



**DETECTION OF *Sarcocystis* spp. IN STRIATED  
MUSCLES OF FREE-RANGING CHICKEN  
(*Gallus gallus domesticus*)**

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### ABSTRACT

The percentage frequency occurrence of *Sarcocystis spp.* in different types of striated muscle of free-ranging chicken (*Gallus gallus domesticus*) is conducted to determine the presence of *Sarcocystis spp.* The tongue, upper esophagus, and heart were collected from freshly slaughtered free-range chicken in the backyard of Carmona, Cavite. The sections were stained with standard histologic H & E staining technique, which use haematoxylin and eosin, for the observation under the photomicroscope. Observation was done at De La Salle University – Dasmariñas. The percentage occurrence of different organ observed in tongue, upper esophagus and heart were all the same with 33.33%. *Sarcocystis spp.* is suggestive based on sarcocyst size, sarcocyst wall size, sarcocyst forms and other specific features. From 15 free-range chicken 6 of them were positive of different *Sarcocystis spp.* For tongue, the probable Sarcocystis species is *S. wenzeli* in which observed size ranges from 337 – 324  $\mu\text{m}$  x 55 – 47  $\mu\text{m}$  and the sarcocyst wall size ranges from 2-4  $\mu\text{m}$ . For upper esophagus, the probable Sarcocystis species is *S. hovrathi* in which observed size ranges from 291 – 93  $\mu\text{m}$  x 211 - 41  $\mu\text{m}$  and the sarcocyst wall size ranges from 2-3  $\mu\text{m}$ . For heart, the probable Sarcocystis species is *S. arieticanis* in which observed size ranges from 75 – 69  $\mu\text{m}$  x 41 – 29  $\mu\text{m}$  and the sarcocyst wall size ranges from 0.5-3  $\mu\text{m}$ . The study concluded that the free-ranging chickens were infected of *Sarcocystis spp.* in different striated muscles.

*Keywords:* Sarcocyst, *S. wenzeli*, *S. hovrathi*, *S. lindsayi*, Haematoxylin, Eosin