



REPÚBLICA DEMOCRÁTICA DE TIMOR-LESTE
INSTITUTO NACIONAL DE CIÊNCIAS E TECNOLOGIA
(INCT)



Instituto Nacional De Ciência e Tecnologia

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INCT SCIÊNTIFIC RESEARCH REPORT 2021

Instituto Nacional
de Ciências e Tecnologia de
Timor-Leste



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Effect Of Efficiency Leguminosae Production Plus Maize As A Feeding
On Growth Phase Of Local Swine In Timor-Leste
(*Potamochoerus porcus*).

By Teams:

Armando Afonso

Esmenia Seina Dc Cruz

Inácio Savio Pereira

Marcelino Da Costa Napoleão

Desembro de 2021



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Knowledge Area : Livestock

**Prepared By Teams : Armando Afonso, Esmenia Seina Dc Cruz,
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Mentor : Claudino Ninas Nabais., P.hD

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(*Potamochoerus porcus*).

Knowledge area : Livestock

Mentor : Claudino Ninas Nabais., P.hD

Conclusion year : 2021

**I Certify, Respectfully, That The Data Presented Here Are Correct And That This
Research Does Not Indicate Plagiarism Or Copyright Infringement**

Instituto Nacional de Ciências e Tecnologia, Date month year

Investigator's Signature :

I have noted the information in this statement and also certify that all this data is true

Mentor's Signature :

Acknowledgment

With the completion of this research, our research team would like to express our gratitude to God Almighty for all the gifts and guidance that has been bestowed upon us, the research team. We present the results of this scientific work to several parties or institutions who have supported and facilitated us for the completion of this research, namely;

1. National Institute of Science and Technology (INCT)
2. Oriental University of East Timor (UNITAL)
3. Faculty of Agriculture, majoring in Animal husbandry and Agronomy Departments
4. INCT mentor's DR. Claudino Ninas Nabais.

Hopefully this is our only offering.

Motto: “*With science and breeders can change my future life experience*”.

Team

Writers

Efeito da Eficiência Produção de Leguminosas Mais Milho Como Alimento na Fase de Crescimento de Suínos Locais Desempenho em Timor-Leste
(*Potamochoerus Porcus*)

Abstrato

Em Timor-Leste, os suinicultores ainda não utilizaram grãos de leguminosas para a manutenção de suínos para alimentação animal, para aumentar o desempenho, respondendo à procura do mercado. Os objectivos da investigação para avaliar o Efeito da Eficiência Leguminosae Produção Plus Milho como uma alimentação em Fase de Crescimento de Suínos Locais Desempenho em Timor-Leste. Esta pesquisa foi realizada em Agosto de 2021 até Outubro de 2021 em aldeia Zero cinco (05), Suco de Fatuhada, posto Administrativo de Dom Aleixo e Município de Dili, com elevação de 8 metros Acima Nível do Mar (ASL). Tamanho da pesquisa com comprimento de 10 m x largura de 11 m = 110 m². Esta pesquisa foi utilizada Latin Square Design com 4 tratamentos, 4 linhas, sendo empregadas 4 colunas. A alimentação suína tem 4 tratamentos, tais como R1 (milho 50% + Feijão Verde 15% + Soja 20% + Feijão 15%), R2(Milho 40% + Feijão Verde 20% + Soja 15% + Feijão 25%), R3 (Milho 40% + Feijão Verde 20% + soja 20% + Feijão 20%), R4(Milho 50% + Feijão Verde 10% + Soja 15% + Feijão 25%). Nesta pesquisa mostrou-se que os suínos que consumiam taxas de R2 eram muito bons quando comparados com outros alimentos para suínos. Veja o desempenho dos suínos com aumento de peso corporal de 31,16kg e comprimento do corpo de 72,75cm na fase de cultivo. Todos os dados analisados pela ANOVA Latin Square Design e Least Significance Difference (LSD) foram conduzidos quando as médias foram significativamente diferentes ($p < 0,05$).

Palavras-Chave : Eficiência de Leguminosas, Milho, Suínos Locais (*Potamochoerus porcus*).

**Effect of Efficiency Legume Production Plus Maize As a Feeding
On Growth Phase of Local Swine Performance in Timor-Leste
(*Potamochoerus porcus*).**

Abstract

In Timor Leste swine Farmers did not use yet legume production grains for feed swine maintenance for increasing performance respond to market demand. The aims of research to evaluate the Effect of Efficiency Leguminosae Production Plus Maize as a feeding on Growth Phase of Local Swine Performance in Timor Leste. This research was conducted on August 2021 to October 2021 in Zero five (05) Hamlet, Fatuhada village, Dom Aleixo Sub District and Dili Municipality with elevation 8 meters above sea level (ASL). Research size with length 10 m x width 11 m = 110 m². This research was used Latin Square Design with 4 treatments, 4 rows, and 4 columns were employed. The swine feeding has 4 treatments such as R1 (corn 50% + mung bean 15% + soybean 20% + common bean 15%), R2 (corn 40% + mung bean 20% + soybean 15% + common bean 25%), R3 (corn 40% + mung bean 20% + soybean 20% + common bean 20%), R4 (corn 50% + mung bean 10% + soybean 15% + common bean 25%). In this research showed that swine that consumed R2 rates were very good when compared to other feedings for swine's. Look at the performance of the swine with an increase in body weight of 31.16kg and body length of 72.75cm in the grower phase. All data analyzed by ANOVA Latin Square Design, and Least Significance Difference (LSD) conducted when means was significantly different ($p < 0.05$).

Keywords : Efficiency of Legume, Maize, Local Swine (*Potamochoerus porcus*).

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List of Abbreviations

ADF	= Acid Detergent Fiber
ANOVA	= Analysis of Variance
ASL	= Above Sea Level
Cm	= Centimeter
F	= Frequency
INCT	= Instituto Nacional de Ciências e Tecnologia
Kg	= Kilo gram
LSD	= Least Significance Difference test
m	= Meter
NS	= No significant
MSCBM	= Mung Bean, Soya Bean, and Common Beans Meal
N	= Nitrogen
NDF	= Neutral Detergent Fiber
P	= Probability
R	= Ransom