USEFUL INFORMATION

1. Recycling Nytran

0.1M NaOH at room temperature for 30' or 0.4M NaOH for 10'.
Neutralize with 1M Tris pH7.5, 2 x 20' at room temperature.

2. Ribosomal RNA sizes in maize

3.20 kb
1.85 kb
1.60 kb
1.15 kb

3. Radioactivity conversions

1Ci = 2.2×10^{12} dpm
1mCi =- 2.2×10^{9} dpm
1μCi = 2.2×10^{6} dpm

4. Plasmid amplification

Grow until OD_{600} = 0.9. Add 100 mg chloramphenicol to 500 ml broth and continue to incubate at 37°C overnight.

5. Best FAA fixative

50 ml ethanol
5 ml acetic acid
10 ml 37% formaldehyde
35 ml H_2O

6. Phosphate buffer

To make 50 ml 1M phosphate buffer:

pH	6.4	6.6	6.8	7	7.2	7.4
H_2	36.7	31.2	25.5	19.5	14	9.6
Na_2	13.2	18.7	24.5	30.5	36	40.5

7. Tris buffer

To make 100 ml 2M Tris buffer:

pH	7.2	7.5	8.0	9.0
acid	89.2	80.7	56.4	9.7
base	10.8	19.3	43.6	90.3

8. Dialysis tubing preparation

Add 100 g anhydrous Na_2CO_3 to 250 ml dH_2O
Put up to 3 metres dialysis tubing into the solution & boil for 15'
Rinse 5 x with dH_2O
Boil in dH_2O
Boil 3 x in 10mM EDTA washing well with dH_2O in between
Store in 10 mM EDTA

9. Clearing leaves (Crookston & Moss, 1974)

Place in 95% ethanol until chlorophyll is extracted
Place in 10% NaOH for 12-14 hr
Rinse with dH_2O

10. Chlorophyll assays (Arnon, D.L. 1949 Plant Phys. 24, 1-15)

Grind premeasured leaf disc in liquid nitrogen (about 1 cm diameter).
Thaw in 80% acetone in eppendorf tube
Spin out debris
Read OD_{645} & OD_{663} of supernate

Chlorophyll concentration = $OD_{645} \times 20.2 + OD_{663} \times 8.02$ $\mu g ml^{-1}$
Chla = $0.0127 \times OD_{663} - 0.00269 \times OD_{645}$
Chlb = $0.0229 \times OD_{645} - 0.00468 \times OD_{663}$

11. 5-azacytidine

Either: germinate on filter paper in dark then after 2-3 days add 30 μM 5azaC. Leave for 3d then change for dH_2O.
Or: germinate in 30 μM 5azaC for 2 days and then transfer to dH_2O