



Seed Speak

A to Z



Accession

A collection of seed or plant material made from a single population on a particular date.

E.g. "The Partnership has secured **accessions** from two thirds of nationally threatened Australian flora".



Bradysporus

Plants that store mature seeds in the tree canopy instead of releasing into the soil.

E.g. "Some Banksia species are **bradysporus**, storing their seeds until after fire events when conditions are right for new plants to germinate".



Cryopreservation

Preservation of seed or plant tissues at below -130°C temperatures using liquid nitrogen.



E.g. "**Cryopreservation** is important for conserving orchid seed given they are short-lived under normal seed banking conditions".

Dormancy

The property of a seed that stops it from germinating, even when conditions are right.

E.g. "Seed **dormancy** spaces out germination over many years, improving the chance that new plants will survive to expand the population".



Endosperm

Tissue in seeds of most flowering plants that provides nourishment & protection to the embryo.



E.g. "The white meat in a coconut is called the **endosperm**".

Fecundity

The rate of reproduction, productivity, fruitfulness or abundance of a plant.

E.g. "Plants with high **fecundity** (like orchids) usually produce a high number of seeds".



Gibberellic acid

A plant hormone that can regulate seed germination and aspects of plant growth.



E.g. "**Gibberellic acid** is used to stimulate germination in seeds that exhibit dormancy".

Hemi-parasite

A plant that parasitises another plant to obtain water and nutrients, but can photosynthesize its own sugars.

E.g. "Mistletoe is a **hemi-parasite**. Its seed is deposited onto the branches of host plants through bird poo."



In-situ conservation

The maintenance of plant populations in their natural wild habitats.

E.g. "The Partnership assisted with **in-situ conservation** of the De Mole River Correa on Kangaroo Island".



Juglone

A chemical secreted by some plants, that stunts the growth of its neighbours.

E.g. "Walnuts release **juglone** to suppress the growth of other plants in their vicinity, reducing competition for light, water and nutrients".



Karrikinolide

A chemical found in bushfire smoke which helps stimulate germination & plant growth.



E.g. "**Karrikinolide** is derived from the Noongar word 'karrik' (meaning 'smoke'), reflecting its discovery on Noongar lands in WA".

Longevity

The life span of a seed or other plant tissue.

E.g. "Understanding the **longevity** of collections in seed banks is critical for plant conservation".



Maternal line

Seeds from an individual parent plant which are stored separately from other parents of the same species.



E.g. "Keeping **maternal lines** separate allows precise management of collections, & preserves the genetic diversity of a species".

Non-orthodox seed

Seeds that cannot be stored under normal seed banking conditions.

E.g. "**Non-orthodox** seeds are those that don't tolerate drying, or those that tolerate drying but not freezing".



Orthodox seed

Seeds that survive drying & storage at sub-zero temperatures.



E.g. "Storing **orthodox seeds** at sub-zero temperatures extends their lifespan".

Pteridophyte

A vascular plant that reproduces through spores rather than seeds.

E.g. "Most ferns and horsetails are types of **pteridophytes**".



Quandong

An Australian hemi-parasitic tree that is found through southern and central deserts.



E.g. "**Quandong** trees produce bright red fruits with a tangy acidic flavour. They contain a brain-like nut that encases the seed".

Rhizobia

A type of bacteria that forms a symbiotic relationship with the roots of legume plants.

E.g. "**Rhizobia** convert nitrogen in the air into a form plants can use, while the plant provides nutrients and a suitable home".



Soil seed bank

The reservoir of seeds present within or on the soil that replenish a plant species in an ecosystem.



E.g. "Seeds in the **soil seed bank** wait for suitable conditions to germinate & grow into mature plants."

Tissue culture

Buds, shoot tips or other small plant parts that are collected & grown on nutrient media in sterile conditions.

E.g. "An alternate way to grow plants that can't be stored in seeds banks is through **tissue culture**".



Umbel

A cluster of small flowers on short spreading stems that come from the same point, forming a shape similar to an open umbrella.



E.g. "The Rottnest Island daisy (Trachymene coerulea) produces **umbels** of light purple flowers from Oct-Jan."

Viability

A measure of how many seeds in a sample are alive, and could germinate into a plant under suitable conditions.

E.g. "After a collection is made, it is crucial to test the sample's **viability** to inform its future use for restoration."



Winnow

The separation of seed from husk & debris, using an air current.



E.g. "To purify seed collections, seeds are dropped from one container to another, using the wind to **winnow** away chaff."

Xerophyte

Any plant that is adapted to survive in environments with little liquid water.

E.g. "To prevent water loss, **xerophytic** plants may have water-storing leaves, waxy/hairy leaf coverings, or may fold leaves to reduce sun exposure."



Yakirra

A genus of plants in the grass family found in Burma and Australia.

E.g. "**Yakirra** species are a key food resource for bilbies after fire."



Zieria

A genus of small shrubs in the citrus family.

E.g. "Named after Polish botanist John Zier, there are about 60 **Zieria** species that are located mainly in eastern Australia."



Safeguarding Australia's flora, through a national network of germplasm collections

Seedpartnership.org.au