

ABSTRACT

Farmers who have many livestock need technology to facilitate human work and increase the precision of feeding so that farmers can reduce losses in their business. This research is making a chicken feeding device equipped with a feed control and monitoring system that can mix four types of feed raw materials, namely with a mixture of 58% corn, 33% concentrate, 8.5% bran, and 0.5% premix so that the feeding will be better and more efficient. the time required for feeding is shorter. Making the tool using Arduino Mega to regulate all the commands given, namely the number of chickens, and the age of the chickens will then be processed for the mass amount of each type of feed, and the feeding time is in accordance with the orders given. Data collection was carried out by two methods, namely with tools and without tools. The data taken is the age of one week of chickens in the amount of one and five tails, where data collection is carried out nine times, both with tools and without tools. The results of data collection showed that data collection using tools was faster than without tools. The average time for retrieval without tools was 67.03 and 89.57 and retrieval with tools was 23.54 and 24.15 seconds, respectively. Data collection with the tool obtained the average error value of corn 9.4% and 1.28%, concentrate 16.26% and 2.2%, rice bran 1.23% and 1.39%, premix 86.93% and 8,5%. This is caused by reading the value of the Load Cell which is fluctuating. Meanwhile, without tools, there are only error values on the premix, namely 5.88% and 1.18% due to the accuracy value of digital scales that can only read 0.01 grams.

Keywords: Feeding equipment, Feed Mass, Feeding time, Load