

## PSEUDO FOWL PLAGUE

---

M. CRAWFORD, M.R.C.V.S.

GOVERNMENT VETERINARY SURGEON

---

**T**HIS is the most serious infectious disease of poultry in Ceylon at present and is doing more to hinder the development of a promising cottage industry than any other single factor. As there seems to be a good deal of misunderstanding of the nature and origin of the disease it is advisable to give a brief resumé of the important points.

One misconception that exists in some places is that the disease has been introduced and spread by means of the imported breeds of poultry such as the R. I. R. which are being popularized by the Department of Agriculture. This is not correct. The disease is new not only to Ceylon but to science. The first record of the occurrence of this disease was a serious outbreak on a large poultry farm at Newcastle in England in 1926. The origin of the infection was never definitely proved but it was suspected to have come from America. The disease was dealt with very rigorously and did not spread and never became established in England. It is unknown there to-day.

In 1927 reports of a new disease of poultry came in from numerous and widely separated places, for example at Rhaniket in the north of India, the Phillipines, Java and Ceylon.

The source of infection was never definitely traced in any of these outbreaks. In India it spread with great rapidity from the north to the south and it is still a great source of loss to poultry keepers in India.

It is suspected that Ceylon was infected from India. At that time large numbers of live poultry were regularly imported from South India to Colombo and the disease first appeared in Colombo and round about. There is no definite proof of this but when investigations were made later it was shown that fowls actually affected with the disease were being brought from India to Ceylon. It was because of this that the import of live fowls from India and Asiatic Ports was prohibited in 1931. Following prohibition there was a considerable decrease in the number of outbreaks of the disease and there were periods of quiescence but the disease has never died out since it started in 1927, and recently it has shown evidence of increased activity.

The disease is essentially one which is spread by direct contact. Spread of infection by intermediate agents as for example crows and dogs carrying pieces of carcasses of birds dead of the disease does occur but only over short distances. In towns and villages crows and dogs play an important part in disseminating the disease once it has been introduced but they are of little or no importance in carrying the disease over any considerable distance. That is very evident from the experience of our own Departmental farms. These farms are not situated in towns or villages and we have never had the disease at any time on any of our farms with one exception and that was the Tinnevelly Experiment Station where the fowl runs were within a stone's throw of a busy public road. The experience of large poultry farmers on estates have been similar, for example the brothers Van Geyzel and Mr. Schrader have probably the largest poultry farms in Ceylon and none of them has ever had this disease. It may be stated with confidence that in 99 per cent. of outbreaks the primary infection is introduced by fowls either actually sick with the disease or which have been in contact with sick birds.

Once introduced into a village or town, intermediate agents such as crows and dogs can and do play an important part in spreading infection.

To control or prevent spread by such intermediate agents is of course a very difficult task and so the most useful measures are those designed to prevent the primary introduction from outside areas.

Transport of fowls by railway is a frequent means of spreading infection over long distances in a very short time. A recent example will illustrate this. An outbreak occurred in Anuradhapura. This was soon followed by reports of outbreaks at Galle, Katugastota and Trincomalee.

In the case of Galle there was clear and definite proof that infection had been introduced by fowls brought from Anuradhapura by train and in the case of Trincomalee and Katugastota there is good reason to believe that the same applies.

It is therefore very important that early and stringent measures be taken to prevent fowls from an infected place being sent out by rail.

The disease was added to the list of diseases under the Contagious Diseases (Animals) Ordinance (Chapter 327) in 1931. This was done in order that regulations could be passed prohibiting import of fowls into Ceylon from countries where the disease was known to be widespread.

At first no attempt was made to deal with outbreaks in accordance with the regulations framed under that Ordinance. It was thought that the difficulties of enforcing the regulations would be very great. In some areas the attempt has been

made to deal with the disease in accordance with the regulations, and experience shows that such action can be very useful even when it is not possible to attain rigorous enforcement of all details of the regulations.

The attention of all Revenue Officers is therefore drawn to this disease because (1) it is a serious stumbling block to the development of a very promising village industry (2) it is causing a scarcity of eggs and table poultry and (3) there is reason to believe that utilization of the powers under the Contagious Diseases (Animals) Ordinance is likely to be very useful in checking spread.

The main points which should be borne in mind are—

- (a) The disease causes a high mortality generally over 80 per cent.
- (b) There are no carriers.
- (c) Recovered birds have a strong and lasting immunity.
- (d) The virus is delicate and readily destroyed outside the fowl's body by natural agencies such as sunlight.

For these reasons the disease is theoretically one which it should be possible to eradicate completely from an island such as Ceylon in the same way as it has been possible to eradicate Rinderpest.

- (e) The sick fowl and the fowl which has been in contact with sick fowls are the normal means of introducing infection into a clean area.
- (f) The railway and 'buses can act as rapid means of disseminating infection over long distances.
- (g) Carelessness in disposing of carcasses is very common. They are frequently thrown out on rubbish heaps, into ditches, dust bins, &c., instead of being burnt or buried deeply.
- (h) The reprehensible practice of selling off all contact birds as soon as the disease appears in a poultry yard is one of the ways in which the disease is rapidly spread.
- (i) The activities of hawkers must be stopped as soon as the disease occurs in any area.
- (j) Up to the present no practicable curative or preventive treatment is known and attempts at treatment should not be encouraged.
- (k) There is some suspicion that the regulations prohibiting import of live fowls may be evaded by small sailing craft from India and inquiry should be made as to whether this is in fact occurring. A feature of the disease has been the frequency with which it occurs at sea coast towns.