INNOVATIVE TECHNOLOGIES IN PEKIN DUCK FARMING

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Abstract

The development of precision technologies offers new opportunities for optimizing Pekin duck production through process automation and efficient resource management. This paper reviews the scientific literature on automated feeding and drinking systems, radio-frequency identification (RFID), microclimate control, and digital monitoring. Electronic feeding systems integrated with RFID technology enable the individual recording of feed intake and feeding behavior, providing data for assessing feeding efficiency. Microclimate control contributes to maintaining appropriate rearing conditions, while computer vision enables non-contact estimation of body weight and monitoring of flocks. The integration of these technologies supports data-driven management and efficient resource utilization; however, their large-scale commercial application requires the assessment of costs, infrastructure requirements, and the possibilities for integrating digital systems.

Key words*: Pekin duck; innovative technologies; precision livestock farming; RFID; digital monitoring*