culture for four hour period, with an average of 300. Not in-
frequently, on the first day of collection, the yield has been
as high as 800-1300 in a four-hour egg-laying period. (D. melan-
ogaster, pseudo-obscura, and to a small extent affinis and
miranda)

The important precautions to be observed for optimum yield
of eggs are:
(a) The females should not be etherized at any time prior
to use for this purpose.
(b) The medium should be seeded with yeast at least 6 hours
and not over 24 hours before use.
(c) The surface of the medium should be slightly roughened
just before being placed with the flies.
(d) The surface on which eggs are to be collected must be
ventral to the flies.

The details of the procedure I have followed are as follows:
Young flies, not over 24 hours old, are transferred to fresh food
without etherization (20-40 °F and above). Two or three days later
they are transferred to fresh food. At this time the medium on
which the eggs are to be collected is prepared. It consists of
ordinary cornmeal-molasses-agar with lampblack added to give con-
trast to the white eggs. The cornmeal is sifted before cooking.
The food mixture is poured onto the ordinary type of paper milk
bottle caps, leaving a margin of 1 cm. all around. When cool,
the surface is uniformly seeded with fresh yeast. (Caps for 24
hours are prepared at one time.) The next morning the surface of
the food on the caps is scraped with a metal tissue lifter. The
flies are transferred to empty half-pint bottles which are capped
with the prepared paper caps. The bottles stand with the caps
down. New caps are substituted at appropriate intervals.

Eggs have been collected by this method continuously for a
week or more at intervals of 2, 4, 6, 8, 12 hours. If the rate of
oviposition falls off after a few days it may sometimes be re-
newed by transferring the flies to regular food bottles for 2-3
days. Strains that do not reach their optimum rate of egg-laying
as early as the fourth day may be kept on regular food longer
before beginning the experiment. (D. pseudo-obscura does well
after 7-10 days from hatching; affinis and miranda even later.)

If properly fitting caps are used (dim.=1.625" for Bridges-
type bottle, and 1.640" for most others) they may be washed and
reused indefinitely.

Schweitzer, Morton D. Handling eggs and larvae.

When eggs are collected in the manner outlined above the usual high mort-
ality due to handling and yeast overgrowth may be minimized by
several precautions. After counting, the entire slab of food (or
a segment containing an appropriate number of eggs) may be trans-
ferred to the surface of regular unyeasted food. If the surface
of the food on the cap is sliced off with a scalpel just before
use, the danger of yeast overgrowth is much reduced. An alterna-
tive method of transfer, that has given high percentages of insects,
is to allow the eggs to hatch on the food while it is still attached
to the cap. The young larvae are transferred with a fine scalpel.
In transferring larvae, an efficient method is to gently touch the
scalpel to a larva, then touch the larva to a second one, etc., until 25-75 are adhering to each other. In this way the larvae are subject to a minimum of direct handling.