing.