

Mosquito's proboscis

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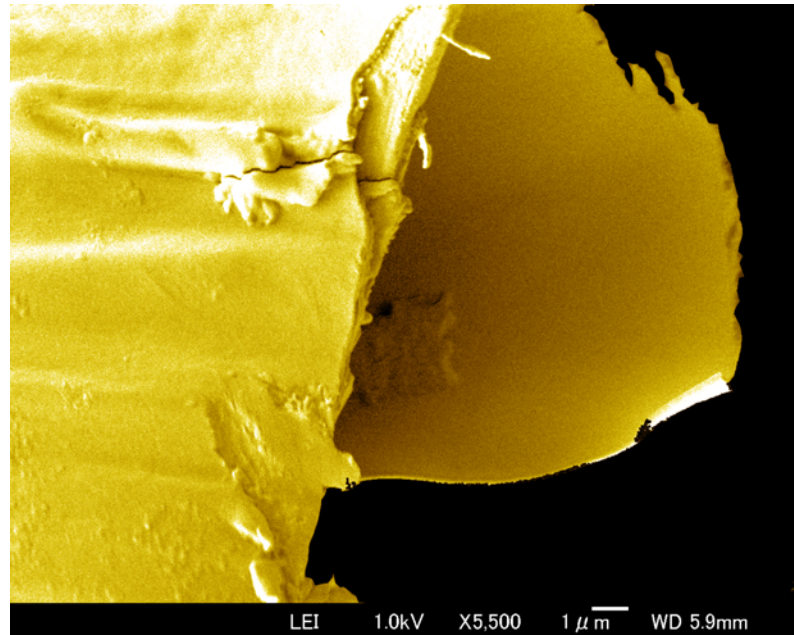


Fig. 1. Layer structure of the proboscis.

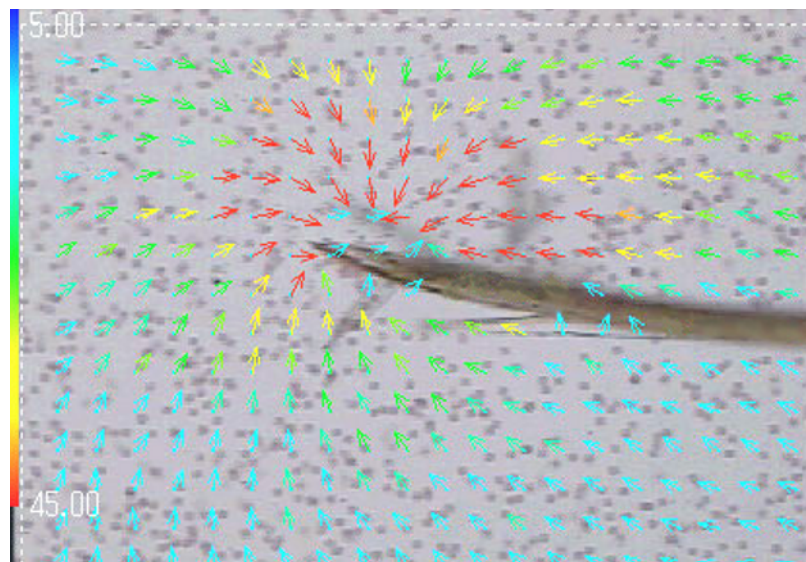


Fig. 2. Flow pattern near the tip of the proboscis.

Figure 1 shows the structure of proboscis, taken by SEM. The proboscis consists of two layers. The surface of the inside layer looks smooth, while that of the outside layer has longitudinal stripes. However, chemical components of both layers are the same.

Figure 2 shows the flow pattern near the tip of the proboscis sucking blood under the atmospheric pressure, that is measured by PIV method. The particles around the proboscis were human blood cells. The volume flow rate in the proboscis is estimated.