

Storing Wild Flower Seed

We store a selection of arable wild flower seed in an ordinary domestic fridge. The seed is kept in air-tight containers on a bed of silica gel, and the fridge dial set to maintain a temperature of around 4°C.

Initially, we used an off-the-peg mini seed-bank sold by Kew, but since this product became unavailable, we have made our own mini seed-banks based on Kew's version. We have found that seed stored in this way will remain viable for years. This document explains how we did it.

NB. This will cost you between £20 and £30 to set up, excluding buying a fridge thermometer. A cheaper, but probably somewhat less effective alternative, is to dry seeds in the air, then store in paper envelopes in an air-tight container (a food storage box or bag), again with some silica gel sachets, placed in the fridge.

What you need

- A large, sealable food-storage box, in clear plastic. We used an Addis 4.6 litre rectangular 'Clip & Close' box, which cost around £10.
- A selection of collecting pots. We used 30 ml, 60 ml and 180 ml pots from NHBS.com. You will probably only need the smaller sizes. Note that the pots we use have screw-on lids and are recommended for liquids (i.e. the lids have a tight seal).
- Loose silica gel – for one 4.6l box, we used 500 g of self-indicating silica gel that changes colour when hydrated, which cost around £7.50. This will arrive in its dehydrated form and needs to be kept dehydrated, so keep it wrapped in plastic and in a dry place until you need to use it.
- Silica gel indicator sachets – you will need one sachet for each small pot. We bought a pack of a hundred 1 gram self-indicating silica gel sachets, which cost around £5. Note that the sachets must be made of clear plastic, so that you can see the beads inside them; opaque paper sachets are not suitable. The sachets will arrive in dehydrated form, but you will need it to be hydrated, so leave the sachets out until the colour starts to change as they absorb moisture from the atmosphere.



60 ml collecting pot with screw lid



1 g sachet silica gel

Storing the seed

- First clean the seed. That is, sort through what you've collected and remove bits of extraneous material, i.e. fragments of seed-pod, so that all you have are the seeds themselves.
- Put the seed into the collecting pots – just one species per pot – and add a silica gel sachet in the top. Label the pot with the species, place collected, and date. **DO NOT** put the lid on the pot.
- Open the big bag of loose, dehydrated silica gel, and pour it into the sealable food container. Stand each of the open smaller pots on the bed of silica gel, and put the lid on the food container, making sure that it is sealed.
- Over time (days), the small indicator sachets will change back to their dehydrated colour, showing that the seed has dried out. At this point, you can open the container and put the lids on the individual pots (leaving in the silica gel sachets), then reseal the food container.
- Place the sealed container in the fridge. The temperature should be around 4°C, so keep the seed away from the freezer compartment. We ensure that the fridge temperature is about right by using a fridge thermometer – we use a Salter analogue fridge-freezer thermometer which cost around £10.



Cleaned
corncockle seed
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Eventually, the loose silica gel will start to change colour as it absorbs moisture. It can be reactivated by placing it in a heat-proof container and placing it in a low oven or under a very low grill until its colour changes back. Let the gel cool before putting it back in the seed-bank.

Safety with silica gel. While silica gel is not toxic, the colour-change dyes in the gel may be, so it must be kept away from children and not consumed. It is always good practice to wash your hands after handling plant material or silica gel.



Mini seed-bank, with lid removed to show pots of drying seed on top of the silica gel © Richard Moyse

All prices in this document are based on purchasing items in 2019 and costs may vary.