becomes essential. We have found the following technique satisfactory for egg-larvae counts.

Eggs collected from spoons containing a level amount of cornmeal-agar food blackened by finely powdered charcoal and painted with yeast are placed in a row upon the surface of Pearl's synthetic medium in a watchglass. If each individual is to be accounted for throughout larval life, 10-12 eggs in each watchglass will probably be found a sufficient number. The eggs are easily transferred by needle to the watchglass without injury. Enough yeast is carried along in the transfer so that the addition of yeast is unnecessary. Each day every watchglass can be inspected as often as desired and each larva can be accounted for. We have most satisfactorily used a Greenough binocular with 9 X oculars, 2.3 X objectives, 150 Watt light placed horizontally to the mirror so that the reflected light passes up through the glass stage and through the transparent food giving intense illumination.

If it is necessary to study the individuals further, the pupae can be transferred from the watchglasses to regular food vials where pupation will occur normally and the adult flies can be collected in routine fashion.

Danner, Edwin C. Methods for obtaining Drosophila eggs for embryological study. In obtaining Drosophila eggs for fixation and sectioning or for study in vitro, the homopathic vials (3/4 X 3-1/2 inch) were found to give good results. (Shell vials of similar size may be better.) Approximately one half inch of banana agar medium is placed in each sterilized vial and allowed to solidify. Immediately upon solidifying, a strip of toweling (1 X 4 inch) with one end cut rounded to fit the vial is inserted so that the rounded end lies upon the medium and at right angles to the remainder of the strip which is pressed against the side of the vial. Moisture from the medium is absorbed by the toweling. Powdered yeast is then sprinkled upon the moist toweling and allowed to stand twelve to twenty-four hours.

In preliminary experiments, single pair matings resulted in good egg production. Virgin females approximately four and a half to five days old, when mated, usually laid eggs shortly after being fertilized. The eggs were laid on the growth of yeast on the strips of toweling. The parents may easily be shaken from the vial and the strip of toweling with the eggs upon it easily removed. Upon the removeal of the eggs, the strip may be reinserted and the parents returned to the vial for further egg laying.

In collectin the eggs for study, the moist toweling was made to adhere to a piece of cardboard or filing card to facilitate handling. With the aid of a binocular microscope, the eggs were easily removed with a needle and were free from medium.

To remove the opaque chorion, the eggs were placed in a drop of distilled water upon a glass slide. The excess water

was drained off and the slide placed under the direct light from a desk lamp with a fifty watt bulb to evaporate the remaining water and cause the eggs to adhere to the slide. This slight drying aids in the removal of the chorion with a sharp needle, the egg itself not shrinking from loss of moisture unless allowed to dry too long. For dissection purposes a #40 objective and #10 X oculars were used on a Spencer binocular microscope.

Altenburg, Edgar Eggs for ultra-violet treatment. Get eggs 3 to 3-1/2 hours after flies have been placed in bottle for egg laying. Keep them while laying in a dark place at about 26° C. and see that females are good layers, viz. young and fat, and that they are kept at about 25° C. for a day or two previous to laying. The flies should be removed from bottle in which they were placed for egg laying 1 hour and 10 minutes after they were put in the bottle. The eggs should be kept at 24° C. With a sharp razor blade cut a sharp edge on a blotter (preferably blue), the cut surface being at an angle of about 45° to the surface of the blotter. Moisten the blotter, and slide the eggs with the aid of a blunt needle to the edge of the blotter, so that only the polar cap projects beyond the cut edge. Treat so that rays strike polar cap only, rest of the egg being shielded by blotter. About thirty eggs can be arranged along the edge of one blotter and treated.

Gottschewski, G. Collecting eggs from weak stocks. Aus Stämmen, die im Hinblick auf Sterblichkeit und Legefreudigkeit durch Pärchenkultur über mehrere Generationen selektioniert sind, werden X 10 frischgeschlupfte Drosophilapärchen ausgesucht, die drei Tage in gewöhnlichen Kulturgläsern beisammen bleiben. Die 3-4 Tage alten Fliegen werden dann ohne Ätherbetäubung in einen einseitig geschlossenen Glaszylinder (12,5 x 6 cm) gebracht, den auf der unteren Seite ein Deckel einer Petrischale abschliesst. Auf dieser Schale ist Futter, das durch schwarzes Fliesspapier verdeckt ist. Das Fliesspapier wird mit 3% igem Eisessig und ausgequetschtem Futtersaft stark angefeuchtet. Die Schale wird jede Stunde durch eine neue ersetzt; das Gelege ausgezählt und nach ca. 19 Stunden beginnt die Hauptmasse der Larven zu schlüpfen. Die Daten gelten fur 25° C.. Durch einstündiges Ablesen der Larven erhalten wir 0-1 stündige Larvengelege. Bei guter Behandlung - beim Ablesen feuchter dunner Haarpinsel, gleichmässige Temperatur usw. - schlüpfen aus dem Eigelege 85-90% der Larven. Ich verwende gleichzeitig 6-8 Cylinder und erhalte durchschnittlich 2-300 gleichaltrige Larven, deren Variationsbreite bei dieser Methode auf das geringstmögliche Mass eingeengt ist.