Image Recognition Berbasis Convolutional Neural Network Untuk Deteksi Dini Penyakit Mulut dan Kuku pada Sapi

(*Image Recognition Based on Convolutional Neural Network for Early Detection of Foot and Mouth Disease in Cattle*)

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ABSTRACT

Foot and Mouth Disease (FMD) is a contagious disease that adversely affects cattle farmers as it can spread rapidly, leading to decreased production and the death of infected animals. Early detection is crucial to prevent further spread. This research aims to develop an image recognition system based on Convolutional Neural Network (CNN) for the early detection of FMD in cattle. The system is expected to provide accurate and rapid results to assist farmers in taking preventive measures.

The method used is CNN for image recognition, with data consisting of images of cattle infected and not infected with FMD. These images are analyzed using CNN algorithms to identify FMD symptoms. The results of the study show that the CNN-based image recognition system has a high accuracy rate in detecting FMD in cattle. The system can quickly and accurately identify FMD symptoms, making it useful as an early detection tool.

The use of CNN technology for the early detection of FMD in cattle has proven to be effective and efficient, helping farmers to quickly and accurately identify infected cattle. Preventive measures can be taken earlier to reduce the spread of the disease.

Keywords: *Foot and Mouth Disease, Convolutional Neural Network, Image Recognition, Early Detection, Cattle.*