

incorporate the pressure loss across the filter in the dirty condition, not the clean loss.

COLLECTION AND TRANSPORTATION OF FIELD CUTTINGS

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The first task in preparing for a field trip is to organize efficient insulation of the vehicle floor.

In our climate, the transfer of temperature through the chassis and vehicle floor frequently raises the floor temperature above tolerable levels. It has been found that a false floor of pressed packs available for seedlings, is excellent insulation.

MATERIALS REQUIRED FOR LENGTHY FIELD TRIPS ARE AS FOLLOWS:

1. Large "poly" boxes with efficient self-sealing lids.
2. A large quantity of paper (Butcher's paper for the purist — newsprint for the rest).
3. A plentiful supply of water, preferably carried in small, easily handled square containers of 4 to 5 litre capacity.
4. A squeeze pack or hand operated vaporiser.
5. Medium sized clear plastic bags plus some hessian or woven plastic bags.
6. Sphagnum moss.
7. A quantity of unexpanded cardboard cartons and appropriate tapes and ties.
8. A substantial piece of shade cloth which may be rigged to cope with direction shifts and sun intrusion.

TAKING CUTTINGS

Wherever possible the material should be collected shortly after daylight.

The material should be partially reduced immediately and wrapped in moist paper before stowing in a "poly" box, or into a cardboard carton.

At night camp, further reduction may be made but never to the prepared cutting stage.

Advantage should always be taken of night temperatures and possible dew. However, material should be protected from winds.

Best results are obtained with prodigal use of fresh moist paper at each unwrapping and the use of moist sphagnum scattered through the cuttings and wrapped around exposed bases can be highly commended. If water from the field is to be used always test first, i.e. with the taste buds. Brackish water has a very adverse effect on material which is to be transported for days or weeks.

There are many more sophisticated means of collection than those mentioned here. Use has been made of ice, dry ice, refrigeration and air conditioning. However, lengthy field trips are generally dependent on the use of quite unsophisticated means and often in unsophisticated vehicles.

There are some collectors who use Formula 20, the old Geo. Warner solution. There is some evidence to suggest that this material does delay wilting. My own experience seems to indicate that it has considerable value when dealing with lush cuttings, but is not effective with woody types. Further, in the case of dry desert material, it appears to have an adverse effect.

Perhaps emphasis should be put upon the continuous re-handling of collected material. One has to face up to the fact that extended field trips are expensive. It is, therefore, necessary at the end of a long hard day in the field to face up also to the essential labour required to deal with the material collected every night.

Plastic bags are great aids but they cause quick heating and there is always the ethylene danger. Our normal method is to collect material into plastic bags as carrying tools, but on arrival at the vehicle, we reduce the material and become dependent on moist paper.

Where airports may be reached easily, the additional travelling should not be neglected. This pre-supposes that air schedules are well known and that nursery organization has been arranged for receipt and treatment of material. For despatch by air, the material should be re-wrapped, placed in plastic bags and thence to the cartons. Sometimes this exercise causes damage through over-packing. It is false economy to pack too tightly in an effort to save the freight on a second carton. Sometimes this final packaging occurs in the vehicle on the way to the airport to save time.

When one is making a trip where no alternative transport is available, careful planning is necessary to keep the length of a trip to a minimum. Every day material is carried may reduce its viability. However, if a long period becomes necessary, then careful and continuous handling of material may still ensure success. Myrtaceous cuttings, for example, have been carried for as long as three weeks under very adverse summer conditions

and yet achieved a better than 50% result in the cutting trays.

When the transportation period is extensive, sphagnum moss has a definite part to play. Provided plant material is generously wrapped in moist sphagnum and kept reasonably cool, it will carry in good fettle. However, material in sphagnum which warms will degenerate very quickly indeed.

Summer collecting presents special difficulties. Mention has been made of the use of plastic bags as a carrying tool while collecting. Water should be on hand if only in a belt bottle, so that the inner surface of the bag may be made moist. The standard method of achieving this is to pour a little water on the material in the bag, shake vigorously and pour off the surplus. Normally one carries a second bag, preferably hessian to contain the plastic bag and insulate it. The outer bag is also kept moist to obtain an evaporative cooling effect.

If collecting in station country or farming areas, contact should always be made with local residents as quite often someone may be headed for the city and thus provide a quick fortuitous means of transport. I must record, however, that I once lost the product of three days hard collecting in this way, and never managed to discover whether the material was successfully delivered to one of my competitors, or found its way into a hotel garbage bin. Fortunately such tragedies are rare.

Whenever possible, transport should be at night, If collection is made as suggested, in the early morning, it is easier to keep the material cool in the comparative comfort of a camp than on the road in the heat of the day. This is particularly important when making desert collections.

Great care should be taken in the choice of camping sites. They should be as close to the plant source as common sense and topography allow. Of course if this can be achieved on good water, one has a bonus. While the quality of water for direct contact has been emphasised, most water can be used for cooling.

These notes have been written after many years, now approaching half a century, of collecting. The methods detailed are simple enough and we all have our own ideas in this respect. The justification for detailing them is simply that they have proved fairly effective.