

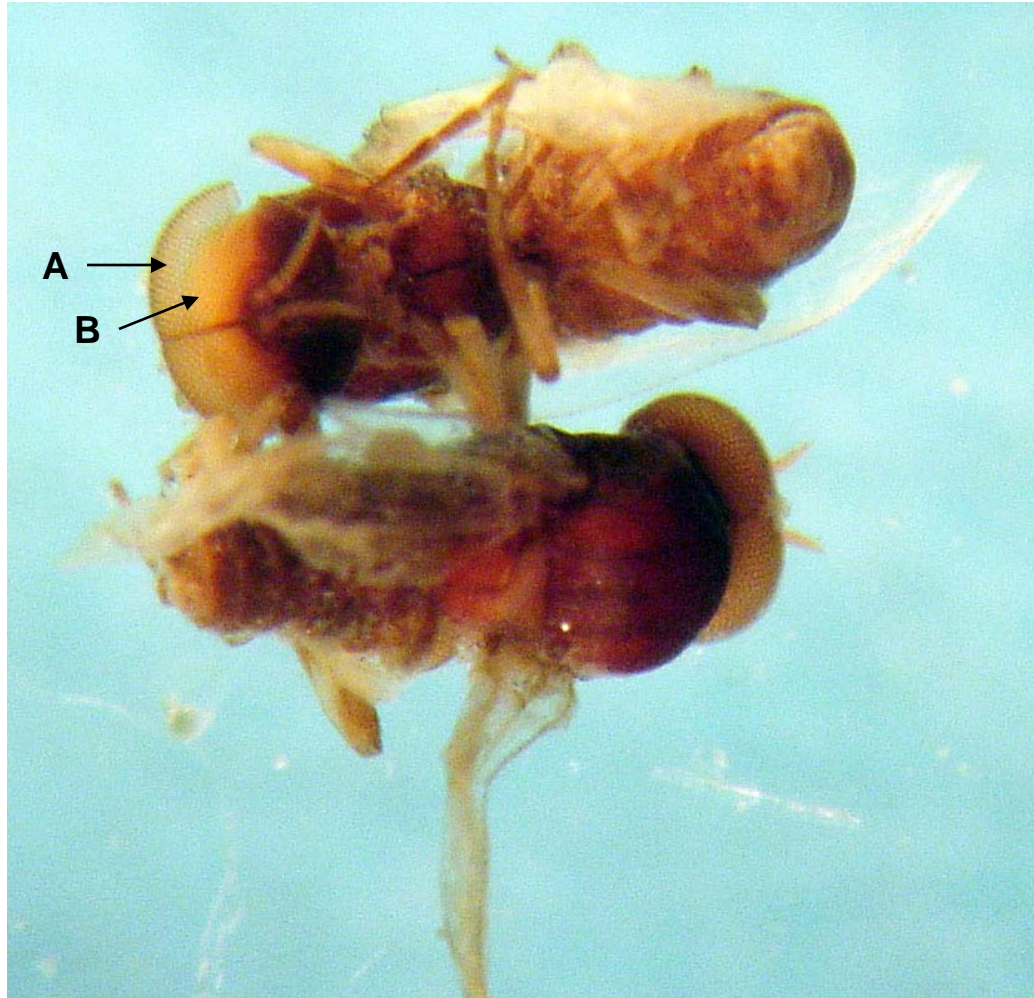
“Simulid” flies (Simuliidae); adults variously referred to as “blackflies”, “buffalo gnats”, or “hump-backed” flies because of their dark color and large thorax.

Specimens of *Simulium vittatum* used in this presentation were provided by R. F. Kirchner, a Marshall University student and long-time employee of the U.S. Army Corps of Engineers, Huntington, WV, District.

*Simulium vittatum* adult female (top), adult male (bottom).



*S. vittatum*, adult males (ventral view, top; dorsal view, bottom). Note the “holoptic” condition where eyes cover virtually all of the head. Compound eyes of males contain two types of ommatidia; large ommatidia dorsally, small ommatidia ventrally. Legend: A, area of large ommatidia; B, area of small ommatidia.



