

Growing Members of the Pea Family from Seed

To grow members of the pea family (Fabaceae) from seed it, is first necessary to break the seeds dormancy. There are 2 basic ways to do this, or perhaps use a combination of both.

One – Scarify the seed by either rubbing it with sandpaper or taking a nick out of the seed coat. This allows water to penetrate the seed, thus speeding germination. *I have taken to doing this with a drill bit for the larger, harder coated seeds with considerable success.*

Two – Soaking either by:

- Place seeds in a ceramic cup and add sufficient, near boiling (allow kettle to cool for 2-5 minutes before using), to just (barely) cover the seeds. Smaller seeds (pin head sized) should have an equal volume of cold water added after 2 minutes to stop the seeds from cooking; larger seeds can be left in the hot water and allowed to cool. Continue to soak for 24-48 hours and sow any seeds that have swollen (it will be obvious). Seeds that do not swell – repeat the process many times if necessary – current record is now eleven!
- Seeds that have been scarified as at ‘one’ above should not be treated with boiling water. Hot tap water should be sufficient. They should be left to soak until they have swollen. After 48 hours, seeds that have not swollen should have a further nick taken out of the seed coat.

Sow the treated seed in normal potting compost and keep at 18 – 25 Deg C, until germination occurs (2 – 3 weeks or more, although I am currently seeing germination in 2 – 3 days!!). Sealing pot in polythene bag helps, although watch out for mould forming which will quickly spoil a batch of seed.

Once true leaves have formed you can transplant the seedlings into larger pots. Like a lot of legumes, Acacia’s and their relatives seem to resent root disturbance and growth will suffer a check at this point and this is quite normal. When conducting later potting on, try to disturb the root ball as little as possible. Many of the bush/tree types have spines that are often concealed by the foliage, so take care when handling.

For those plants intended for outdoor culture, it would probably be wisest to plant them out in the summer of their second year in order that they may establish themselves better if they are larger.

Some Additional Tips by Species

Some members of the pea family have been found to require additional or extra treatment – these are detailed below:

Acacias, Albizias and Entadas – all African species: Change the water frequently as the seed coat contains germination inhibitors which will be leached away by this process. Soak until the seeds have swollen to at least double the original size. When planting out in pots, use deep ones as most have a tap-root.

Adenantha and Abrus: These seeds may need repeated treatment with boiling water as per Erythrina. **For Abrus – the soaking water is toxic.**

Dalbergia: These seeds most often come in the pod. The seeds are almost impossible to extract from the pods, so don’t try. Soak the seed pods for a few hours and then sow them on the surface of the compost.

Delonix and Colvillea: These are the seeds I have had to take a drill bit to. The seed is very hard and it is important that the seed coat is damaged prior to soaking or the water just will not penetrate. Don’t use boiling water; just use hot tap water (60 – 80 degrees C or so).

Erythrina: The coral trees have exceptionally hard seed coats. Treat with boiling water as described over. Soak for 48 hours changing water daily. Remove and sow any seeds that have swollen to at least double original size. Re-treat stubborn seeds with boiling water and continue to repeat this process until the seeds swell. **100% germination will occur with swollen seeds within just a few weeks, un-swollen seeds may take a year or more to germinate and can survive in the soil for 10 years or more and still be viable.**

Indigofera and Lessertia: These don’t need scarifying but need to be soaked till they swell up. They may germinate in the soaking water (I once left a batch for 7 days and all germinated in the soaking cup), this is not a problem, just sow and lightly cover and all will be well.

Kennedia: The coral peas require a quick boiling water treatment. Add no more than 1 cm of boiling water to a ceramic cup containing the seeds. Leave for 5 minutes then add 5 cm of cool water. Continue to soak for 48 hours. If the seeds don't swell – repeat the process once more.

Lupinus (Texas Blue Bonnet): These are biennials and will self seed themselves if happy. They may be sown as overleaf, or sown direct into a prepared flower bed.

Pterocarpus: Crack the outer case and either remove the seed or leave it in situ. Use warm water for the soaking. Failure to do this will mean the seeds will take a year or more.

Schotia and Xanthocercis: The Boer Beans and Nyala Beans have large seeds that need a long soak. Treat with boiling water as described over, then soak, changing the water daily, for up to a week.

Wisteria: Sow outdoors in pots in a cold frame or unheated greenhouse. Can take up to 12 months to germinate.