



Pimelea spinescens Recovery Team

Coordinating the recovery of Spiny Rice-flower (subsp. *spinescens*) & Wimmera Rice-flower (subsp. *pubiflora*)

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Seed Collection Protocol

Before collecting seed from any native species, please contact the Department of Environment, Land, Water and Planning (DELWP) to obtain the required permits.

Pimelea spinescens sbsp. *spinescens* (Spiny Rice-flower) generally flowers between the months of May and August. By mid to late August the ovary of female flowers starts to swell and the seed begins to develop. It is at this time when it is best to begin the seed harvesting process. This time frame will vary depending on rainfall and should be used as a guide only.

Choose a predominantly female plant that has been well pollinated and appears to have individual branches with copious amounts of seed developing on them. This ensures the effort put into harvesting the seed offers the greatest return. This will obviously depend on the size of the population and availability of female plants.

(See photos 1 & 2)

Cut the legs off a pair of stockings into lengths that will cover a branch or multiple branches of a single plant. Tie a knot at uppermost end of the cut stocking length and proceed to place the open end over the branch.

It is not imperative that stockings are used, as long as the material is breathable and practical to work with it will be suitable for the job, for example, gauze may also be suitable.

Using tie wire, tie-off the open end at the base of the branch or at a convenient location to capture the largest amount of seed possible.

(See photos 3 & 4)

This method allows maximum harvest with the lowest input of labour as the stocking will catch all the seed that falls from the covered branch. The stocking material provides enough air movement around the seed to avoid rot or mould developing on the seed. However, if heavy rainfall occurs between applying the stockings and harvesting, it is best to check the stockings for a build up of moisture amongst the fallen seed and leaf litter.

Allow at least three to four weeks before returning to the plants to harvest. Check that all or at least 80% of the seed has fallen from the branch and is sitting at the bottom of the stocking bag. If the majority of seed is yet to fall, return to the site at intervals of at least once a fortnight until the stocking and the seed collected inside is ready. By mid October to early November, all of the seed should have fallen.

Depending on the size of the population, the size of the harvested plants, and the fate of the population (eg, is it being destroyed for industrial development?), use discretion in regards to the way the seed is collected from the stocking.



The easiest and quickest collection method is to remove the branch from the plant using secateurs with the stocking still tied to it and the seed can be emptied into a paper envelope or calico bag for short-term storage. However, this will cause minor damage to the plant

The second method of collection involves undoing the tie wire while holding an envelope, calico bag or deep-sided tray underneath the stocking to catch the seed. This method ensures the plant is not damaged, with usually only a small amount of defoliation to the covered branch being the only side-effect.

As a general rule of thumb, no more than 10% of the seed from a population should be collected. Again, this may vary depending on the longer term fate of the population or as specified in the conditions of the seed collection permit.

Also, it is important to collect from as many clearly separate plants as practicable and possible from across the geographic spread of the population rather than focusing your efforts on a small cluster of plants. This ensures that the highest level of genetic diversity is sampled in the seed stock.

Ensure that the plants intended for harvesting are temporarily marked in some way to ensure the plants are easily identified upon return to collect your harvest. Pin Flags or flagging tape has proven to be sufficient previously.
(See photos 5 & 6)

Be wary of collecting from sites that may be subject to grazing by domestic stock, or from roadsides where stock movement is a regular occurrence. Both sheep and cattle remove or tear the stockings, trample the pin flags and the plant you are collecting from.
(See photo 7)

Always ensure that proper approval has been obtained, including relevant permits and landholder permission. A related translocation, introduction or augmentation plan should always be produced before seed collection begins, outlining the purpose and intended outcomes of collecting *Pimelea spinescens* sbsp. *spinescens* seed.

PHOTO 1 & 2: Ripening seed, ready for the harvesting process.



PHOTO 3 & 4: Stocking bags tied to branches



Photo 4 & 5: Pin flags marking *Pimelea spinescens* subsp. *spinescens* plants



Photo 7: Ripped stocking caused by cattle browsing

Photo 8: Collected seed at the end of the harvesting process