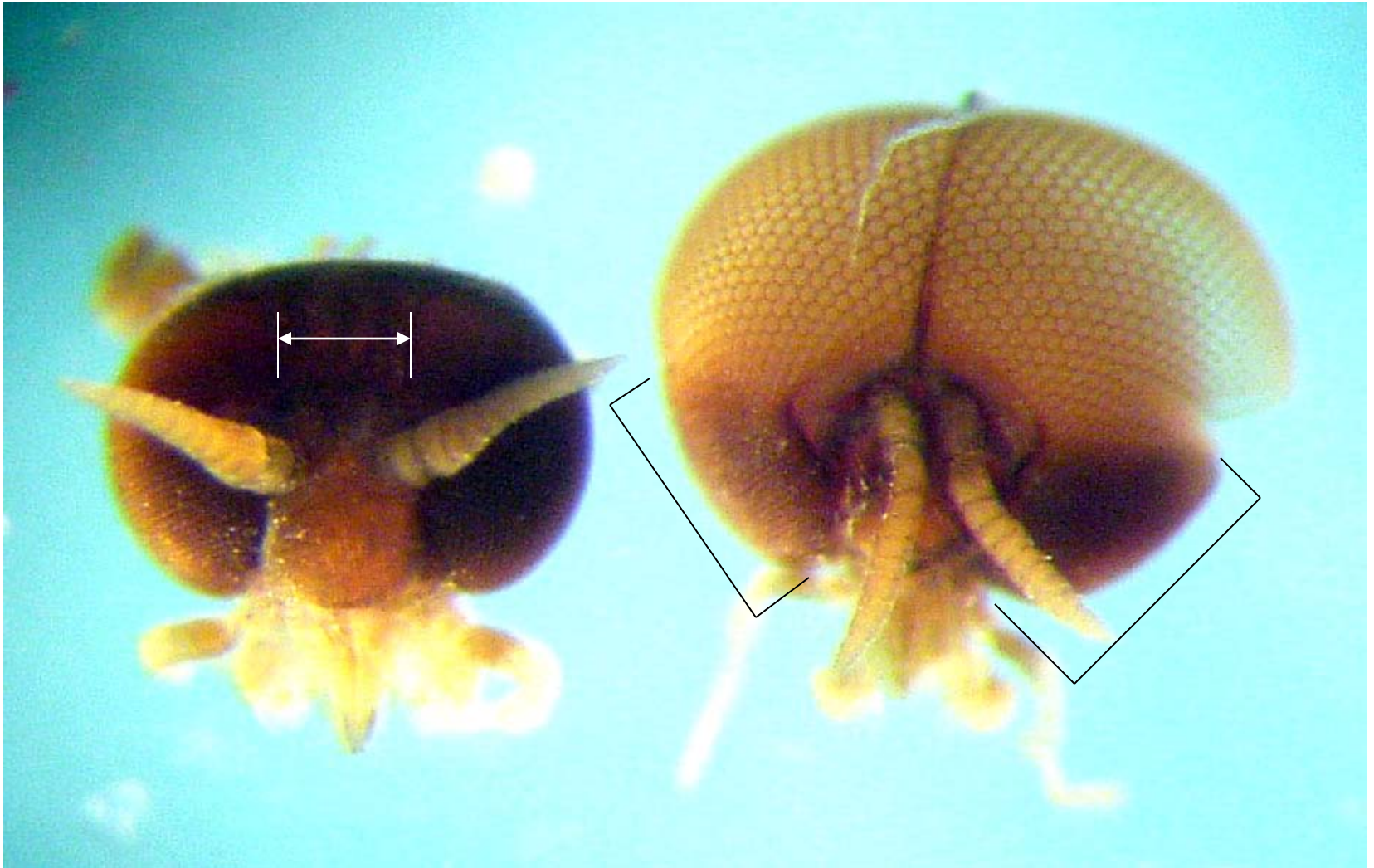
*S. vittatum* male (left), female (right). A & B, areas of large and small ommatidia, respectively, in the male. Box indicates area of ommatidia in the female which are approximately the same size as small ommatidia in the male. Legend: a, antenna; p, palp.



*S. vittatum*, male. Legend: A, large ommatidia; B, small ommatidia; a, antenna; h, haltere; t, thorax.



*S. vittatum* heads of female (left), male (right), en face views. Note that female is “dicoptic” with all ommatidia the same size. The male is “dicoptic” with dorsally placed ommatidia much larger than ventral ommatidia. Interocular space in female indicated by white arrows. Ommatidia in lower portion of male eye (indicated by brackets) approximately the same size as ommatidia in female eye.



*S. vittatum* heads of female (left), male (right), lateral views.



*S. vittatum* head of male, ventral view of large ommatidia.

