

Genetic Analysis of Tolaki Chicken During Growth Period

Rusli Badaruddin and Ld. Nafiu

GENETIC ANALYSIS OF TOLAKI CHICKEN DURING GROWTH PERIOD

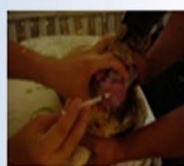
Rusli Badaruddin and La Ode Nafiu
Faculty of Animal Science
Universitas Halu Oleo

Introduction

Tolaki chicken was an original chicken of Southeast Sulawesi are scattered in several areas such as Konawe and South Konawe. Nevertheless the information characteristic of Tolaki chicken as typical chicken in Southeast Sulawesi has not been much reported, either genotype and phenotypes character. Research that studies the biological and genetic aspects in Tolaki chickens not yet implemented, so that the data potential production, maintenance efficiency has not been much noticed.

As the initial step in this research was conducted to find out the potential of the phenotype and genetic Tolaki chicken during growth, including the potential productivity and reproductivity.

PROCEDURE



Artificial Insemination



Hatching



Weighting

RESULT

Heritability Value of Body Weight on 0-12 Week

Age (week)	Heritability		
	\hat{h}^2_{a}	\hat{h}^2_{d}	$\hat{h}^2_{\text{(a+d)}}$
0	0,28 ± 0,29	-0,05 ± 0,11	0,12 ± 0,13
1	0,39 ± 0,33	0,01 ± 0,08	0,20 ± 0,23
2	0,41 ± 0,35	0,01 ± 0,13	0,21 ± 0,24
3	0,52 ± 0,38	0,15 ± 0,21	0,34 ± 0,31
4	0,70 ± 0,45	0,19 ± 0,13	0,44 ± 0,25
5	0,55 ± 0,42	0,08 ± 0,13	0,31 ± 0,29
6	0,54 ± 0,41	-0,08 ± 0,26	0,23 ± 0,26
7	0,49 ± 0,38	0,05 ± 0,15	0,27 ± 0,27
8	0,49 ± 0,38	-0,25 ± 0,27	0,12 ± 0,13
9	0,39 ± 0,33	-0,24 ± 0,26	0,08 ± 0,14
10	0,30 ± 0,28	-0,18 ± 0,19	0,06 ± 0,12
11	0,39 ± 0,33	-0,20 ± 0,21	0,09 ± 0,16
12	0,27 ± 0,26	-0,23 ± 0,23	0,02 ± 0,07

\hat{h}^2_{a} : male component
 \hat{h}^2_{d} : female component

$\hat{h}^2_{\text{(a+d)}}$: male + female component

Heritability Value of Body Weight Gain On 1-11 Week

Age (week)	Heritability		
	\hat{h}^2_{a}	\hat{h}^2_{d}	$\hat{h}^2_{\text{(a+d)}}$
0	0,28 ± 0,29	-0,05 ± 0,11	0,12 ± 0,13
1	0,39 ± 0,33	0,01 ± 0,08	0,20 ± 0,23
2	0,41 ± 0,35	0,01 ± 0,13	0,21 ± 0,24
3	0,52 ± 0,38	0,15 ± 0,21	0,34 ± 0,31
4	0,70 ± 0,45	0,19 ± 0,13	0,44 ± 0,25
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6	0,54 ± 0,41	-0,08 ± 0,26	0,23 ± 0,26
7	0,49 ± 0,38	0,05 ± 0,15	0,27 ± 0,27
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11	0,39 ± 0,33	-0,20 ± 0,21	0,09 ± 0,16
12	0,27 ± 0,26	-0,23 ± 0,23	0,02 ± 0,07

\hat{h}^2_{a} : male component
 \hat{h}^2_{d} : female component

$\hat{h}^2_{\text{(a+d)}}$: male + female component

Conclusion

Based on the results of research carried out on Genetic Analysis on Growth Period Tolaki Chicken can be summarized as follows:

- Inheritance nature of growth based on the variance components stud (H^2_S), based on the parent (H^2_D) and the stud and parent ($H^2_S + d$) reasonably fluctuate depicting still vast variance chicken growth properties Tolaki
- Ability heredity stud growth based on the variance components (H^2_S) from 0 to 12 weeks with a high heritability values and positive values.