# ENTHEOGENESIS AUSTRALIS

## How to grow Acacia seeds

## entheogenesis.org



Acacia seeds. Photo by Communacacian.

Acacia species, also known as wattle, are iconic Australian trees. Australia boasts over 1000 different Acacia species, which typically bloom in shades of yellow, with blossoms emitting rich, sweet, honey aromas. Acacia trees are one of Australia's most common entheogens. With some Acacia populations being threatened by human harvesting in the wild, we can protect Acacia by preferencing cultivated plants and by growing wattle trees ourselves. We hope this guide will help protect wild trees by encouraging individuals to grow their own trees.

The following methods can be applied to many different Acacia species as well as other plants from the Fabaceae family. These instructions have shown particularly promising results for Acacia in the simple phyllode/flower spike group described in our <u>Reference Guide for Common</u> <u>Wattles</u>. Community members have reported sowing seeds directly using the <u>coke bottle tek terrarium technique</u>, reducing repotting time and frequency of watering.

Acacia seedlings. Photo by Communacacian.

#### Equipment

- · Ceramic mug or equivalent
- Teaspoon
- Paper towel
- Sieve
- Trowel
- Pencil or alternative dipstick
- Seedling tray
- · Heat mat with thermostat (optional)
- Pots/native tree tubes
- Face mask
- Protective gloves

#### Ingredients

- Acacia seeds
- Native potting mix (low phosphorus)
- Coco coir
- Perlite
- Granitic sand
- 3mm river stone
- Slow release native fertiliser (low phosphorus)
- Seaweed fertiliser (e.g. Seasol)
- Rhizobia inoculant soil (soil from the base of an Acacia tree)



Acacia seedlings. Photo by Communacacian.

#### Step 1

Place the seeds in your mug and cover them with boiling water. This mimics a bushfire scenario, where sudden intense heat triggers seeds to wake up. Floating seeds are likely not viable, but you can keep or remove them from the mug as you wish.



Acacia seeds in boiling water, cooling before inoculation soil is added. Photo by Communacacian.

#### Step 2

Once the water has cooled add a teaspoon of rhizobia inoculant soil into the water, and mix.



Acacia seeds in boiling water that has cooled, after the inoculation soil has been added. Photo by Communacacian.

Most Acacia species do not strictly require this inoculant for germination, but it will help with overall health and vigour of some species. If you have an Acacia in your backyard or neighbourhood, simply take a handful of soil from the base of the tree. Avoid disturbing the roots of the Acacia too much, very little soil is required.



Rhizobia inoculant soil collected from an Acacia in the garden. Photo by Communacacian.

#### Step 3

Allow your inoculated water, seed and soil mix to sit for 24 - 48 hours, then strain the seeds from the mix using your sieve. Set the seeds aside on a paper towel.



Acacia seeds after soaking. Note the seeds have absorbed water and become plump. Photo by Communacacian.

Keep the water, as the rhizobia will still be present. This water can be used to water the seeds, increasing the available levels of rhizobia in the soil.

#### Step 4

Prepare your germination soil, combining these ingredients according to the following ratio; 50% coco coir, 30% perlite, 10% granitic sand, 10% 3mm river stone. Don't worry if you're missing an ingredient, just continue with what you have.



Germination soil ingredients, ready for mixing. Photo by Communacacian.

We recommend wearing a face mask as some soils contain particulate matter that is unhealthy to inhale. Gloves are worthwhile for protecting your hands, too.

#### Step 5

Fill your seedling tray with soil, leaving a 1cm gap at the top. Press down the soil lightly, aiming to make the soil level.

#### Step 6

Place seeds flat on the soil in the tray, making sure each new seed is at least 1 cm away from the last.

#### Step 7

After sowing the seeds, sprinkle some inoculation soil on top, then cover with another layer of your soil mix, before covering with a thin layer of river stone. Finally, sprinkle a final layer of inoculation soil on top.

#### Step 8

Leave the sown tray in a warm place with good, filtered sunlight. If it's cold, try using a heat mat set to ~23 degrees Celsius. Water daily.

#### Step 9

Your Acacia seeds should germinate within two to four weeks.



Acacia seedlings all start with bipinnate leaves and develop phyllodes as they age. Some of the seedlings pictured are starting to develop their first phyllodes. Photo by Communacacian.

Once your seedlings have reached 1-2 cm in height (~6 weeks after gemination), use your dipstick to gently jiggle the seedlings free from the tray. Be careful not to damage the seedlings' roots.



A delicate Acacia seedling, just recently germinated. Photo by Communacacian.

#### Step 10

Prepare your potting soil, combining ingredients according to the following ratio; 70% native potting mix, 10% perlite, 10% granitic sand, 10% 3mm river stone, plus a small amount of inoculation soil and slow release fertiliser. Wear your mask and gloves while working with the soil.

#### Step 11

Plant each of your Acacia seedlings in its own pot. First, fill the bottom of a pot with potting mix, then hold the seedling with roots pointing down with one hand, using your other hand to gently fill soil around the seedling. Align the top of the soil with the beginning of the stem, ensuring the roots are entirely covered. Press in the corners of each pot, top up with potting mix and water with seaweed fertiliser.

#### Step 12

Water seedlings daily, and occasionally apply seaweed fertiliser.



Healthy roots on an Acacia seedling. Photo by Commacacian.

Sprinkle slow-release fertiliser on top of the potting mix every few months. In 4-6 months, your seedlings will be ready to be planted in the ground.



Happy Acacia seedlings, ready for planting in the ground. Photo by Communacacian.

#### **Additional resources**

To help you on your Acacia journey, make sure to read our <u>Reference Guide to Common Wattles. A video guide to</u> <u>Acacia cultivation</u> from Communacacian is hosted on our YouTube channel, <u>EntheoTV</u>. Remember, some Acacia are under threat. Learn more about Acacia conservation via <u>Conseracacian</u>.

#### Disclaimer

This document cannot cover all information regarding this diverse area of study. This document is only a starting point and should be used in conjunction with other evidence concerning ethnobotanical plants, fungi and related compounds.

Ethnobotanicals have risks and benefits and should always be treated with caution and respect. Some practices and ideas associated with the use of ethnobotanicals are embedded in cultural traditions.

Research, due diligence, and caution are essential. Ensure to understand local laws, traditions, and sustainability before working with any ethnobotanicals.

#### Who we are

Entheogenesis Australis (EGA) is a charitable, educational organisation established in 2004. We provide opportunities for critical thinking and knowledge sharing on ethnobotanical plants, fungi, nature and sustainability.

We also encourage gardening and the conservation of plants, fungi and seeds that have a traditional relationship with humankind. We aim to celebrate culture, science, art, politics, and community around medicine plants through our events and educational resources.

### entheogenesis.org gardenstates.org

If you find this resource helpful, please consider supporting the work of EGA.

entheogenesis.org/support-1

### Reference images of Acacia

Acacia seedlings. All photos on this page by Communicacian.









### **Reference images of Acacia**



Acacia seedling. Photo by Jonathan Carmichael.



Mature Acacia, grown from seed. Photo by Tony Daveys.



Mature Acacia, grown from seed. Photo by Tony Daveys.



Mature Acacia, grown from seed. Photo by Tony Daveys.



Acacia seedlings. Photo by Sianna-Rose.

### Reference images of Acacia



Acacia seedling. Picture of remains of bipinnate leaves below, with a fully developed phyllode above. Photo by Jonathan Carmichael.



Phyllodes of an endangered Acacia, grown from seed. Photo by Jonathan Carmichael.



Acacia seedling. Picture of a petiole developing into a phyllode. Photo by Jonathan Carmichael.