LITTER UNDER TREES

PROJECT 4-27

<u>PROBLEM</u>

Many people hate raking leaves off lawns so they plant evergreen eucalypt trees rather than deciduous trees in their gardens. It seems however, that eucalypts drop leaves, twigs, bark, flower parts and fruits in vast amounts and the gardener hasn't solved his problem. The problem is even greater when all the litter falls into a swimming pool and blocks the filter.

You might like to compare the seasonal occurrence of litter beneath eucalypt and deciduous trees. You may also compare pines.

INFORMATION

- 1. Litter is collected by placing trays about 75 cm square with fly wire bottoms under the trees.
- Collect litter regularly, especially if wind is likely to affect your collection. Sort litter into categories – leaf, stem, bark, flower parts and fruit and weigh it. It is conventional to dry it out at 100 C before weighing.
- 3. Branches that crash off in storms are unlikely to land on your trays so keep separate records of these.
- 4. You must be prepared to work over the summer holiday period to get good information on the eucalypts.

DESIGN OF EXPERIMENT

- 1. How many replicate trays should be used?
- 2. Are you going to work in a garden situation or a native stand of eucalypts?
- 3. Are you going to bulk up your collections into weekly or monthly lots for presentation of results?
- 4. What environmental factors do you think are inducing leaf drop in the eucalypts and deciduous trees?

REFERENCES

- Penfold, A.R. and Willis, J.L. (1961). The Eucalypts Botany, Cultivation, Chemistry and Utilization. (World Crop Books) (Leon and Hill : London).
- Pryor, L.D. (1976). Biology of Eucalypts (Studies in Biology No. 61). (Edward Arnold) (General information on eucalypts rather than specifically good for this project in both the above books).
- Weier, T.E., Stocking, C.R. and Barbour, M.G. (1974). Botany An Introduction to Plant Biology (5th ed.) (Wiley : New York) Chp. 10, 20.