SEM MORPHOGRAPHY OF OGMA DECALINEATUM (NEMATODA : CRICONEMATIDAE)

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During a plant-parasitic nematode survey in September 1984 in coffee (*Coffea arabica* L.) plantations of São Tomé, W. Africa, several specimens of a criconematid species belonging to *Ogma* Southern, 1914 were found. Specimens from a number of localities have been examined and identified as *Ogma decalineatum* (Chitwood, 1957) Andrássy, 1979 [= *Criconema (Variasquamata) decalineatum* (Chitwood, 1957) Mehta & Raski, 1971; = *Variasquamata decalineata* (Chitwood, 1957) Khan, Chawla & Saha, 1976; = *Criconema (Variasquamata) gracile.* (Mehta & Raski, 1971) Andrássy, 1979; = *Variasquamata gracilis* (Mehta & Raski, 1971) Khan, Chawla & Saha, 1976].

Details regarding head structures, cuticle ornamentations, excretory pore, vulva lips, anus and tail, obtained with scanning electron microscope (SEM) observations, are illustrated.

Nematodes were extracted from soil samples by Cobb's (1918) decanting and sieving method. They were prepared for light microscopy observations by fixation in hot 4 % formaldehyde + 1 % propionic acid and processing to dehydrated glycerin. Additional specimens were prepared for SEM observations by fixation in TAF, transferring to 1 % of OsO₄ solution infiltrating with Spurr's resin (De Grisse, 1973; Clark & Stone, 1975).

Glycerin mounted specimens were also used for SEM observations. These nematodes were placed in an ethanol solution of glycerin (5%) for 12 h, then rinsed several times with ethanol and then infiltrated with the ethanol miscible Spurr's resin. All specimens were coated with gold, observed by Jeol 50-A SEM at an accelerating voltage of 5-10 kV and microphotographed. The term morphography (from Greek *morphe* = form and *graphe* = drawing, delineation) is proposed as the most appropriate for the description of surface configurations.

Ogma decalineatum (Chitwood, 1957) Andrássy, 1979 (Figs 1-12)

FEMALE

Measurements : (n = 22) : L = 0.32-0.38 mm; total body annules = 70-90, vulva on 14th-16th and anus at

9th-10th annule from terminus; vulva-terminus distance = 55-59 μ m; vulva-anus distance = 30-32 μ m: head annules width = 11-12 μ m; body annules = 5 μ m wide at mid-body, 4.5 μ m at vulvar area; distance between rows of scales = 15 μ m at mid-body; vulva slit = 13-15 μ m; excretory pore = 115-130 μ m from anterior end, on 27th (25-31th) annule.

Description: Body fusiform and slightly curved ventrally. Head truncate with two head annules, equal in width. The first annule discoid and set off by a constriction from the second one which has crinkled edge clearly visible in lateral view (Fig. 7).

De Grisse (1969) classified the genus *Criconema* as having no submedian lobes. Mehta and Raski (1971) consider both "*Ogma decalineatum*" and "*Ogma gracile*" (the two species were synonymized later by Andrássy, 1979), as having submedian lobes. SEM observations illustrated here (Figs 2, 3, 4, 6) show that this species does possess four small, rudimentary lobes, arranged in a dorsal and ventral pair. The two subdorsal connected dorsally and the two subventral connected ventrally forming a rectangular oral disc, bearing the centrally located oral opening. The slit-like amphidial apertures open on the lateral edges of the rectangular oral disc (Fig. 6).

The body annules are slightly retrorse and marked with longitudinal rows of scales; eight rows on the first to the 4th body annule; ten on the succeding annules (Fig. 10). The number of longitudinal rows of scales decreasing ventrally and dorsally at vulval and anal level (Figs 1, 4, 11). In cross section (Fig. 10) at mid-body the rows of scales appear as a smooth rounded convolution of the cuticle, while transverse ridges traverse the longitudinal groves between the scales. The excretory pore appears as a small pore and opens on the 27th (25-31th) annule from anterior end (Figs 8, 9).

Vulva closed with vulval lips slightly protruding from the body surface and with its anterior flap (larger than the posterior) overlapping slightly the posterior one (Figs 3, 11, 12). The anal aperture is located five annules posterior the vulval opening between two ventral rows of scales 9-10 annules from terminus. The conoid tail, which is uniformly tapering (Figs 1, 2), ends with a small conoid terminal annule.

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Figs 1-5. SEM photomicrographs of *Ogma decalineatum*. 1 : Ventral view of adult female. 2 : Posterior section of body showing vulva and tail terminus in lateral view. 3, 4 : Face and lateral view of anterior body portion showing the increasing number of rows of scales at 8th-9th body annule. 5 : Section of mid-body showing arrangement of annules and scales. (*Scale bars = 10 \mum.*)

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Figs 6-12. SEM photomicrographs of *Ogma decalineatum*. 6-7 : Head in face view and profile showing the rectangular oral disc, the slit-like amphidial openings and the crinkled edges of the second head annule. 8-9 : Excretory pore (arrowed) area. 10 : Cross section through mid-body showing the ten rows of scales. 11 : Vulva - anus area. 12 : Vulva lips. (*Scale bars = 5 \mum.*)

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HOPLORHYNCHUS ANDRÁSSY, 1985, A JUNIOR SYNONYM OF *PRATYLENCHOIDES* WINSLOW, 1958 (NEMATA : PRATYLENCHIDAE)

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The genus *Hoplorhynchus* Andrássy, 1985 was proposed in Hoplolaimidae, Rotylenchinae (*sensu* Andrássy, 1976) with type and only species *H. riparius* Andrássy, 1985.

All data provided for erecting that genus fit very conveniently with those of *Pratylenchoides* Winslow, 1958, as amended by Baldwin, Luc and Bell (1983). Consequently *Hoplorhynchus* is considered a junior synonym of *Pratylenchoides*, and the type species is renamed *Pratylenchoides riparius* (Andrássy, 1985) nov. comb.

In the group of *Pratylenchoides* species, having six lines on the lateral field, *P. riparius* differs from all but *P. magnicauda* (Thorne, 1935) Baldwin, Luc & Bell, 1983 by the annulation of the tail extremity, which is continuous and about the same size as body annules (vs

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a smooth terminus or with few coarse annules). From *P. magnicauda, P. riparius* differs by : *i*) short but conspicuous oesophageal glands overlapping the intestine (*vs* nearly abutted junction); *ii*) shorter stylet (21-22 μ m *vs* 29.5-34 μ m); *iii*) vulva slightly more anterior (V = 57-58 *vs* 58-64).

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