

ABSTRACT

Milk is one of the basic human needs. One of the most popular milks for humans is cow's milk. One of the areas that produce cow's milk in East Java is Batu City. Therefore, farmers are expected to produce quality cow's milk. One of the technological innovations that can increase livestock production is to classify or monitor the pH of cow's milk. The basic concept of classifying or monitoring the temperature and pH of cow's milk is the need for a tool to check the pH and temperature of cow's milk with the Internet of Things method that will make it easier for traditional farms to become semi-modern. The purpose of this study was to identify cow's milk suitable for consumption or not. From the research that has been done, it is known that the use of the Internet of Things can optimize traditional livestock production. The use of the Internet of Things (IoT) on traditional farms can help farmers to find out what the pH and temperature levels in cow's milk are when pasteurized. Pasteurization is done by traditional farmers to keep the milk in the milk tank lasts long and maintain the quality of the milk. Monitoring of Cow's Milk Based on the Internet of Things that will be made in this study aims to make it easier for traditional farms to monitor the pasteurization process.

Keywords: Monitoring, Internet of Things, PH, Cow's Milk, Pasteurization

ABSTRAK

Salah satu inovasi teknologi yang mampu meningkatkan produksi peternakan adalah dengan mengklasifikasikan atau memonitoring ph susu sapi. Konsep dasar mengklasifikasikan atau memonitoring suhu dan ph susu sapi adalah perlunya alat untuk mengecek kadar ph susu sapi dengan metode *Internet of Things* yang akan mempermudah peternakan tradisional menjadi semi modern. Tujuan dari penelitian ini adalah untuk mengidentifikasi susu sapi layak konsumsi atau tidak. dari penelitian yang sudah dilakukan, diketahui bahwa penggunaan *Internet of Things* dapat mengoptimalkan produksi peternakan tradisional. Penggunaan *Internet of Things(IoT)* pada peternakan tradisional dapat membantu peternak untuk mengetahui berapa kadar ph dan suhu pada susu sapi saat pasteurisasi. Pasteurisasi dilakukan oleh peternak tradisional untuk menjaga agar susu yang ada dalam tangki susu bertahan lama dan menjaga kualitas susu. *Monitoring Susu Sapi Berbasis Internet of Things* yang akan dibuat dalam penelitian ini bertujuan untuk memudahkan peternakan tradisional untuk memantau proses pasteurisasi.

Kata kunci : *Monitoring, Internet of Things, PH, Susu Sapi, Pasteurisasi*