

porous surface induces oviposition. The addition of fresh baker's yeast dissolved in water or for some species in a Ringer's solution containing particularly Mg and K ions brings the larvae through to pupation under optimum feeding conditions. The dissolved yeast may be added to the cellucotton at about the time the larvae hatch. Eggs or larvae may be secured for study or experiment at any time by shaking a bit of the cellucotton in Ringer's solution.

Spencer, W. P. The use of cellucotton in *Drosophila* culture.

A porous cellulose compound under the trade name, Cellucotton, furnishes an excellent base for culture media for *Drosophila*. This material comes in large bats, 2lb, 5lb, and 8lb. It is extremely

porous and absorbent. One gram will soak up and hold without dripping 20 cc. of water or other liquid media. The material may be readily cut into wads of convenient size and placed in any design of culture bottle. Liquid media of which the main constituent is a sugar, (cane sugar, either refined or brown, or molasses), together with salts such as are added in the culturing of yeast, may be poured or pipetted onto the cellucotton and the surface seeded with a little powdered yeast. Flies are then put in. If there is any trouble with molds, moldex or other mold preventatives may be used. At any time during the life of the culture food may be added either in the form of the original solution or of baker's yeast in liquid suspension. It is also possible to raise the larvae from the start on yeast suspension, to which for some species salts must be added. In this case a small wad of cellucotton soaked in sugar water should be stuck to the side of the culture vessel as food for the parent flies.

If larvae are raised on yeast alone be sure to add a wad of cellucotton soaked in sugar water before emergence of adults as they will not live long on a yeast diet.

The advantages of the cellucotton will be obvious to anyone using it. There is no cooking of food media necessary. There is no necessity for cutting out a food plug to allow escape of CO₂. There is less tendency for flies to become stuck in the food medium. There is a more effective use of the media by the larvae and an increased yield per culture bottle. Large, well-nourished larvae are more readily available for salivary chromosome study. Much smaller containers can be used for rearing a given number of flies, thus cutting down on incubator space necessary for running an experiment. With proper handling of adults as to numbers and time left in culture overcrowding should not occur. When this is allowed to take place more cellucotton soaked in yeast may be added.