

Monotony Mitigated a Mite: or, A Superior Skin Smear Slide

TO THE EDITOR:

Innumerable laboratory technicians, medical assistants, nurses and physicians in leprosy endemic areas can vouch for the tedium of taking and examining multiple and repeated smears from large numbers of leprosy patients. Any small measure that will facilitate this task is worth a trial. We offer the Kivuvu modification for making the ordinary skin smear slides.

Standard clean 1" x 3" glass microscope slides were coated with paraffin wax by dipping the slides into a can of melted, ordinary wax-bath type paraffin, and then allowed to

cool. The paraffin should be only slightly above melting temperature to insure a thick enough coat on the slide. After cooling, the slide is placed over an eight-square pattern, previously drawn on heavy cardboard, corresponding to that shown in Figure 1. This design gives eight 12 mm square areas for smears and allows about 25 mm on the left for labeling and 5 mm on the right to avoid interference by the microscope slide holder. Furrows reaching the glass surface are then traced in the wax over the pattern with a straightedge and the sharp tip of a scalpel blade turned slightly sidewise as a stylus.

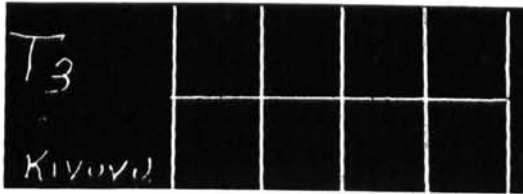


Figure 1. Skin smear slide. The etched squares are on the under side.

The slide is next turned over and an identifying character scribed in the wax on the opposite side on the left. The slide is then placed in a small vat (previously wax-coated, if metal or glass) of concentrated hydrofluoric acid. If done indoors, the vat should be covered to avoid the release of noxious gases, or the procedure may be done in a ventilated hood. After about ten minutes the slides are removed by tongs, washed in running water, and the paraffin removed by heating and rinsing in xylene.

These slides provide a uniform area for the smear and the location of each smear is readily identifiable. The smear is placed on the obverse side of the slide from the etched squares. We routinely take specimens from eight sites by the slit and scrape method—the right and left ears are always represented on the two left squares and apparently healthy skin and nasal mucosal swab are on the far right squares. The remaining four squares are for four other affected areas. Advantages of the etched lines are that they do not materially weaken the glass as do scratched lines, and they are permanent. Two people can easily produce up to 200 of these slides in a day.

[Note: This creation was made possible by a surprise shipment of hydrofluoric acid through a relief agency.]

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