

placed for a few minutes in 20% acetic acid before the regular staining procedure. The measurable diameter of the cells increases by 70 to 80%. Considerable improvement was noted in the spreading of pachytene chromosomes in sporocytes that were relatively poor spreaders. Prolonged exposure to the acetic acid results in loss of affinity for the stain. Similar but less pronounced effects were noted in barley. Pre-treatment with higher percentages of acetic acid was better in some cases.

Joseph Neubauer

10. Improved propiono carmine stain.

A number of years ago a worker in the radiation genetics lab noted that a batch of propiono carmine unintentionally refluxed for a much longer time seemed to give better staining. When this came to our attention recently, we prepared it as follows:

0.5 gm per 100cc. of 45% propionic acid  
reflux for 6 to 8 hrs.  
cool and filter

This stain gives much better results for corn than any that we have prepared by other methods.

Dilution with 45% acid may be necessary if the cytoplasm is stained too heavily, as in the tomato.

John T. Stout

11. Variable transformer for use with microscope lamp.

For a microscope lamp using a spotlight 100W, 120V, G16 ½ bulb, or for one that uses a 100W 120V T 8 ½ bulb, CC13 filament, we have used a Powerstat variable autotransformer:

Type 2PF10 input 120V, 60 cycle  
output 0-130V, 1 amp.

It is manufactured by the Superior Electric Co., Bristol, Conn. A 1 ½ or higher ampere unit would probably be better.

C. R. Burnham