# Castanospermum australe

#### **Role In Nature**

The Black Bean has a strong root system, which can be used to consolidate stream banks against erosion. This helps maintain soil stability and prevents sedimentation in waterways.

The tree's ability to grow in a variety of conditions, including full sun to shady situations, allows it to occupy a specific ecological niche and support a diverse range of plant and animal species

## **Cultural Significance**

The Black Bean Tree is often used in educational programs to teach about rainforest ecosystems, plant toxicology, and traditional Indigenous practices, promoting cultural and ecological awareness. The seeds and flowers of the Black Bean Tree are sometimes featured in local art, crafts, and storytelling, symbolizing resilience and the richness of natural heritage

#### **Medicinal Benefits**

- Ethanolic extracts of the leaf and bark of the Black Bean tree have analgesic and anti-inflammatory properties.
- The alkaloid castanospermine, found in Black Bean seeds, has strong antiviral properties, including effectiveness against the dengue fever virus.
- Black Bean seeds contain toxic saponins, which can cause poisoning if not properly prepared.

## **Did You Know?**

Seeds of Black Bean tree contain toxic alkaloids, making them poisonous if consumed raw. However, Indigenous Australians traditionally leached and roasted the seeds to remove the toxins and make them safe to eat. The seed pods are large, woody, and contain several large seeds resembling chestnuts, hence the common name Moreton Bay Chestnut