

THE MEDIA IS THE MESSAGE

INTRODUCTION

In the first of a series of articles focussing on the community composting sector, Richard Clare from Sheffield's Organic Food Initiative considers some of the finer points of the craft of composting. In this issue, he explains some of the techniques and benefits of manufacturing a wide range of Seed and Potting composts.

The Organic Food Initiative has been working to develop and support local, grass-roots food-growing projects for the past ten years. Their course in "Organic Culture and Horticulture" includes a large component on urban recycling and bulky organic matter. For the past three years, they have hosted the Annual Gathering of the Community Composting Network (see Compost News Spring 2001) at Unstone Grange in North-east Derbyshire, a visitor centre with two acres of organically-certified gardens and orchards, where SOFI runs a Gardening for Health volunteering project.



ORGANIC POTTING COMPOSTS (*GROWING MEDIA*)

INERT / STRUCTURAL <----- INGREDIENTS -----> FERTILE /
STRONG

	GRIT	SAND	PERLITE	VERMICU LITE	LEAF MOULD FINE	LEAF MOULD ROUGH	LOAM FINE	TOP SOIL	COMPOST FINE	COMPOST ROUGH	SEA WEED MEAL	GRO SAFE (B,F&B)
CUTTINGS	20	20	30		30							
SEED SMALL		30		30	40							
SEEDLING PRICKING OUT			27		50		10		10		2	1
SEED MEDIUM		18	30		40		10				2	
SEED LARGE		10	25		30		20		10		3	2
POTTING ON YOUNG			20			22		25	25		5	3
POTTING ON MATURE			10			20		30		30	5	5

POTTING COMPOSTS (GROWING MEDIA)

The table (above) sets out the proportions of ingredients in a basic range of potting composts as a simple **percentage**, rather than the fractions or parts in recipes for standard John Innes mixes, which can be confusing.

Although each mix has distinctly different uses and properties, it is also possible to make up base mixes which can then be adapted to produce exactly the right medium for the intended use. For instance, powdered lime, dolomite or calcified seaweed can be added to suit the requirements of lime-lovers, such as onions and cabbages. Rockdusts can be added if a long, slow release of fertility is required. Media for acid-loving, ericaceous plants can be produced by using leafmould made out of evergreen leaves or composts that have been digested anaerobically.

The range of media in the diagram progresses from those which require minimum fertility and a structure which will encourage cuttings and small seeds to form strong root systems, to those which need extra fertility to allow established plants and seedlings to grow on strongly. The golden rule of potting on and planting out is to always transfer plants into a more fertile medium. The ingredients are arranged similarly, from those which are more **structural and inert** (left), to those which are more **fertile** (right).

This selection maximises the use of ingredients which can be obtained freely from local sources. Good organic practices should include managing all the resource cycles which will make these ingredients available: making garden **compost**, **leafmould**, **loam** and creating improved, weedfree **topsoil**. Saving money by sourcing bulky ingredients yourself means you can afford the inputs which have to be bought in, such as perlite, vermiculite and concentrated fertilisers. These more expensive ingredients can be reduced or even omitted, but this will reduce the effectiveness of the final products.

Commercial mixes use peat, processed sewage or coconut fibre in place of leafmould. Peat extraction has been reduced in this country, which helps to save British peat bogs, but supply has been met by imports, from countries such as Lithuania. Regular commercial products also minimise or exclude the use of soil, to reduce weight, which makes them cheaper to transport, but requires the addition of extra slow release (often chemical) fertilisers.

SOIL Mixes which include soil are more resilient and long-lasting. Soil acts as a buffer producing a more enduring and forgiving medium which requires less regular watering and will last longer before it needs to be replaced.

Loam and topsoil will have different qualities according to the nature of the mother soil from which they are formed:

- 1 Sandy soils can be used in the finer consistency media, such as for seed-sowing.
- 1 Clay soils are only suitable for rougher mixes for more mature plants.
- 1 Silt or alluvial soils and any soil with high humus content can be included in both.

Using soil in potting media produces plants which are prepared for and adapted to the type of conditions they will encounter when they are transplanted.

TIPS

- . Mix bulky ingredients together first, then add concentrated fertilisers.

- . Add perlite or vermiculite next to check the concentrates are distributed evenly throughout the mix. Move the batch from end to end of a container to make sure it is mixed thoroughly.
- . Rubbing the finer mixes by hand adds minute amounts of enzymes, hormones and auxins which can promote growth.
- . Most mixes can be used immediately, but those which contain volatile substances (such as raw compost and blood, fish & bone) should be left to mature and settle for several days.

RIDDLING

- **2 cm (one inch)** mesh produces rough grade material suitable for large seed or potting on media. Larger stones or twigs can be saved and used for drainage in the bottom of pots.
- **1cm (half inch)** mesh produces fine particle size for seed mixes. Stones that do not pass through the riddle can be saved for use as grit.

ADDED VALUE

Price comparisons between raw bulky materials and mature, processed products reveals the commercial value of generating finished materials. Simply bagging a rough compost could multiply its value several times. By combining compost with loam and leafmould to create a basic potting compost, the value can be increased tenfold.

LOCALLY SOURCED MATERIALS

For those of us who can think ahead and anticipate reduced dependence on fossil fuels, transport and food miles are real and genuine concerns. Although the economic advantage of local sourcing is minimal and has not yet been recognised to its full extent, locally available materials are all that are available to those who cannot afford the luxury of national and intercontinental transport

DIVERSITY AND SPECIALISATION

As a relatively small-scale operation working to supply about four acres of market garden and allotments, SOFI has been able to consider and provide a broad range of the materials needed in future years, as well as working to perfect the quality of those substances. However, instead of being able to exploit this advantage commercially by producing in large quantities, we have chosen to market the techniques we have developed by producing educational material and running courses.

QUALITY CONTROL

By controlling the whole production cycle, from collection of raw feedstock to final use, we are able to exactly customise the right medium for a specific purpose. We can ensure consistent media which will perform reliably. For instance, by efficiently pasteurising leafmould and compost in the early stages of processing, we can minimise the content of pathogens or weed seeds and guarantee optimum performance.

THINKING AHEAD

We can maintain a balance between the level of production we will need to supply the projects we run with growing media. This means we have to think ahead two years. In most years, we will aim to generate enough media to spare for other individuals and projects. This year, we will produce approximately 10,000 Litres of media.