

length of the worm. The intestine leads anteriorly into a diverticulum, which has a distinct lumen, measures 0·78 mm. in length and 0·036 mm. in breadth, and lies anteriorly on the dorsal side of the œsophagus. The œsophagus, lying in the ventral side of the animal, is also continued backwards into a cæcum lying below the intestine, and measuring 1·86 mm. in length by 0·072 mm. in breadth. The lips bear dentigerous ridges, and between them there are accessory lips. The upper lip is quadrangular with rounded anterior angles, it is 0·043 mm. in length and 0·066 mm. broad; the outer surface is flat, the inner gives off two rounded processes, which extend outwards and forwards, and protrude terminally on either side below the outer surface. The accessory lips are hook-shaped and bent inwards; they are but slightly smaller than the principal lips, from which they are markedly distant. The tail end is conical and pointed. The two uniform sabre-shaped cirri of the male are 7·2 mm. long, and are protruded for about 6 mm. They can be recognised with the naked eye, and to this the specific title obviously refers. Of postanal papillæ there are four median, and somewhat towards the ventral surface three lateral, while in front of the anus there is a variable row of thirty-eight to forty or so.

The largest female was 24 mm. long and 1·1 mm. broad. The vulva is situated about the boundary between the first and second quarter of the body, dividing the latter in the proportion of 5 to 13. The ova are spherical, the shell measures 0·0049 mm. in thickness, and is considerably distant from the yolk. It exhibits a very beautiful marking, due to regular, uniformly distributed, minute, shining elevations. The diameter measures 0·072 mm., while that of the yolk is 0·042 mm.

Ascaris spiculigera was first described by Rudolphi,¹ and has been subsequently observed by a great number of naturalists. The hosts are very numerous²—*Mergus merganser* and *Mergus serrator*, *Pelecanus americanus*, *Pelecanus onocrotalus*, *Pelecanus tetraerhynchus*, and *Pelecanus fuscus*, *Carbo brasiliensis*, *Carbo cormoranus*, *Carbo cristatus*, *Carbo dilophus*, *Carbo graculus*, and *Carbo pygmæus*, *Plotus anhinga*, *Lestris pomarinus*, *Larus tridactylus*, *Colymbus arcticus*, *Colymbus rufogularis*, and *Colymbus septentrionalis*, *Podiceps auritus*, *Podiceps dominicensis*, and *Podiceps minor*, *Uria troile*, *Alca torda*. The stomach and œsophagus are infested. The best descriptions are those of Dujardin³ and Schneider.⁴ The geographical distribution is remarkably extensive, for the species occurs in Europe (Germany, Scandinavia, Austria, Sardinia, France), in Asia (Turkestan⁵), in Africa, in America (Brazil), and in the Antarctic region.

¹ Entoz. Hist. Nat., Amstelædami, t. ii., 1808-1810, p. 168.

² Von Linstow, Compendium der Helminthologie, Hannover, 1878, pp. 162-178.

³ Loc. cit., pp. 206-208.

⁴ Monographie der Nematoden, Berlin, 1866, p. 45, pl. i. fig. 14.

⁵ Von Linstow, Fedtschenko's Journey in Turkestan, Soc. Nat. Hist. Moscow, sec. 18, vol. ii. pp. 3, 4, 1886 (in Russian).