

**STUDY OF AGONISTIC BEHAVIOUR AND
GROWTH PERFORMANCE OF LARGE WHITE
YORKSHIRE WEANED REGROUPED
PIGLETS UNDER DIFFERENT
MANAGEMENTAL PRACTICES**

**BASCAL LEO, J.
I.D.No.MVM 00027**



*Thesis submitted in partial fulfilment
Of the requirements for the degree of*

**MASTER OF VETERINARY SCIENCE
in
LIVESTOCK PRODUCTION AND MANAGEMENT**

to the
Tamilnadu Veterinary and Animal Sciences University
Chennai – 600 051.

**DEPARTMENT OF LIVESTOCK PRODUCTION AND
MANAGEMENT
MADRAS VETERINARY COLLEGE
TAMILNADU VETERINARY AND ANIMAL SCIENCES
UNIVERSITY
CHENNAI - 600 007**

2002

CERTIFICATE

This is to certify that the thesis entitled "**STUDY OF AGONISTIC BEHAVIOUR AND GROWTH PERFORMANCE OF LARGE WHITE YORKSHIRE WEANED REGROUPED PIGLETS UNDER DIFFERENT MANAGERMENTAL PRACTICES**" submitted in partial fulfilment of requirements for the degree of **MASTER OF VETERINARY SCIENCE** in **LIVESTOCK PRODUCTION AND MANAGEMENT** to the Tamilnadu Veterinary and Animal Sciences University, Chennai, is a record of bonafide research work carried out by **BASCAL LEO.J**, under my supervision and guidance and that no part of this thesis has been submitted for the award of any other degree, diploma, fellowship or other similar titles or prize and that this work has not been published in part or full in any scientific or popular journal or magazine.

Date : 26.7.02

Place : Chennai.


(Dr. S. ARUNACHALAM) 26/7/02
Chairman

Approved By

Chairman : Dr. S. ARUNACHALAM 

Members :

1. Dr. T. SIVAKUMAR 

2. Dr. A. SUBRAMANIAN 

Date : 01.10.2002


EXTERNAL EXAMINER

(D.K. BIDARKAR)

ABSTRACT

Title : STUDY OF AGONISTIC BEHAVIOUR AND GROWTH PERFORMANCE OF LARGE WHITE YORKSHIRE WEANED REGROUPED PIGLETS UNDER DIFFERENT MANAGEMENTAL PRACTICES

Name of the student : BASCAL LEO.J,

Degree for which thesis is submitted : M.V.Sc.,
(Livestock Production and Management)

Name of the Chairman : Dr.S.ARUNACHALAM, Ph.D.,

Department : Livestock Production and Management

College : Madras Veterinary College

University : Tamil Nadu Veterinary and Animal Sciences University

Year : 2002

The experiment was conducted in the piggery unit, Livestock Research Station Kattupakkam with eighty Large White Yorkshire weaned piglets. They were classified in to heterosex, male, female (Sex based regrouping), large, medium, small, asymmetry (Weight based regrouping), enriched environment, increased feeding space allowance and barren environment (Management based regrouping) groups each consisting of eight pigs. To study the effect of agonistic behaviour, the behavioural activities were recorded with the help of a Video camera and Time lapse video recorder and also by personal observations.

The present study was designed with the following specific objectives.

- i. To assess the effect of regrouping on the agonistic behavior.
- ii. To assess the effect of regrouping on the growth performance of weaned piglets.
- iii. To study the effect of different managemental methods on agonistic behavior and growth performance of regrouped piglets.

In sex based regrouping the total duration and number of encounters of agonistic interactions of female piglets were significantly ($P < 0.05$) higher than the male and heterosex group piglets, in weight based regrouping the medium weight group had significantly ($P < 0.05$) more duration and number of interactions than the large, small and asymmetry groups and in management based regrouping straw bedding group had significantly ($P < 0.05$) less duration of interaction than increased feeding space allowance and barren environment group piglets.

The agonistic interactions were significantly higher ($P < 0.01$) during the first hour after regrouping and got reduced with passage of time in all the treatment groups.

The body temperature was significantly ($P < 0.01$) higher in females, medium weight and increased feeding space allowance group piglets in sex based, weight based and managemental based group respectively. Similar was the trend in case of other physiological parameter such as pulse rate and respiratory rate.

The male piglets in sex based group, large weight piglets in weight based group and increased feeding space allowance group piglets in managemental groups had significantly ($P < 0.01$) higher feed intake and body weight than the other groups in their respective groupings.

The feed efficiency was significantly ($P < 0.01$) higher in pigs under enriched environment than the other treatment groups.

The body measurements viz., body length, chest girth and height were significantly ($P < 0.01$) higher in males, large weight piglets and piglets in increased feeding space allowance in their respective treatment groups.