

Continuing A SEED SOWING SAGA

Last month Norm Hulands described the issues of germinating *Crotalaria cunninghamii* the green birdflower.

A while back I purchased a rock tumbler, the kind that lapidary people use to polish stones. In nature, many hard coated seed occur in harsh environments, and using the example of seed being blasted by seed in desert areas, I thought that this idea had some merit. I also had the idea that being able to regulate the amount of scarifying a seed was subjected to could offer some clues as to how to



germinate difficult species. Rather than damage the polycarbonate cylinder, I cut down a poster cylinder I purchased at the post office. The cylinder is 60mm in diameter. Into this I inserted a piece of 80 grit sandpaper, so that the seed would be continuously in contact with the sandpaper as the cylinder turned. The end caps provide a tight fit so even small seed would not escape.

Norm gave me 10 *Crotalaria* seed, which was tumbled for 40 minutes. The time was just a guess, but when the seed was removed for inspection, the seed coat appeared scratched all over, so I am guessing that it might have been long enough.

The seed was soaked overnight, and by the morning 2 seed had expanded to 4 times original size. These were removed and sown, and the other seed soaked till the next day. 3 more swelled, and were sown, but after now 7 days, the remaining 5 seed refuse to show any sign of imbibing water.

It could be that some seed exhibit additional germinating barriers, but this I doubt as all the seed is from the same batch.

Anyway, I will keep tracking the germination of these, and other Fabaceae seed which I have treated,

The tumbler. Note the post cylinder inside the tumbler. This is loose, and as the tumbler revolves, the inner cylinder also revolves, with the seed scraping on the sandpaper liner continuously. It is an efficient method of sanding the seed coat, without rubbing the skin off one's fingers.

and hope to find the best length of time of scarifying using this method.

A number of Genera respond to scarifying, and over the coming months the tumbler will be earning its keep as I attempt to determine how much damage the seedcoat needs to allow successful germination.

If any member has experience in this field, I would appreciate shared knowledge.