

The Face View of Trichodoridae

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Many authors (1, 2, 6, 7, 8, 10, 11) have illustrated different species of *Trichodoridae* by using the light microscope.

Most of these illustrations show 16 papillae: an inner circle of 6 papillae equidistally surrounding a round oral aperture and an outer circle of 10 papillae arranged in 4 pairs (2 subdorsal pairs and 2 subventral pairs) plus a single lateral papilla in front

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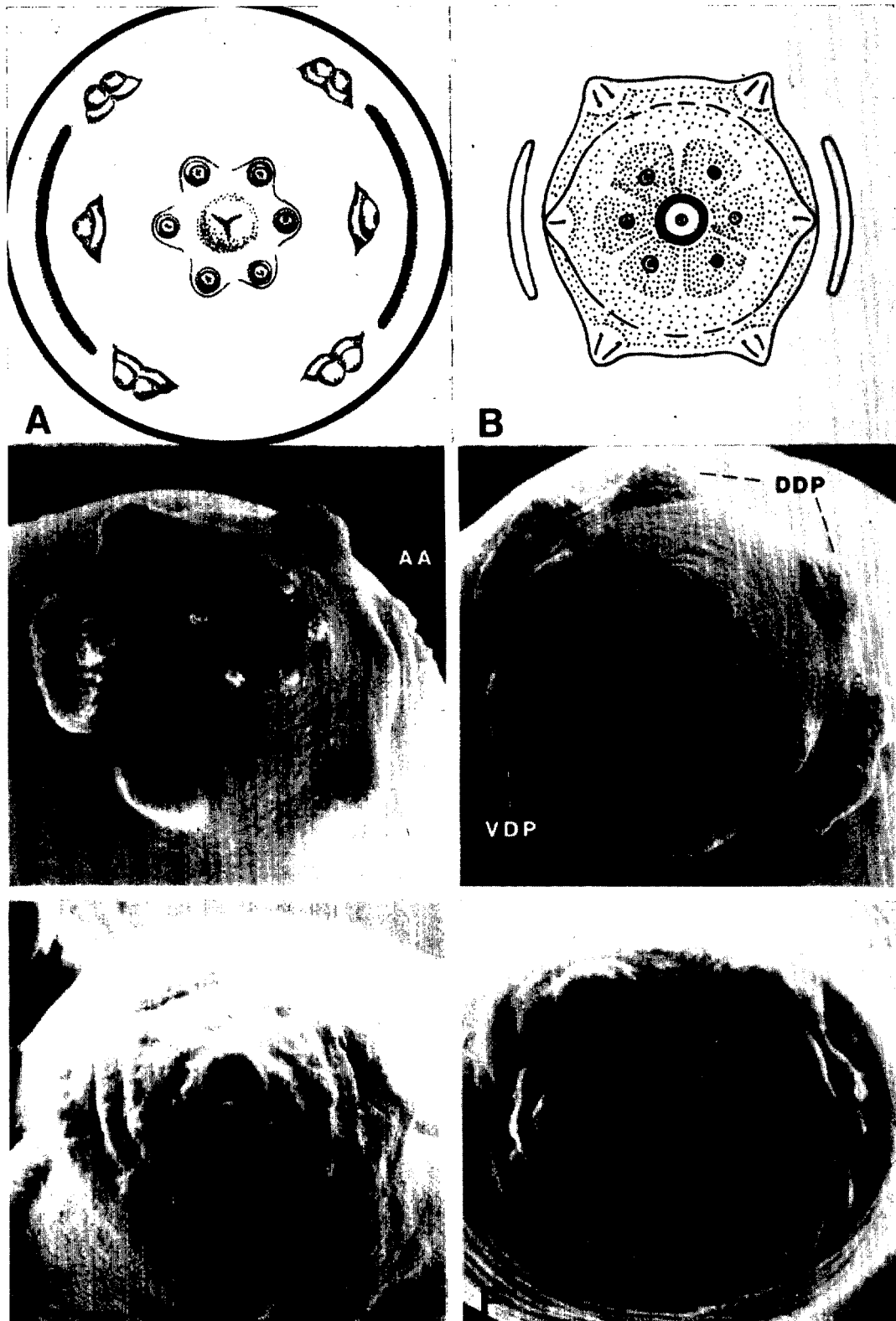


FIG. 1-(A-D). *Trichodorus* (x5,000): A) Composite illustration of SEM micrographs (female). B) Face view as seen under light microscope (female). C) SEM micrograph (male). D) SEM micrograph (female). E) *Paratrichodorus* (*Paratrichodorus*) *allius* (Jensen, 1963) (female x 5,000). F) *Paratrichodorus* (*Nanidorus*) *christiei* (Allen, 1957) (female x 10,000). DDP—subdorsal double papilla; VDP—subventral double papilla; LSP—lateral single papilla; AA—amphid aperture; AE—emphid exudate.

of each slit-like amphidial aperture (Fig. 1-B). On illustrations of some species (1, 8), a circular line exists between the two circles of papillae. Except for *Paratrichodorus (A.) pachydermus* (8) and *P. (A.) porosus* (10), all species are depicted in face view with a distinct rectangular or hexaradial line situated between the level of the outer circle of papillae and the level of the amphidial aperture. The oral aperture is illustrated as being rounded for all the species although a study of the ultrastructure of the feeding apparatus of *Paratrichodorus (N.) christiei* showed a triradiate stomatal opening (5).

Scanning electron micrographs of the face view of *Trichodorus* n. sp. *Paratrichodorus (P.) allius* (Jensen, 1963) Siddiqi *chodoros (P.) allius* (Jensen, 1963) Siddiqi, (Allen, 1957) Siddiqi, 1973 were obtained by a previously reported method (9). These micrographs show the same basic arrangement of the papillae in both genera and permit observation of certain morphological structures not seen, or interpreted with difficulty, under the light microscope (Fig. 1-A).

The oral aperture is triradiate (Fig. 1-C,F). The inner circle of 6 slightly elevated papillae (2 subdorsal, 2 subventral, 2 lateral) is equidistally arranged around the oral aperture. The papillae of the outer circle are arranged in the following way: 4 prominent protuberances (2 subdorsal and 2 subventral) containing two papillae each, two smaller lateral protuberances contain a single papilla each (Fig. 1-A,D). The papillae of this so-called outer circle occur at two levels: the lateral single papillae are anterior to the level of the subdorsal and subventral double papillae, and the double papillae are located at amphidial level (Fig. 1-A,D). The large, slit-like amphid apertures often produce an exudate (Fig. 1-C,D). No indication of an incisure between the inner and outer circle of papillae nor between the lip region and the body was observed in face views.

The two circles of 6+ 10 papillae are in accordance with the general scheme of the relative symmetry in the distribution of the sensitive organs in the cephalic region of nematodes (3, 4).

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