

immersion objective is utilized only when cedar wood oil is put between the front of the microscope condenser and the back of the slide. If this condition is not fulfilled, the numerical aperture of the observing objective is reduced to 1 as light leaving the condenser passes through air whose refractive index is 1 as against 1.5 of cedarwood oil.

(This contribution by Mr. E. H. Anthes of the Bausch & Lomb Optical Co. was prepared upon request of the editors.)

Lebedeff, G.A. · Method of mounting  
the reproductive organs of Drosophila.

The fly is placed in a drop of physiological solution and the

abdomen is separated from the rest of the body. With two needles the reproductive organs (duct and gonads) are cleared from the rest of the abdominal organs. At this time it is advisable to transfer the organs to another drop of physiological solution (on the same slide) in order to eliminate small bits of foreign tissue which may adhere to the organs. Next, the organs are transferred into a drop of white of egg on to another clean slide (with shallow concavity) where the organs are placed in the desired position. Excess of albumen is removed by means of blotting paper. This transfer helps the organs to adhere to the slide and prevents their drying. After leaving the organs in the white of egg for about 12 to 24 hours, the slide is then placed into absolute alcohol, then transferred into solutions of 85, 50, 35, 15 percent alcohol for about 30 minutes or less in each. Then the slide is ready to be placed in tap water. If it is desired to have the colorless parts of the duct and the ovary differentiated, the slide may be stained with "light green". The testes, however, will preserve natural color. The preparation then is ready for dehydration and is passed through alcohol solution, ending with absolute xylol. Thirty minutes or less is a sufficient period of time for keeping the preparation in each of the alcohol solutions. Finally, the preparation is mounted in balsam or euparal.