

A POLLEN-COUNTING GUIDE

BARNEY A. CREDILLE, M.D., FLINT, MICH.

IN DETERMINING the daily pollen count during the height of the ragweed season, there is often a heavy concentration of pollen granules, spores, and debris on the slide, thus making the counting of a moving field difficult. For this reason there would appear to be need for a marker within the microscope field which would simplify the counting procedure and relieve eyestrain. The writer has prepared a small device which has been designated as a "pollen-counting guide" which reduces the area of the field under active scrutiny without interfering with its diameter.

The guide is a simple apparatus consisting of a metal ring with two parallel bars crossing its widest diameter. When used with a 10× eyepiece and a 10× objective, the apparent distance between the bars is approximately 0.5 mm., varying considerably with the make of microscope. (If for any reason an accurate measure of the reduced field is desired, it can be obtained by the use of a stage micrometer slide ruled in 0.1 and 0.01 mm. divisions.)

TECHNIQUE OF COUNTING

The guide is inserted in the eyepiece so that it rests on the central diaphragm of the tube—halfway between the upper and lower lenses. The eyepiece is then turned so that the bars run horizontally across the field of vision (Fig. 1). In counting, only the space between the transverse bars is considered, the upper and lower segments being ignored. All particles thus remain in the counting field for the same length of time as the slide is being shifted vertically (across its short diameter). Use of the guide requires no extra calculations of any kind if the technician is following the standard technique^{1, 2} for gravity slide counting recommended by the Research Council of the American Academy of Allergy. The supporting ring of the device does not narrow the diameter of the optical field as compared with the diameter of the same optical field without the device. Thus, it acts as a convenient guide or eye channel and does not interfere in any way with the usual calculations of field width previously made for the optical combination in which it is used.

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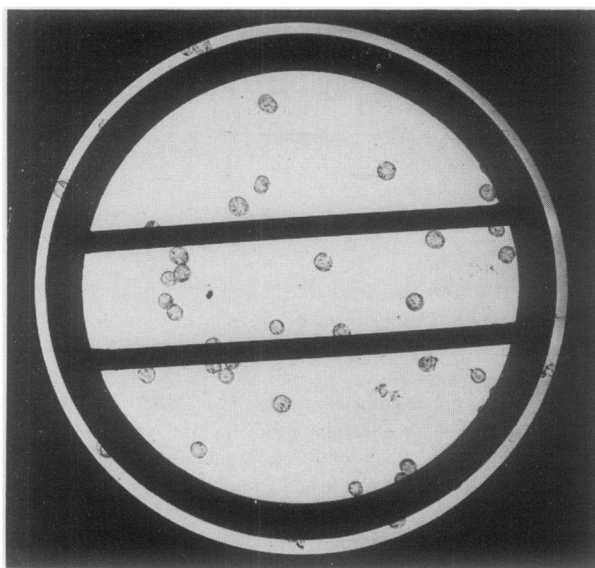


Fig. 1.—In position for use, the bars are parallel with the long axis of microscope slide.

This device may be obtained at: The G. A. Ingram Company, 4444 Woodward Avenue, Detroit 1, Mich.

REFERENCES

1. Report of the National Pollen Survey Committee of the American Academy of Allergy on a Conversion Factor for Gravity Slide Counts, *J. ALLERGY* 18: 284, 1947.
2. Durham, O. C.: The Volumetric Incidence of Atmospheric Allergens. IV. A Proposed Standard Method of Gravity Sampling, Counting, and Volumetric Interpolation of Results, *J. ALLERGY* 17: 79, 1946.