

A NEW ELEPHANT HOST RECORD OF EYE WORM THELAZIA WITH SOME CLINICAL OBSERVATIONS

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Common eye worm belonging to the genera *Thelazia* (Soulsby, 1982) has been recorded from different domesticated animals. The subject has been widely reviewed by Weinmann (1982). However, there is no previous record of the occurrence of this general in Asian elephant (*Elephas maximus*) (Fowler, 1978; 1991 Pers. comm.). Present communication deals with the occurrence of *Thelazia* in an Asian elephant with some clinical conditions and its correction.

A 20 year old adult male elephant was reported to be constantly weeping from its right eye with irritation. Most of the time the animal kept close its eyelid. The mahout treated the eye with common salt in mustard oil. However, the clinical condition was not ameliorated.

On examination of the affected eye, four live creamy-white colored nematodes could be seen under the nictitating membrane in the medial canthus of the eye. The worms were collected in physiological saline solution and brought to the laboratory for taxonomic study.

Removal of the worms were followed by washing of the eye with 1% borozinc lotion three times a day. From the second day of treatment, a 1% aqueous solution of tetramisole was used alternatively for 5 days along with borozinc lotion. On the third, gentamicin eyedrops were used topically three times a day which was continued for 7 days. Fifteen days after this treatment, all the clinical condition of the affected eye became normal.

Based on the morphological criteria (Soulsby, 1982; Weinmann, 1982) of the worms recovered, it was found that the worms belonged to the genera *Thelazia* Bosc, 1819. Scanning electron microscopic studies on the tegumental morphology of the worm revealed transverse striations on the entire body surface. The striations were more sharp in the first quarter of the body (Fig.1) than the other quarters (Fig.2,3 and 4). Moreover, the striations located in the posterior two quarters were incomplete at some places (Fig.3 and 4). Findings of the detail light microscopic studies on the morphology of the specimen will be separately communicated.

There is little practical work on the host specificity of thelazia species. Probably, the host feeding preference by vector species might be playing a role in establishing the infection in a new host. Further observation in this regard is necessary.

Fig.1. Scanning electron microscopic (SEM) photograph of the *Thelazia* specimen showing the anterior quarter of the body. Note the sharp tegumental striations. Scale bar = 10 micron Magnification = X600

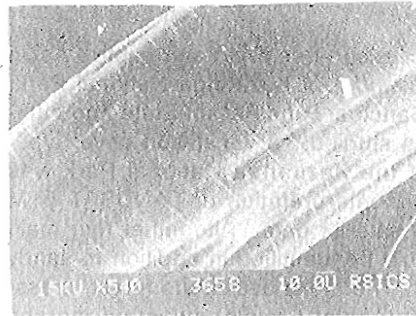
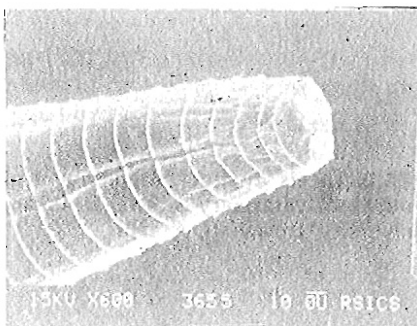


Fig.2. SEM photograph of the worm showing the transverse tegumental striations at the second quarter of the body. Scale bar = 10 micron Magnification = X540

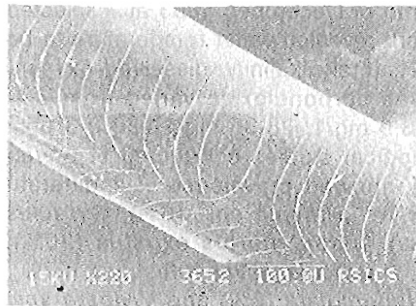


Fig.3. SEM photograph of the worm at the third quarter showing the transverse tegumental striations. Note the striations are not complete. Scale bar = 100 micron Magnification = X220

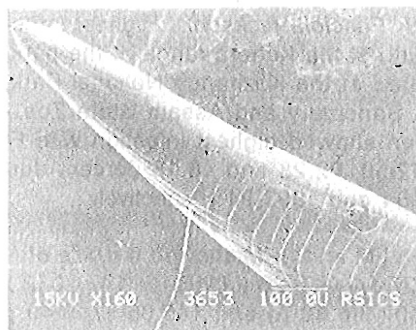


Fig.4. SEM photograph of the worm showing the hind quarter with incomplete transverse tegumental striations. Scale bar = 100 micron Magnification = X160

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