

contain few larvae or develop slowly.

The layer of food should be somewhat deeper than 1/2 inch and its surface seeded with pure live yeast (fresh or dried). Adding paper and making the surface appetizing with fruit juice did not increase the yield in our case. 200 flies per vial and 1000 per half pint bottle should be considered a good average. This means that a vial can be employed where formerly a bottle was required, and a bottle can take the place of a group of bottles. Not only the number, but the size of flies is considerably increased. When fresh yeast is easily available it can be employed advantageously by substituting 15 grams fresh yeast for 1.5 grams of dry yeast in our formula.

The preceding formulae enable us to prepare food of each of the three types by the use of ingredients which will not spoil. A laboratory can thus provide itself with a year's supply at once, avoiding further trouble in this connection.

We desire to call special attention to the convenience offered by the new type of medium here described: The syrup-agar for the preservation of the P. flies, for the great elasticity it introduces in current laboratory work.

Parker, D.R.      Food formula

The food used in the University of Texas lab-

oratory is made according to the following formula:

- 1 pound bananas (250 cc)
- 20 grams agar-agar
- 125 cc Karo syrup (white)
- 15 grams dried brewer's yeast (sterilized)
- 625 cc water
- .15 gram Moldex A (dissolved in 95% alcohol)

Total 1 liter of food

The water and agar are heated until the agar is completely dissolved. When the bananas have been mashed thoroughly, they are added along with the other ingredients to the melted agar and the food is poured immediately, a glass funnel with rubber tube and spring stopcock being used for this purpose. Bottles are plugged with cotton stoppers, whereas the vials are covered with cloth towels until cool, after which they are sprayed with a thick suspension of fresh Fleischmann's yeast, punched, papered, and stoppered in the usual fashion. (According to suggestions by Muller in DIS-3: 52) Bottles are treated in the same manner; when they are cool, the stoppers are removed and paper toweling is added in the place of confetti. In both cases, by using a glass tube about 1/4" inside diameter and a large rubber bulb, a small hole is punched in the food at the side of the container in order to release gases formed in fermentation.

Spencer, W.P.      Food formula

- 1 liter water
- 25 grams chopped agar
- 1000 grams mashed ripe or over-ripe banana.

It has been my experience that this medium is distinctly superior to corn-meal-molasses-agar for many species of *Drosophila*, and equal to it for all species tested, which will grow on corn-meal.