

**Abstract:**

Two experiments were performed to study cross infections from chickens to ducks and vice versa. For each experiment the source birds (chickens or ducks) were infected with *Pasteurella multocida* strain 10322T. The infected birds were then mixed with sentinel indigenous ducks or chickens, respectively, six hours after inoculation. To monitor cross transmission, oropharyngeal and cloacal swabs were taken from the sentinel birds daily, for culture on blood agar and other media, for two weeks. The cultured bacterial isolates were characterized for *P. multocida* through biochemical and other tests. For chickens to duck transmission study a few ducks (40%) picked the bacteria on the first day, number of infected birds increasing with time and the birds had high infection rate (60%) by day 14 post-infection. In the duck to chicken transmission study, most chickens (80%) were infected by the first day and maintained infection up to the twelfth day (60%) but appeared to clear the infection thereafter. These results showed that it was possible to transmit *P. multocida* from indigenous chickens to ducks and vice versa. The duck may be a better carrier of *P. multocida* under scavenging system than chickens. This contact cross transmission may be playing a role in the maintenance of the bacterium at the village level.