

INFORMATION ON RESEARCH RESULTS

1. General information

- Project title: Studied on the circulation of foot and mouth disease virus in pigs and immunological response of vaccine.
- Code number: **B2010-16-180**
- Coordinator: **Nguyen Thu Tam**
- Implementing institution: Department of Veterinary Medicine - College of Agriculture and Applied Biology- Cantho University
- Duration: from April-2010 to April-2012.

2. Objectives:

- To determinate the circulation of foot and mouth disease virus (FMD) in pigs.
- To investigate protective rate and remained duration of immunological response in pigs of vaccination.

3. Creativeness and innovativeness

- The vaccination rate of FMD for pigs in region is low. This rate had not meet the requirement for the protection of the herds.
- Immunological responses of pigs vaccinated FMD vaccine is low
- There was the circulation of FMD virus type O in pigs of Chau thanh district Dong thap province.

4. Research results

- The vaccination situation of FMD for pigs in region is low. The average vaccination rate for pigs in Cantho, Dong thap and Hau giang from 2008 to 2010 were 39,94%, 28,68% and 27,62% respectively.
- The outbreak of pig FMD occurred in 2006 and 2007 in some provinces in Mekong delta. From 2008 to date there was almost no occurrence unless very few cases that was detected in smallholder and slaughter house.
- There was the circulation of FMD virus in Chau thanh district, Dongthap provinces through the positive serological of type O found in pigs. The infected rate in pigs was 73.30%. In addition FMD virus type O was also detected in pig infected samples.
- The immunological response with FMD vaccine of pigs were low. The protective rate of pigs in Cantho, Dong thap, and Hau giang were 56.67%, 34.10% and 27.62% respectively.

-After vaccination, the protective rate on the day of 21 to 28 was 84.38%. This rate remained to the day of 60 was 48.50% and gradually decreased to the third month and decreased rapidly after that.

- Giá trị PI của các mẫu huyết thanh đạt tỉ lệ bảo hộ đang ở mức cao nên có khả năng bảo hộ trong một thời gian nhất định theo tiêu chuẩn của vaccin.

-PI value (Percentage Inhibition of Elisa technique for determination of antibody of serum) is being at high protective levels.

5. Products

-Two master students.

-One article: published in the Cantho University Scientific Symposium Proceedings 11/2010.

-A scientific report of the project.

6. Effects, transfer alternatives of research results and applicability

The research results have been transferring to provincial departments of Dong thap, Kien giang and Hau giang where these studies were carried out.

Project leader



Nguyen Thu Tam