cavities run longitudinally and alternate with the vascular bundles, and remain separated from one another by multicellular partition walls. The cavities are interrupted, at irregular intervals, by transverse diaphragms, one to several cells thick. The cells of diaphragms are polygonal to stellate, and always accompanied and supported by small cross bundles given off from the main longitudinal bundles of the leaf. The cross bundles are very prominent in *C. esculentus*, and composed of xylem and phloem connected with the xylem and phloem of the main longitudinal bundle (Fig. 5).

The development of a diaphragm (Fig. 1) is initiated by divisions of parenchymatous cells interrupting the air canals (Fig. 2). Successive divisions in the same mother cells result in the formation of 4–6 tiers of cells (Fig. 3). The formation of the dividing walls is parallel to the long axis of mother cells. Later, the middle lamellae begin to separate, at a number of places, from the adjoining cells, resulting in the formation of small perforations (Fig. 4). These perforations enlarge considerably, and give a beaded appearance to the cells of the perforated diaphragm (Fig. 6).

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SHORT SCIENTIFIC NOTES

Occurrence of *Eulecanium* sp. *tiliae* (L.) (Homoptera: Coccidae) on Plum and Apple in Himachal Pradesh

Plum is an important fruit crop in subtemperate regions of India. During the year 1970, large number of plum trees in Solan (1,500 M.asl) area of Himachal Pradesh were found infested with a coccid which was identified as *Eulecanium* sp. *tiliae* by the British Museum of Natural History, London. Besides plum, the insect was also observed on apple at Kalpa in Himachal Pradesh. It is believed to be the first record of *E.* sp. *tiliae* from India.

The female adult scale is dark brown, hemispherical and devoid of legs and antennae. Ventral surface of the scale remains intact with the host surface till the hatching of eggs. Oviposition is prolonged and eggs are concealed beneath the female scale, where they hatch. After oviposition female scale dies. The scale lays eggs from mid-March to beginning of April and hatching takes 12–15 days. Young crawler is light brown in appearance with long thread-like beak and possesses legs and antennae. Reproduction is parthenogenetic and males were not recorded. Young crawlers migrate to the undersurface of leaves where they suck sap. The crawlers migrate back to twigs during October-November, when trees start shedding off leaves. Life-cycle is completed in one year.

Effective check of the scale is kept by its natural enemy, *Coccophagus* sp. nr. *ishii* (Hymenoptera; Aphelinidae). The parasitism was as high as 73%.

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Observation on the Host Specificity of Isopod Parasite *Nerocila* Sp. from Andhra Coast

During investigations on clupeoid fishes of the Andhra coast, it has been observed that the parasite *Nerocila* sp. is found on *Ilisha melastoma* (Schneider, 1801); the place of infection being the gill chamber. Meenakshisundaram (1945) has recorded the host specificity of this parasite from Kutch on the West coast. While examining the landings he found this parasite on *Ilisha indica* (= *I. melastoma*) but not on *I. filigera*. It is further confirmed that the parasite is specific in the selection of its host, because it has not been found on other species like *I. whiteheadi* from Kakinada, *I. elongata* from Masulipatnam, *I. megaloptera* from Visakhapatnam and Suryalanka and *I. filigera* from Gollapalem and Masulipatnam. In all, 300 specimens of the above species were examined. The parasite has been found on 9 out of 25 specimens of *I. melastoma*.

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