

**ACCURACY OF TEST INTERVAL METHOD IN ESTIMATING TOTAL MILK  
YIELD AND MILK COMPONENTS OF DAIRY GOATS**

**RANIEL AGUSTIN VALENCIA**

An undergraduate thesis manuscript presented to the Faculty of the Department of  
Animal Science, College of Agriculture, Central Luzon State University in  
partial fulfillment of the requirement for the Degree

**BACHELOR OF SCIENCE IN AGRICULTURE  
(ANIMAL SCIENCE)**

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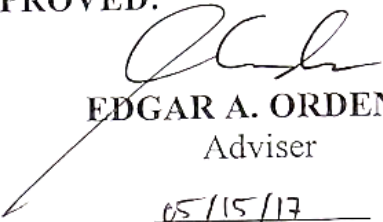
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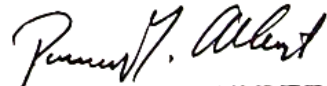
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**RANIEL AGUSTIN VALENCIA**

## **BIOGRAPHICAL SKETCH**

The author, Raniel Agustin Valencia was born on September 23, 1997 at Malolos, Bulacan. He is the eldest son among the three children of Mr. Rolando D. Valencia and Mrs. Estrellita A. Valencia.

He finished his elementary education at Manicla Elementary School and completed his secondary education at San Jose City National High School, formerly Constancio Padilla National High School.

His aspiration to continue his studies was fulfilled at Central Luzon State University. He pursued Bachelor of Science in agriculture major in Animal Science with Dairy Production as his specialization. To further enhance his knowledge in research, he pursued thesis as his undergraduate requirement.

The author is a proud and an active member of Society of Animal Science (SAS) a college based organization.

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# ACCURACY OF TEST INTERVAL METHOD IN ESTIMATING TOTAL MILK YIELD AND MILK COMPONENTS OF DAIRY GOATS<sup>1</sup>

by

**Raniel A. Valencia**

## ABSTRACT

The study sought to assess the accuracy of test interval method (TIM) in estimating total milk yield and milk components of dairy goats. The TIM was used to estimate the milk yield of 31 dairy goats ( 2 Saanen, 7 Toggenburg, 1 Alpine, 21 Anglo-Nubian) from Small Ruminant Center, Central Luzon State University, Science City of Muñoz, Nueva Ecija. Three Anglo-Nubian were used in the estimation of milk components. Test interval was at 15, 20 and 30 days. The study period covered 150 days lactation starting from the 5<sup>th</sup> day after kidding.

Results revealed that the estimates of test interval method were lower compared to the actual milk yield. The mean for the actual milk yield was 4.08% to 5.85% higher than the three tested interval. However, 20 days interval has the highest accuracy (95.92%) on estimating milk yield. Meanwhile, 15 days interval has the highest accuracy for milk components estimate, namely; 96.83% for milk fat, 96.11% for milk protein, 95.22% for total solid and 95.56% for solid nonfat.

Correlations between the actual and estimated yield of TIM were 0.983, 0.977 and 0.955 for 20 days, 15 days, and 30 days interval, respectively for milk yield. For milk fat, the r-values were 0.980, 0.842, and 0.765 for 20 days, 30 days and 15 days interval, respectively. In terms of milk protein, the r-values were 0.989, 0.989 and 0.871 for 15 days, 20 days, and 30 days interval, respectively. Test interval method could be an alternative recording method in estimating total milk yield and milk components of dairy goats.

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