

## **INFORMATION ON RESEARCH RESULTS**

### **1. General information**

Project title: "The survey on the prevalence of the blood parasites, especially Leucocytozoonosis in broilers and suggestion some effective preventations in some provinces in Mekong delta"

Code: 2010-16-163

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Implement Institution: Can tho University

Duration: 2010-2011

### **2. Objective**

- Surveying the situation in the poultry flocks in some provinces in Mekong delta.
- Identifying the prevalence rates of the blood parasites in poultry
- Identifying the species of blood parasites in broiler.
- Observing the necropsy on infected, and apply the histopathological methods to detect blood parasite species.
- Test the efficiency of some drugs in the treating and prevention.

### **3. Creativeness and innovativeness**

This is a breakthrough project in the field of prevention of the blood parasite disease in chickens which is one of the most new harmful diseases, resulting in the massive damage to the national poultry production. Therefore, to control the mentioned disease, it is necessary to figure out the effective measurements in order to offer the highest productivity for the poultry farms in Mekong delta.

### **4. Research results**

Through the examination of 2330 blood samples of broilers at 4 areas: Mang Thit District, Vinh Long City, Vinh Long Province and Chau Thanh District, My Tu District, Soc Trang Province, and the necropsy of 60 broilers, and the treatment of blood parasite disease of 3 broiler flocks with three kinds of medicines: ALECCID, BIO QUINO-COC, and HANCOC, we found that:

The prevalence of blood parasites infestation was rather high at 30.47%. The infection rate of blood parasite in broilers at Mang Thit District, Vinh Long City – Vinh Long Province (32.38%) was markedly higher than that at Chau Thanh District, My Tu District – Soc Trang Province (28.22%). It increased according to the ages of broilers.

Chicken breeds: Of the three various breeds, namely Tam Hoang, Newhloman, Brown AAA, Tam Hoang breed showed the highest infection rate.

Raising methods: Raising chickens in the free range houses has the higher infection rate than that in cooling pad houses.

Two species of blood parasite were found in broilers: *Leucocytozoon caulleryi* and *Plasmodium* spp.. The infection rate of *Leucocytozoon caulleryi* was higher than that of *Plasmodium* spp. in blood.

The symptoms of infected broilers were mostly found as green exudation, anemia, dropsy and weakness. Through necropsy, we also found that there were necrosis and atrophy in livers, spleens.

The results of treatment with three kinds of medicines : ALECCID, BIO QUINO-COC and HANCOC were effective

## **5. Products**

- A report on the situation of raising chickens in some surveyed areas.
- A report on the infection level of blood parasites resulting from *Leucocytozoon caulleryi* in the poultry flocks according to the breeds, age groups, and raising methods.
- A report on the results of testing some effective drugs in the treatment of *Leucocytozoon caulleryi* , and recommended preventive measures.
- Three published scientific reports in the prestigious scientific magazines
- Successful supervision of a master's student of Veterinary Medicine (MVM) .

## **6. Effect, transfer alternatives of research results and applicability**

The results showed the prevalence of blood parasites caused by *Leucocytozoon caulleryi* on raising chickens in the Mekong delta. Three drugs such as ALECCID, BIOQUINO-COC and HANCOC was tested effective. Therefore, these findings play an essential role in preventing Leucocytozoonosis as well as blood parasite diseases in order to develop the poultry production not only in Mekong delta but also throughout the country.