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Drosophila medium that does not require
dried yeast.

In the past, our laboratory has experi-
enced difficulty with the standard corn-
meal-molasses medium. Occasionally we
had periods in which pair matings and low
viability stocks grew poorly. This
appeared to be correlated with an aging

of the dried, heat killed Brewers yeast. In addition we have experienced difficulty in
obtaining fresh supplies of dried yeast. Therefore we decided to find a non-spoiling sub-
stitute for the yeast. The substitute finally adopted is a mixture of yeast extract and
non-fat dry milk solids. Yields using the recipe given below are as good or better than
those we obtained using the yeast formula. We have tried three brands of yeast extract and
found no difference between them and no evidence of deterioration with age (the oldest yeast
extract was more than three years old). While this recipe is slightly more expensive than
media using yeast, we feel its advantages offset the extra cost.

Recipe for cornmeal-molasses-yeast extract-milk solids medium.

Ingredient	Amount for 150 quarter pint bottles ¹ .	% of total water
Water	4286.6 ml	79.62
Agar	30.3 gm	0.56
Molasses	692.7 ml	12.87
Cornmeal	578.7 gm	10.75
Milk Solids ² .	118.3 gm	2.20
Cold Water	930.3 ml	17.28
Yeast Extract	30.3 gm	0.56
Boiling Water	166.7 ml	3.10
Acid Mix ³ .	60.3 ml	1.12

1. About 37,800 cc of medium.

2. Carnation non-fat dried milk solids were used but any brand should
be suitable.

3. Propionic-Phosphoric acid mix (from E. B. Lewis DIS 34:117) was
used as a mold inhibitor.

Directions for preparing the medium:

1. Dissolve agar.
2. Reduce heat and add molasses (We use sorghum syrup because of local availability).
3. Dissolve yeast extract in boiling water.
4. Make a slurry of cornmeal and milk solids using the cold water.
5. Stir the cornmeal-milk slurry into the agar-molasses mixture and then add the yeast
yeast extract solution (adding the latter earlier makes a deficient medium). Heat to
80-82° C.
6. Turn off heat, stir in acid mix and pour.

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Lafayette, Indiana. Dental Rolls for
pupation sites.

To facilitate the collection of large
numbers of virgin adults of species less
productive per bottle than *D. melanogaster*,
I have been using dental rolls as pupation
sites. Dental rolls (3/8" by 1-1/2") are

poked into the food medium when 3rd instar larvae begin to crawl and left until the rolls are
full of pupae. The pupae-laden rolls are then poked into the surface of a fresh bottle of
food. Generally two bottles of larvae result in one of pupae on rolls (6-7 rolls/bottle).
When adults emerge they can be shaken out without the accompaniment of liquified medium. This
method works well with a reasonably large number of species, with the trenchant exception of
D. virilis. The rolls are available from Johnson and Johnson at 2000 for \$6.50 (suggested
price as of March 6, 1967). A dispenser is available if one feels the need.