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STEREOSCAN STUDIES ON THE SURFACE TOPOGRAPHY OF *OLVERIA BOSI*, PARASITIC IN RUMEN OF CATTLE

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The taxonomic value of SEM studies on the surface topography of digenetic trematodes is well established (Eduardo, 1980, 1982a; Tandon and Maitra 1981, 1982, 1983, 1987). The present communication deals with the surface features of *Olveria bosi* Tandon, 1951 (Paramphistomidae: Cladorchiinae), a rare species of bovine paramphistomes.

Of the ten adult worms collected from the remen of cattle (*Bos indicus* L.) four were fixed in 10% cold buffered formalin and processed for scanning electron microscopy. The metal coated specimens were observed under a Jeol JSM-35 CF under electron accelerating voltages of 10-15 Kv.

The surface features are illustrated by a series of photographs (Figs. 1-6). The whole body is encircled by transversely running prominent ridges, which assume a concentric pattern at the anterior extremity (Figs. 1, 2). The general tegument has non-tuberculated nature except in the acetabular region. The concentric ridges in the circum-oral region have a finely folding tegument and no papillate structures. The internal surface of the pharynx has a crown papillae or petaloid elevations which are comparable to the shorter papillae in the pharynx of *Paramphistomum gotoi* (Eduardo, 1982b) and also resemble the column-like papillae occurring in the anterior region in *Neocladorchis multilobularis* (Sey, 1984) (Fig 4).

The tegument at the acetabular rim is radially corrugated (Fig. 5). Sparsely scattered aciliate simple protuberances are present in the region dorsal to acetabular opening. The pattern of general tegumental folding in this region is different from that of the rest of the body.

The surface of genital opening has a cluster of smooth cobble-stone like papillae, but the region around the genital opening is devoid of any papillate surface sensory features (Fig. 6).

A comparison of *O. bosi* with *O indica*, the only other species of the genus, reveals differences of surface topography, pertaining to the arrangement, contour and distribution of tegumental papillae between the two species (Tandon, 1986). The latter species possesses a wreath-like arrangement of petaloid elevations in the circum-oral region and also a pattern of concentric ridges studded with domed papillae in the anterior part of the body.

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