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A DISPOSABLE CAGE FOR OBTAINING INDIVIDUAL EGGS OF THE ELM SPANWORM

Abstract.--A waxed paper cage in the shape of a paper coffee creamer (tetrahedron) is easy to make, inexpensive, and ideal for collecting individual eggs or small groups of eggs from the egg-mass depositing elm spanworm. The moths and eggs can be readily observed through the translucent waxed paper.

A simple method for obtaining individual eggs of the elm spanworm, Ennomos subsignarius (Hübner), was required for research purposes. A previously described technique[1] using a cheesecloth substrate for oviposition was useful, but needed improvement because the eggs adhered tightly to the cheesecloth and their removal was excessively time consuming.

The simple method was achieved through the use of a waxed paper cage, fashioned like a paper coffee creamer (fig. 1). The only materials needed are waxed paper and sealing tape.

[1]Drooz, A. T. Obtaining individual eggs from an egg-mass depositing insect. Southeast. Forest Exp. Sta., U. S. Forest Serv. Res. Note SE-57, 2 pp. 1966.

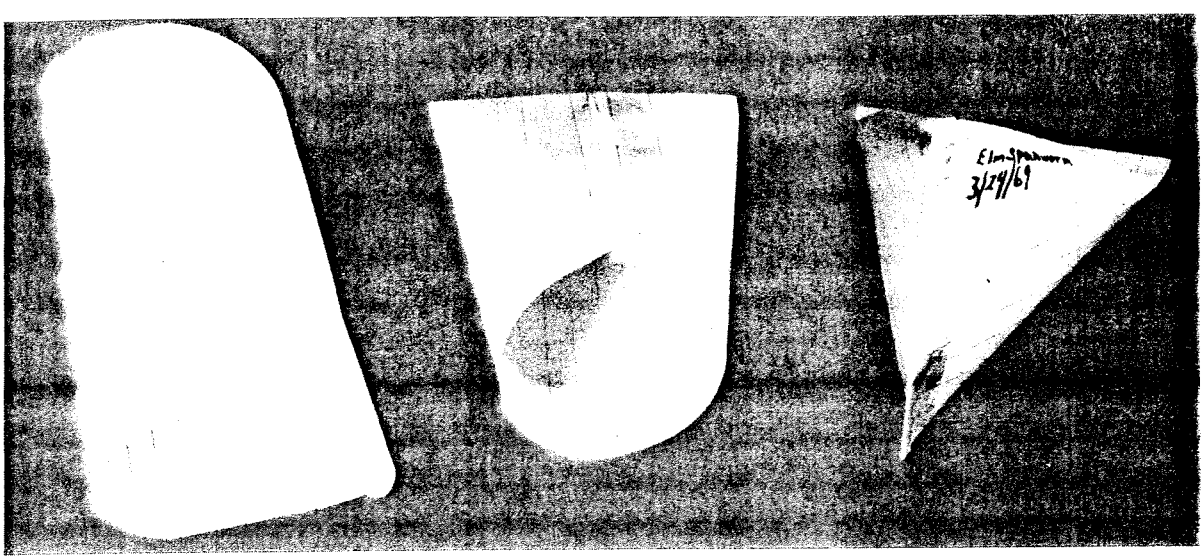

Figure 1.--Steps in making an inexpensive cage for obtaining individual eggs of the elm spanworm. Left to right--lock-folded cylinder; one end sealed; opposite end sealed at right angle to first end. Ruled paper was used to show perspective and shape of the cage.

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One precut sheet of waxed paper, 12 by 18 inches, is used for each cage. The edges of the 12-inch ends are lock-folded together by a double fold ($\frac{1}{4}$ inch) of the matched edges of the paper. Three short strips of tape, one placed at each end and the other in the middle, will hold this cylinder of waxed paper. Next, one end of the cylinder is lock-folded and taped, and then the other end is made ready by lock-folding it at a right angle to the seal in the opposite end of the cylinder.

After the insects are placed inside, the final closure is made. Information about the insects can be written on the cages with a felt-tip marker. The translucent waxed paper permits observation of the moths and eggs.

When oviposition is completed, the masses can be freed by tapping or rattling the cage by hand. The masses will break up, providing numerous individual eggs. The cage can be unsealed and the eggs rolled out. Small groups of eggs still adhering to one another can be separated with a dissecting needle. The eggs can then be stored for treatment or use.

This cage permits rapid collection and easy mixing of eggs from numerous moths for random selection and experimentation. Because of the shape of the cages, they stack easily.

A similar cage was shown to me in the laboratory of A. Hedlin, Canada Department of Forestry and Rural Development, Victoria, B. C., who introduced it from the laboratory of M. D. Proverbs, Canada Department of Agriculture, Summerland, B. C. We found it to be satisfactory for obtaining individual eggs, inexpensive, and simple to make.

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