Determination of Health Status in Pregnant Sheep Using Artificial Neural Network (ANN) Method

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ABSTRACT

This study aims to develop a system for determining the health condition of pregnant sheep using the Artificial Neural Network (ANN) method. In the process, medical record data of pregnant sheep were collected and classified into two categories: healthy and unhealthy. The data underwent pre-processing before being used to train and test the ANN model based on a Multi-Layer Perceptron (MLP) architecture. The test results show that the ANN system is capable of classifying the health condition of pregnant sheep with a relatively high level of accuracy. This can assist farmers in early detection of livestock conditions in an automated and efficient manner. The implementation of this system is expected to enhance the effectiveness of health monitoring for sheep, reduce losses caused by unhealthy conditions, and support faster and more accurate decision making in the livestock sector.

Keywords: Artificial Neural Network, pregnant sheep health status, classification, MLP.