

Culex nigripalpus were observed feeding on honeydew on the same plants with *Aedes sollicitans*. On May 27, 4 males and 1 female *Culex nigripalpus* and 2 male *Anopheles atropos* were again found feeding, same location as above, on aphid honeydew on leaves of *Bidens*. Finally, a fifth species, 1 female of *Psorophora ferox*, was observed feeding on the flowers of buttonwood at about 1600 on August 4.

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AN EASILY CONSTRUCTED RACK FOR MASS STAINING ONE HUNDRED MALARIA SLIDES

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A rack for mass staining at least 100 malaria slides or any other kind of slides can be easily made from an ordinary cardboard-covered, wooden-framed slide box made to hold 100 slides in two columns of 50 slides each. There are several sizes of such slide boxes. The smallest one, measuring about 7½ inches wide and 8¾ inches long, was selected for this rack, although the larger sizes may also be used.

First, the two hinges at the back are removed, and the upper and lower halves are separated. Then the cardboard is cut away from the wooden frame of the cover half. Any paper remaining attached to the wooden frame may be removed by soaking the frame in water until the paper can be peeled off. One of the long sides

of the rectangular frame is then removed, preferably by sawing, since the dove-tailed joints are rather secure. Two small nails or brads are then nailed at each of the remaining two corners for reinforcement. This will become the handle of the rack.

In preparing the other part of the rack, the three grooved units of the lower half of the original box are removed individually after first tearing away the thin cardboard backing behind each unit. Then the cardboard is cut away from the frame, and all vestiges of paper are removed by soaking the frame in water. Small nails are used to reinforce the four corners, two at each corner.

All that remains of the original slide box now are one complete wooden frame, a 3-sided frame, and the 3 grooved units for holding slides. The latter are then nailed directly to the 4-sided frame in the exact positions they originally occupied in the slide box.

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If the slides are inserted into the box, they will fall through, so it is necessary to support them. The writers used 35-pound stainless steel fishing leader wire, although any other kind of fine wire will do. Two sections of this wire are secured tautly by nails at the bottom of each half of the rack, resulting in 4 longitudinal slide supports. The 3-sided or U-shaped frame is now nailed to the lower section, forming a handle for the rack (Figure 1).

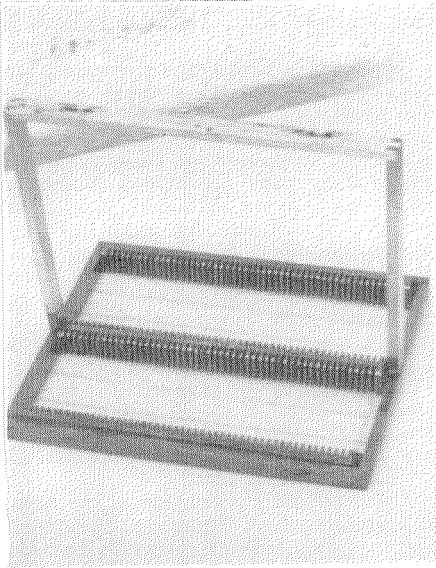


FIG. 1.—Completed staining rack.

In order to prevent warping of the wood or change in pH of the staining solution, the entire rack is given two coats of

transparent spar varnish. The rack can be used indefinitely without affecting or being affected by the staining solution.

The stain used by the writers is Giemsa stain for staining thick and thin smears simultaneously in a dilution of one part of stain to 50 parts of buffered distilled water. This is permitted to act for 45 to 60 minutes, and is followed by a wash for 3 to 5 minutes. The staining solution and wash water are buffered to between 7.0 and 7.2. The same staining solution may be used consecutively for several stainings, but should not be kept until the next day.

The staining solution is prepared in a stainless steel or white-enameled rectangular staining dish of adequate size so that when the rack is placed into the dish the surface of the liquid will completely cover the slides, preferably with $\frac{1}{8}$ to $\frac{1}{4}$ inch to spare. Twenty additional slides may then be laid horizontally upon the other slides, thus making it possible to stain as many as 120 slides at once. When washing the slides a separate dish is used, similar to that used for staining, but if the stain is to be used only once the solution may be poured off and the wash water poured into the same dish.

Since with the rack described above it is possible to stain between 100 and 120 slides at the same time with a minimum of handling, it is of considerable advantage in conducting a blood parasitemia survey for malaria parasites. If staining is conducted continuously, 1,000 malaria slides can be stained in one day with a single rack.