## GROWING GESNERIADS & FERNS FROM SPORES

Small ferns can be an important component of the rock garden and also make good subjects for cultivation in pots. Only a few species are available commercially except from specialist nurseries but spores of several taxa appear in the AGS seed list. It is also fun to propagate some of our native ferns, such as the Rustyback fern, *Asplenium ceterach* [*Ceterach officinarum*], which is very suitable for a shady crevice.

If you wish to collect the spores in order to propagate a fern, select a fertile frond. You will be able to see the spores on the back of the frond and if they are ripe a slight tap will result in a rain of dark dust-sized particles onto a sheet of white paper held below the frond. Cut the frond free from the parent fern and place it in a paper envelope in a dry place. Shake the envelope to detach the spores.

In order to grow new ferns from the spores, you will need the following equipment: small round plastic pots; clear plastic beakers, which fit snugly inside the rims of the pots to give an air tight seal (these can be purchased in a supermarket); compost (John Innes No 1 plus grit); dry sphagnum moss available from garden centres, where it is sold as lining for hanging baskets; kitchen paper; a pair of scissors; and a kettle.

- Step 1: Clean the pots thoroughly and fill to just below the rim with compost.
- Step 2: Chop the sphagnum as finely as possible on to the top of the compost. This is most easily achieved by holding a bunch of sphagnum and making successive closely spaced cuts with the scissors.
- Step 3: Place a folded piece of kitchen paper on top of the sphagnum and pour boiling water from the kettle onto the paper until the pot is completely soaked in very hot water. This sterilises the surface.
- Step 4: Remove the paper and place a beaker over the top of the pot and leave until the pot is cool.
- Step 5: Sow the spores. This is most easily done by spreading them on a piece of half-folded typing paper, tilting it and giving it a slight tap.
- Step 6: Place the beaker back on the pot and place the latter on a plastic saucer on a north-facing window sill.

After several weeks or months, the surface will turn green. Later tiny fernlets will appear. Grow them on until they are big enough to pot up.

If at any time the sphagnum appears dry, stand the pot in a pan of water until the surface appears moist again.

I have found this method very effective for ferns, even those from dry habitats such as *Cheilanthes*; it is equally good for growing gesneriads, such as *Chirita, Haberlea, Jankaea, Streptocarpus* and *Ramonda*, all of which have tiny seeds and slow growing seedlings which get swamped by moss and liverworts if sown on unsterilised compost.