# THE EFFECTS OF MISTRAL<sup>TM</sup> APPLICATION ON PIGLET PERFORMANCE IN THAILAND

## Vivat Chavananikul<sup>1</sup>, Atipoo Nuntaprasert<sup>2</sup>, Manakant Intarakamhaeng<sup>1</sup>

<sup>1</sup> Department of Animal Husbandry, Faculty of Veterinary Science, Chulalongkorn University, Bangkok, 10330, Thailand, <sup>2</sup> Department of Veterinary Medicine, Faculty of Veterinary Science, Chulalongkorn University, Bangkok, 10330, Thailand

## Introduction

The purpose of this experiment is to measure the effects of **Mistral** application in piglet performance, that is, body temperature after farrowing, duration of drying and dropping of umbilical cord, incidence of diarrhoea and and total bacterial count in farrowing crate.

## **Material and Methods**

#### Place and animals:

The experiment was conducted in a commercial breeder farm of 8,000 sows in Ratchaburi province in 2003. One farrowing house in a unit of 2-breed (Largewhite x Landrace) sows was selected to set the experiment.

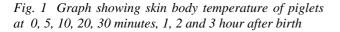
A total of 456 piglets (crossbred Landrace x Largewhite x Duroc) from 43 sows was randomized into two groups. Group Mistral (Treatment), the piglets were dipped from neck to bottom with Mistral<sup>TM</sup> powder immediately after birth; while Group C (Control), no application of Mistral<sup>TM</sup> on the piglets.

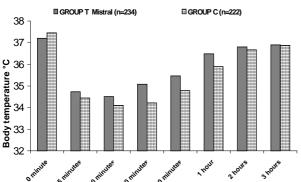
Measurements:

- 1. Skin body temperature using laser temperature instrument at 0, 5, 10, 20, 30 minute, 1, 2, and 3 hour after birth.
- 2. Duration of drying and dropping of the umbilical cords.
- 3. Incidence and time of recovering of diarrhoea.
- 4. Total bacterial count in the farrowing crates

#### Results

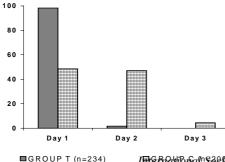
# Skin body temperature

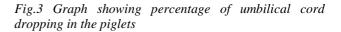


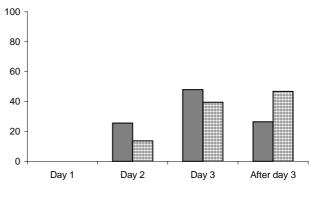


Duration of drying and dropping of the umbilical cords

*Fig. 2 Graph showing percentage of umbilical cord drying in the piglets* 

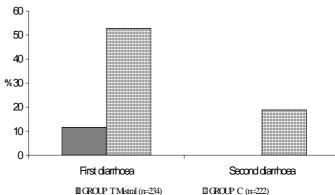




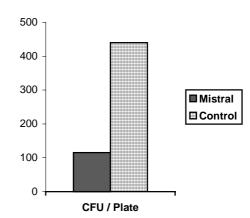


■GROUP T (n=219) ■GROUP C (n=205)

*Graph.4 Effect of Mistral*<sup>TM</sup> *application on piglet diarrhoea in the first weeks of life.* 



*Graph.5 Effect of Mistral*<sup>TM</sup> *application on total bacterial count in the farrowing crates* 



#### Conclusion

Using MISTRAL<sup>TM</sup> from birth in the pig farrowing pens affects significantly piglets temperature after birth, the duration of drying and dropping of the umbilical cords, the incidence and duration of diarrhoea in the first week of life, and the total bacterial counts in the farrowing crates.

IfterRational 53efety for Animal Hygiene - Saint-Malo - 2004