

# Drosophila

A CAROLINA™ CareSheet

The common fruit fly, *Drosophila melanogaster*, is the organism most widely used in genetic studies. It is also an excellent live food.

## Immediate Care & Handling

When cultures arrive, remove the caps but leave the plugs in place. Keep cultures out of direct sunlight, and maintain at 20°- 25°C (68°-77°F).

## Culturing

The fruit fly is easily cultured and its generation time is only two weeks at 21°C (70°F). The development of the flies is slower when the cultures are maintained at lower temperatures, while higher temperatures may promote male sterility, growth of bacteria and fungi, and mite infestation.

Use transparent vials (17-3120) or glass or plastic bottles (17-3135) as culture vessels for *Drosophila*. We recommend Carolina's Formula 4-24® Instant Drosophila Medium (17-3200). Follow the directions sent with the medium to set up vials for new cultures. Food medium should be moist at all times, as dry food will inhibit larval growth and result in few flies eclosing. Transfer flies to new culture vials every 10-14 days.

For more detailed information on setting up cultures and making crosses, see the Carolina™ *Drosophila* Manual (45-2620).

## FAQs

*Which type of Drosophila should I order to feed my mantis (or small frog or reptile)?*

We recommend our 14-4445 culture of flightless flies. Because they cannot fly, they seldom escape from a terrarium or habitat with a fine mesh screen.

*What materials do you recommend for culturing Drosophila?*

Our 17-3050 Drosophila Culture Kit has everything you need except for the starter cultures. It also comes with the Carolina™ *Drosophila* Manual that will explain the procedures for culturing and doing Drosophila crosses, and give you information on crosses that are widely used in genetics labs.

*Which cultures should I order for a beginning genetics lab?*

Our catalog listing is color coded to indicate the strains that have easy to recognize phenotypes that are good for beginning students. Among the most widely used are vestigial crossed with wild type to give a monohybrid cross; vestigial crossed with Sepia for a dihybrid cross; and white crossed with wild type for a sex-linked cross. We list F<sub>1</sub> cultures of these crosses for your convenience.

**Problems?** We hope not, but if so contact us. We want you to have a good experience.

**Orders and replacements:** 1-800-334-5551 then select Customer Service

**Technical Support and Questions:** [caresheets@carolina.com](mailto:caresheets@carolina.com)



© 2012 Carolina Biological Supply Company