

# Benefits of Additional Probiotic Ingredients (Dates, Yakult and Kelor Leaf) on Weight Gains in Laying Hens in the Region of Prigen – Pasuruan

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**Abstract**— Rooster has a body shape and fat content that resembles native chicken, so it can be used to meet the needs of consumers who like free-range chicken meat. The research material used was a population of 4000 laying hens, both cage A with probiotic ingredients or cage B without probiotic ingredients required 130 feedlots with a capacity of 7 kg per feed. This research is experimental by using two independent sample t-test for weight gain analysis of laying hens. The results of data on weight gain of laying hens per day, cage A experienced an increase or increase in weight of 11-22 grams / head, while cage B was 11-16 grams / head per day. Provision of probiotic ingredients (dates, Moringa leaves and Yakult) did not affect the weight gain of laying hens.

## I. PRELIMINARY

According to Najmah Ali, *et. al.*, (2019:1) One of the determining factors for the success of a farm is the feed factor, in addition to genetic factors and maintenance management, the cost of feed in a livestock business is the largest component of the total production costs that must be incurred by farmers during the production process, which is approx. 60-70% so that to meet complete nutritional needs, it is necessary to provide various and quality feeds, both plant-based and animal-derived feeds.

Microbial resistance in livestock product residues due to the administration of antibiotics both in rations and in drinking water has inspired the search for alternative products to replace commercial antibiotics (Nelzi Fati, *et. al.*, 2018:44)

## II. RESEARCH METHODS

This research is experimental by using two independent sample t-test for weight gain analysis of laying hens. The provision of feed is carried out as the provision of feed in the cultivation of laying hens whose supply is adjusted to the development and age of the chickens. Each cage with a population of 4000 laying hens, either cage A with probiotic ingredients or cage B without probiotic ingredients requires 130 feedlots with a capacity of 7 kg per feed. In laying hens, the feeding process is only done once a day, in the morning. The number of feed sizes is adjusted to the age of the chickens, with the size of 1 sack of 50 kg of feed. The more mature the age of the chickens, the size of the feeding will also increase, with an average calculation of 90-97 bags in one period.

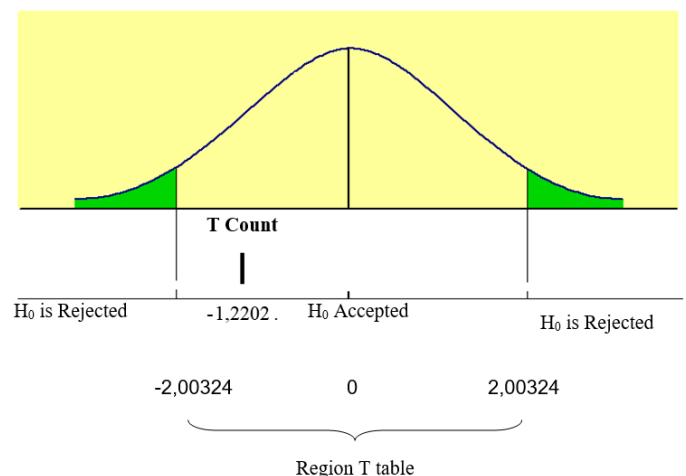
## III. RESULT AND DISCUSSION

The effect of probiotic ingredients on weight gain of laying hens aged 30 days to harvest age with a sample of 10 chickens taken at random in each cage every day.

*Table T Value:*

If dk is 56 then T table with  $\alpha = 0.05$ , then the T table value is 2.00324

*Significance Test:*



From the results of the Significance Test, the following information can be taken:

T count > T table, then H0 is accepted and H1 is rejected so that there is no difference between the weight gain of laying hens in Cage A (with Probiotics) and Cages B (Without Probiotics).

According to Jauhar Utama Putra (2019) in his research entitled "The Effect of Debeaking Age Differences on Feed Consumption, Weight Gain, and Feed Conversion for Laying Hens Age 1-60 Days" The average weight gain of laying hens ranges from  $\pm 13, 29 - \pm 30.12$  g/head per day.

If seen from the data on the increase in body weight of laying hens every day, cage A experienced an increase or increase in weight of 11-22 grams / head, while cage B was 11-16 grams / head every day.

So it can be seen that the male laying hens in Cage A and Cage B experienced weight gain in the same range and there was no significant difference in average body weight between the two.

#### IV. CONCLUSION

Provision of probiotic ingredients (dates, Kelor leaves and Yakult) did not affect the weight gain of laying hens.

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