

Hardy Perennials from Seed

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At our nursery, we grow many hardy perennials from seed, although named forms are, of course raised by cuttings or division. But very many wonderful and easy species can be raised from seed, and over the years we have developed a simple and straightforward method which has proved reliable. I hope that this article will encourage you to try growing more from seed yourself.

THE COMPOST MIXTURE

You will find endless suggestions for compost mixes in books and magazines, including all sorts of weird and wonderful ingredients. On the nursery, where we used to sow about 2000 pots or trays of seed each year, I was keen to find a simple compost which we could use for everything. After only a little experimentation, I finally arrived at a rough 3:2:1 mixture (because it was easy to remember) of peat (or peat free) based compost, John Innes No. 2, horticultural grit, and a slow release fertiliser. In practical terms, I use:-

- a 40 litre bag of peat (or peat free) potting compost
- 'Osmocote' slow release fertiliser, used to the manufacturer's recommendations
- a 25 litre bag of John Innes No. 2 soil based compost
- 10 litres of 6-8mm ($\frac{1}{4}$ " – $\frac{3}{8}$ ") horticultural grit (two 5 litre potfuls)

I sieve the ingredients through a 6mm ($\frac{1}{4}$ ") sieve (and use the 'waste' as a soil ameliorant when planting in the garden) and then mix the constituents together thoroughly. I use a cement mixer, but hand-mixing of small quantities is fine. You might think that sieving is a bit of a chore (and so it is), but the benefits of producing an even, fine, grade of compost become obvious at the pricking-out stage.

SOWING IN POTS

I sow seed in either pots or trays depending upon how much seed we have, and whether the seed is an easy germinator or more sporadic. For small quantities of seed, and sporadic germinators, I use 9cm ($3\frac{1}{2}$ ") round plastic pots.

I always put 12mm (about $\frac{1}{2}$ ") of horticultural grit in the base of each pot before filling as this helps to retain moisture in the pot and to draw down the roots of the young seedlings. A quick and easy method is to cut a 9cm pot down to 12mm, fill it level with grit, and sling it into the pot – a perfect 12mm depth in every pot !

I then fill the pot with the prepared compost by filling a 75mm (3") square pot and transferring it fairly forcefully into the pot. With a little practice the compost is compacted to the right amount by this action and all that is needed is to level it off to the rim and then finally consolidate the compost by patting the base of the pot until it has settled a little way below the rim.

SOWING IN CELLS

For easy germinators, or where we have lots of seed, I use a 20 cell half tray. This system is more time consuming in terms of preparation and filling, but the seedlings make good growth and can be potted up as 'plugs' with absolutely no root disturbance or damage. Using a small hand shovel, I overfill the whole tray and then bang the tray down firmly on the bench to settle the compost into the cells. This is only superficial settlement though, and I then firm each cell individually by shoving

two fingers vigorously into each cell. I then fill the voids with more compost, level off, and then tamp the surface with a stiff brush.

Unless the cells are filled and compacted in this way, they will be full of voids, and when they are watered they sink dramatically. The young seedlings have only a small amount of compost in which to grow in any case, and to reduce it still further by allowing voids is depriving them of a good start.

SOWING THE SEED

The secret of seed sowing is to sow sparingly, 30 seeds to a 9cm pot, or 3-5 seeds in each cell, is ample. Sprinkle the seed onto the surface of the compost carefully, and as evenly as you can, either direct from the packet or as a pinch from a pile in your hand. Books and seed packets usually tell you to cover the seeds with say 1/16" of compost. Have you ever tried ! I have found that a layer of horticultural grit over the seed is far better, just thick enough to obscure the compost beneath. Sprinkle it from a square pot and you will get a gentle curtain of grit from the pot edge, which helps to spread it evenly.

IT IS MOST IMPORTANT that you insert a label, identifying the seed and the date of sowing – DON'T FORGET.

I water the pots of seed after sowing. Some people recommend watering before sowing, but provided the watering is from a fine rose on a watering can, it is better done afterwards – BUT DON'T OVERDO IT. The advice given by some authors to immerse the pot or tray in a bowl of water to a level just below the surface of the compost is to be avoided at all costs. You end up with an overwet compost, floating seeds, and a bowl full of compost !

AFTERCARE

I also break with convention when it comes to where the pots and trays are kept after sowing. So many broadcasters and books and magazines say 'on a sunny window sill', others say in a heated propagator, yet others say in a cold frame or greenhouse. I place all of our seed pots and trays OUTSIDE in a fully open situation – NOT on a 'sunny window sill', NOT in a heated propagator, NOT in the greenhouse, NOT in a cold frame, but OUTSIDE.

I place our seed pots and trays in a simple, shallow, timber box with a removable mesh lid to give some protection against mice, birds, and slugs and snails. The lid is a simple frame covered in shading mesh. The seed trays, however go directly onto the standing beds with no protection at all, other than a few mouse traps nearby. The one thing you must remember though is DON'T ALLOW THEM TO DRY OUT. In reality, seed sown between October and March rarely need any artificial watering as rainfall is adequate and prolonged drying conditions are unusual.

GERMINATION

All being well, germination will occur when the seed is ready ! With some species, this is within a matter of a few days, most within eight weeks, and just a few take a year or longer – so don't be in a hurry to throw away the pot. *Eryngium*, *Helleborus*, *Paeonia*, and *Cyclamen* fall into this long germination category.

Keep the seedlings moist, but not wet, at all times.

POTTING ON

When the seedlings are showing plenty of growth, you can pot them on – this is the rewarding bit. No need for special compost – just use your favourite.

Seedlings from pots can be carefully turned out and the ball of compost dropped (gently) on the bench to encourage them to separate (the sieved compost and the grit at the bottom of the pot help enormously to ensure easy separation of the seedlings). If the seedlings are small, or the roots damage easily, pot up the seedlings in clumps (don't be greedy - 10 good clumps is better than 30 miffy individuals). Don't try and pot on seedlings if they are in wet compost – allow it to dry out a fair bit first. If you don't, the compost will be heavy and clinging and the chances of root damage are high.

I pot everything directly into a 100mm (4") square pot – by the time they are potted they will be wanting to grow away vigorously and will need plenty of space for the expanding root system. For cell grown seedlings, make sure that they have grown plenty of roots before trying to remove them from the cells, otherwise the rootball will not hold together as a 'plug'. The Osmocote fertiliser in the soil mixture will keep them growing strongly until sufficient roots are made. You can either pot up the plugs, or plant them directly where they are to grow.

POSTSCRIPT

It really is very easy and straightforward, and once you have had a success or two, you will be hooked for ever! Remember that the joy of seeing your seedling flower for the first time is reserved only for those who take the trouble to sow the seed.