It is concluded that the phage of *S. pullorum*, as well as those of several other bacteria, may be sufficiently available to the studies on typing of *S. pullorum* and epizootiological investigation of pullorum disease.

STUDIES OF *ESCHERICHIA COLI* ISOLATED FROM CHICKENS, SEROLOGICAL TYPES AND SENSITIVITY TO ANTIBIOTICS

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Two hundred and seventy strains of *Escherichia coli* were isolated from the internal organs (heart, liver, spleen, kidneys, and lungs) of 1198 chickens; 217 from the unabsorbed yolk of the same chickens; and 185 from the droppings of 153 normal day old chickens. Although a few internal organs and unabsorbed yolks were taken from birds about 8 weeks of age; the majority were taken from normal day old chickens. The results of the present experiments may be summarized as follows:

1. Using 42 types of anti *E. coli* O serums (39 known and 3 unknown), 71.5% strains isolated from the internal organs, 79.3% from the yolk, and 74.6% from the feces were typable.

2. There were 25 different O groups of *E.coli* isolated from the internal organs, 22 from unabsorbed yolks, and 17 from droppings.

3. Of 672 strains studied, about 60% belonged to one of the following O groups; O 60 (20.7%), 8–18 (10.3%), Y 813 (9.2%), O 53 (6.7%), O 1 (5.1%), O 2 (2.7%), O 21 (2.4%), and N 128 (2.1%). Serotype O 78, which is common in poultry respiratory diseases in England, was not found in the present studies.

4. Five strains of O 28 ac were isolated from the unabsorbed yolks and 2 strains from the internal organs. The yolks yielded 2 strains of O 125 and the internal organs 2 of the same type.

5. From 24 chickens yielding *E. coli* from all tissues examined (heart, liver, spleen, kidney, lung and unabsorbed yolk), 22 yielded strains which were typed within one or two O groups.

6. Of the 672 strains tested for sensitivity to antibiotics in vitro, all were sensitive to chloramphenicol, 92% to streptmycin, and 67% to tetracycline. In general, the *E. coli* recovered from the internal organs were more resistant to streptmycin and tetracycline than those isolated from the droppings.