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- 4) The pili found in *C. renale* did not agglutinate the same cells as those observed in Gram-negative bacteria.
- 5) The pili antigen was heat-labile and of a distinctly different antigenic property from the somatic antigen.
- 6) Type II strain No. 35 pili were antigenically distinct from the type III strain No. 42 pili.

THE AVERAGE SURFACE TEMPERATURES IN THE FOWL

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(Summary of Masters thesis written under direction of Dr. S. HOSOYA)

The average surface temperatures of the male fowl were measured randomly at constant environmental temperatures between 5 and 30°C. In addition, the surface temperature was measured in a climatic chamber with copper-constantan thermocouples and the surface area was measured by the "gampi" paper method and the geometrical method.

- 1) The ratio of feathered to unfeathered portions was 4:1 to 5:1.
- 2) The average surface temperature was found to fluctuate with time and the environmental changes in temperature.
- 3) In calculating the average surface temperature, it was found that large fluctuations in small surface areas had as much influence on the average surface temperature as similar changes did in large areas.
- 4) The surface temperature of the feathered portion fluctuated constantly even at steady environmental temperatures, but this fluctuation was less than that of the unfeathered portion.
- 5) The skin temperature of the unfeathered portion fluctuated greatly with constant environmental temperatures.
- 6) There was a direct correlation between the surface temperature of the feathered portion and the skin temperature under it.
- 7) I used about the same classification of temperature changes as HONMA et al. did in his studies on the patterns of temperature change in the male fowl: type 1 included the comb, type 3 the wattle, shank and toe, type 4 the cheek, skin breast, back and abdomen and to type 2 most of the feathered portions of the body, except the thigh which belonged somewhere between type 3 and type 4.