ABSTRACT

TUTY MARIA WARDINY. The Vitamin A, Vitamin C and Cholesterol Content in Egg Yolk of Laying Hens Fed *Morinda citrifolia* in the Diet. Under the supervisions of WIRANDA GENTINI PILIANG and LATIFAH K. DARUSMAN

*Morinda citrifolia* known as a medicinal plant that can decrease cholesterol in human blood. The research was designed to evaluate the effect of *Morinda citrifolia* in laying hens diet on egg quality. A Completely Randomized Design was used to analyze the data obtained from this research. One hundred and forty seven layers were divided into 7 treatment groups with 3 replications and 7 hens in each replicate. Seven treatment diets were diet with 0% *Morindra* (R0); diet with 3% *Morindra* leaf meal (R1); diet with 6% *Morindra* leaf meal (R2); diet with 9% *Morindra* leaf meal (R3); diet with 3% *Morindra* juice (R4); diet with 6% *Morindra* juice (R5); and diet with 9% *Morindra* juice (R6).

The parameters observed were age maturity, feed consumption, egg production, feed conversion, egg yolk colour, egg yolk cholesterol and egg yolk vitamin A and vitamin C. The results of this research showed that the age maturity, egg production, feed conversion, egg weight, egg yolk colour and egg yolk cholesterol were significantly different (P<0.05) for all treatment diets. Feed consumption was not significantly different for all treatment diets.

This research showed that 9% *Morindra* leaf meal (R3) in the diet gave the best performance and the best quality of eggs than the other treatment groups because it contained the highest vitamin A and the lowest cholesterol in the egg yolk.

*Keywords*: eggs, *Morinda citrifolia*, vitamin A, vitamin C, cholesterol