

phyceae were found on the legs of *Libellula* sp. larvae. Using a scanning electron microscope, the raphe and the central and polar nodules were observed on the lower valve (hypotheca), whilst the upper valve (epitheca) was seen to possess a pseudo-raphe (Fig. 1). These characteristics place the diatoms in the suborder Monoraphideae of the order Pennales. The absence of a raphe on the upper convex valve is probably related to the habit of these diatoms, i.e. limited mobility (Fig. 1b). The lower concave valve bearing the 'true' raphe (Figs. 1a, 2) is in close contact with the substrate. Minute processes occur around its periphery and transverse striations run outwards from the raphe (Fig. 2). These diatoms thus belong to the genus *Cocconeis*. Members of this genus are typically epiphytic — in this case epizoic — and the peripheral pores are associated with their attachment to the substrate.

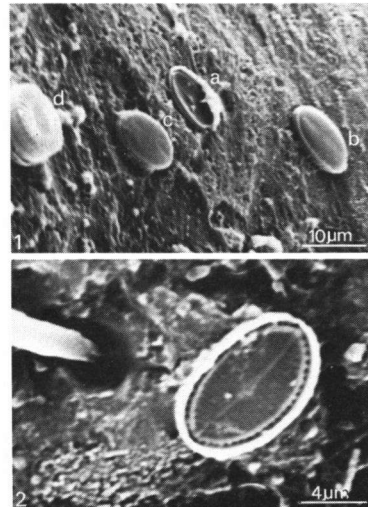


Fig. 1 Three specimens of *Cocconeis* (a-c), one with its upper valve missing (a), and one of (d) attached to the leg of a *Libellula* larva.

Fig. 2. The lower valve of a specimen of *Cocconeis* attached to the leg of a *Libellula* larva. Note the base of the hair to the left of the diatom.

#### DIATOMS ON THE LEGS OF *LIBELLULA* LARVAE

Diatoms belonging to the class Bacillario-

The rounded, 'pill box' form of the second diatom is typical of the order Centrales (Fig. 1d). The valves are centric in structure with no raphe or pseudo-raphe, indicating a sedentary existence. Striae, radially arranged around the periphery, are absent from the central zone, although this is probably perforated by numerous pores which are not seen at the magnification in Fig. 1. Together these features place the diatom in the suborder *Discoideae* and it is probably a species of the genus *Cyclotella*.

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