A VACCINE FOR THE PREVENTION OF FOWL POX

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FOWL POX commonly spoken of as Chicken Pox is probably the commonest and most widely-distributed disease of Poultry in Ceylon.

It is caused by an ultravisible virus, the symptoms produced varying according to the tissues of the body which are attacked. When the comb, wattles, lobes, and bare skin of the face are attacked warty nodules are produced, and it is this type of the disease which is commonly referred to as Chicken Pox. When the tissues of the mouth, tongue, and throat are affected yellow cheesy membranes are developed. This form of the disease is often spoken of as fowl diphtheria. When the eyes and nose are affected catarrhal and inflammatory symptoms resembling those of a severe cold or even Roup are produced.

All three forms of the disease are caused by the same virus and may be present in one bird at the same time. So long as the disease is confined to the comb and wattle, especially in older birds, it does not cause very serious results. When the throat and eyes are affected the death rate may be high. When young chicks are attacked the mortality is usually high.

In Ceylon the disease is very common and it is the cause of considerable losses every year among young birds.

According to workers who have studied this disease in England infection is in nearly all cases contracted by direct contact with a sick bird. It is, however, no uncommon experience in Ceylon to find the disease break out in a flock to which it is known definitely that no diseased bird has had access.

Such outbreaks have always been difficult to explain, but recent work in other countries has shown that mosquitoes are capable of transmitting the disease. It would appear from field observations that this is a common mode of transmission of infection in Ceylon. It is probably for this reason that infection so often gains entrance to poultry yards in Ceylon in spite of all precautions with regard to quarantine of newly purchased birds, etc.

PREVENTION BY VACCINATION

Many attempts have been made in the past to produce a reliable vaccine against this disease. The results obtained were very variable; in some cases good results were obtained, in others the vaccine failed to confer any immunity, while in yet others the vaccine produced severe effects almost as bad as a natural attack of the disease.

In 1930, Doyle working in the Veterinary Laboratory of the Ministry of Agriculture, England, obtained very good results with a vaccine which was prepared from pigeons. This vaccine produced no ill-effects on the fowls and gave a very strong resistance to infection which lasted about 4 months.

The results obtained were so encouraging that it was decided to test it in Ceylon. Capt. Doyle very kindly supplied some of his material which arrived safely in Ceylon. From this material a quantity of vaccine has been prepared. It was tested at first on chickens at the laboratory and later supplied to a number of poultry breeders in various parts of Ceylon.

Results on the whole appear to be satisfactory. The vaccine is a preventive and appears to have little value as a curative. When used in a poultry yard in which the disease is wide-spread results are not so good.

A poultry keeper who has in the past suffered considerable losses among his young stock every year adopted the following method during the past twelve months and reports that he is highly satisfied with the results obtained. His method was to make a routine practice of vaccinating every batch of chickens hatched as soon as they reach the age of 2 to 3 weeks. This was done systematically with every batch of chickens. He found that in quite a number of cases the disease made its appearance among the vaccinated chickens some 2 or 3 months after vaccination, but in all cases it was very mild and almost entirely confined to the comb and wattles. The birds showed practically no ill-effects and continued to eat normally. No deaths occurred. It is of interest that no cases occurred among the very young chicks. This is in striking contrast to this breeder's experience in other years before using the vaccine. His losses among young chicks were always considerable. This method appears to be well adapted to Ceylon and can be recommended to poultry breeders.

METHOD OF VACCINATION

The method of vaccination is simple and can be carried out by the poultry keeper himself.

Vaccination is done on the thigh just above the hock joint, that is immediately above the unfeathered portion of the leg. A few feathers, say about 8 to 10, are plucked from the thigh. The bare skin exposed after plucking these feathers is then lightly scratched with a clean darning needle. It is not necessary to scratch deeply nor to make the skin bleed freely; just sufficient to roughen the skin and remove the more superficial layers. The points on the skin from which the feathers were removed should be scratched. A drop or two of the vaccine is then dropped on to the piece of skin which has been scratched and well rubbed into the scratches.

It is convenient to do this at night because the chickens are then quiet and easily caught and handled. No further treatment is necessary. It should be remembered that the vaccine does not confer immunity immediately, it takes from 10 to 14 days to develop, and during this period care should be taken to avoid exposure of the chicks to infection. The best time to vaccinate is *before* the disease makes its appearance. Do not wait for an outbreak and then vaccinate.

It is advisable to examine the chicks five or six days after vaccination to see whether it has 'taken'. This will be indicated by a swollen condition of the skin especially marked at the points from which the feathers were removed. If there is no swelling the vaccine has not taken and should be repeated.

Supplies of vaccine can be obtained on application to the Government Veterinary Surgeon, Colombo.