Abstract

Scabies is a disease caused by Sarcoptes Scabiei mites and can infect humans and also animals. For animal this disease can be recognized by crusting skin in the ear, nose, and foot area, but if scabies is not treated immediately then mites will spread throughout the animal's body and can even cause death.

Image processing has been done for many classification of disease in human and plants. But there are stil few that involve scabies in animal, so in this final project the author build a system that can classify animal image into two classes, namely animal with scabies, and animal with other skin disease.

The Uniform Local Binary Pattern feature extraction method has been proven to optimize the feature extraction results and the processing time for the feature extraction process, so that the system is built by processing the dataset using the Uniform Local Binary Pattern method and the Random Forest classification method so that the system performance reaches an accuracy of 52%

Keywords: image, scabies, uniform local binary pattern, random forest