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(57) Abstract :

My invention IAEC- System • An Internet-of-Thing (IoT) method for improving ROI of farming includes placing a plurality of advanced sensor hubs in predetermined locations in a farm, each hub including a meteorological data acquisition system and an environmental data collection system; and monitoring key elements in the growing of plants from a plurality of sensor hubs including lighting, humidity, temp, soil moisture, and elements that influence plant growth. The invented system may include one or more of the following. The system provides a Multi-Channel Wavelength Smart control design that enables researcher and grower to setup and optimize the efficiency of lighting receipt, and additionally to dim, shutdown and turn off the bright/darkness cycle in order to provide effective PPFD during the bright and dark period. The computer systems and controllers are capable of permitting farmers and farming business to exercise extremely precise control over almost every aspect of a farming operation, such as fertilizing, planting, spraying or harvesting crops.

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