Despite the betterment done by the government especially the Ministry of Health regarding the infectious diseases, the issue of gastrointestinal parasites especially among livestock is still a major concern in Malaysia. Indeed there were studies done pertaining the prevalence of gastrointestinal nematodes in livestock, nevertheless they were not as much as studies done in human. Trichostrongylus which known as hairworm commonly affects cattle, goats and other ruminants which can lead to gastritis to animals. Trichostrongylus eggs laid by adult females in the large intestine of the host will be shed together with the faeces to the environment. Hence, this study provides a better understanding on the outer surface identification and morphological characteristics of Trichostrongylus eggs obtained from goat faecal samples by using scanning electron microscopy. Faecal samples were collected per rectum from 42 goats in two farms, Haji Kassim’s farm and Pasfa’s farm which both are located in Kuantan, Pahang, Malaysia. The results showed that the eggs are ovoid or elongated shape. The outer surface of Trichostrongylus eggs were appeared rough, crease and ruffled structure. The rough surface of Trichostrongylus eggs may imply that these forms could be resistant form for these eggs to survive in the outer environment and remain infective for several months. In conclusion scanning electron microscopy examination would facilitate evaluation and identification of outer surface structure of Trichostrongylus and other parasites as well.

Acknowledgement: The study would not be possible without the support of RAGS grant no 13-010-0073. The authors of this paper also would like to thank Kulliyyah Allied Health Sciences for the financial support, Integrated Centre of Research Animal, IIUM and final year project-students Ceria group for their kindness help.