



SUPPORTING POLLINATORS IN TROPICAL QUEENSLAND

Why?

Insects help you grow fruit and other produce. They carry pollen between plants, allowing them to reproduce. Pollinators provide this essential service on your property and in your garden every day. They need your help.

European honeybees, native bees and other insects are vital for Australian agriculture and horticultural industries. The European honeybee contributes an estimated \$14.2 billion to the Australian economy each year (Agrifutures 2021).

Native pollinators are also vital. An international study of more than 40 crops showed the best pollination outcomes were achieved when both European honeybees and native pollinators, such as native bees, were present (beeaware.org.au). But native bees are struggling in our modified landscapes. Areas to nest and find food have been drastically reduced through. Widespread pesticide use makes native bees more vulnerable to disease.

You can support and help increase populations of native bees and other beneficial insects on your property with a few simple steps.

Habitat

Native bees need nesting sites, nest building materials, and plants as a source of both pollen and nectar. Start by managing remnant or existing natural areas of vegetation on your property as habitat refuges for bee forage plants. Native bees don't travel as far as honeybees. They rely on local sources of food and water, so it's also a good idea to create habitat corridors that allow them to move safely around your property.

There are more than 1600 described species of native bees in Australia. Most are solitary, making their nests in patches of bare soil, sand or clay banks, and in old borer holes in dead trees and logs. Set aside some permanently protected semi-bare ground that you don't till or disturb. Preserve or add wooden nest sites to make areas favourable for breeding.

Keep some areas of your property free of insecticide. Areas away from active paddocks can be pollinator refuges where they can forage and nest. This helps bees and other beneficial insects avoid foraging in areas that have been sprayed.

Food

Bees need sources of pollen and nectar to thrive. When you plant habitat, try to choose a diverse range of native and non-native plants with successive bloom times. That will provide a year-long feast. As a general rule, aim for a minimum of three plant species blooming in each season.

You can also plant annual species like peas, medics, vetches and broadleaf species like sunflowers and buckwheat. Plant these in clumps to attract and feed a diverse population of pollinators, increase your rates of incidental pollination, and improve the health of your soil. Planting flowers also attracts and sustains predatory insects. This can help keep pest species under control.

**Find out which native bees live in your state on the Aussie Bee website
<https://www.aussiebee.com.au/beesinyourarea.html>**

Type	Botanical Name	Common name	Approx. Height	Nectar	Pollen	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	
Herb	Ocimum tenuiflorum	Holy basil or Tulsi (perennial)	H 1.5m W 1m	n	P	#	#	#					#	#	#	#	#	
	Tropaeolum spp	Nasturtium	H 30cm	N	P	#	#	#					#	#	#	#	#	
	Angelica gigas	Giant angelica Korean angelica	H 1.8m	n	P	#	#	#	#		#		#	#	#	#	#	
	Cichorium intybus	Chicory (perennial)	H 1m	n	P	#	#	#										#
	Helianthus annuus	Sunflower (annual)	H 1.5 - 3m	N	P	#	#	#										#
	Fagopyrum esculentum	Buckwheat (annual)	H 1.5m	n	P	#	#	#	#		#		#	#	#	#	#	#
	Verbena spp.	Verbena (annual, perennial)	H 15-100cm	n	P	#	#	#	#					#	#	#	#	#
	Coronidium Rupicola	Yellow button	H 2m	n	P													
	Xanthostemon chrysanthus	Golden penda	H 5-10m	n	P	#	#	#						#	#	#	#	#
	Callistemon viminalis	Red bottlebrush	H 2.5-10m	n	P	#	#								#	#	#	#
	Grevillea baileyana	White oak Findley's silky oak, Bailey's silky oak	H 6-10m W 4m	n	P	#									#	#	#	#
	Leptospermum polygalifolium	Jelly bush, Common tea-tree, Broom bush	H 0.5-7m	N	P									#	#	#	#	#
	Grevillea pteridifolia	Honey suckle, Fern leaved grevillia	H 4-8m W 2-4m	N	P	#	#	#	#		#		#	#	#	#	#	#
	Boronia rosmarinifolia	Forest boronia	H 1.2m W 1m	n	P	#	#	#	#									#
	Jacksonia scoparia	Dogwood	H 4m W 2m	n	P									#	#	#	#	#
	Hibiscus heterophyllus	Rosella, Native Sorrel	H 1.8-6m	N	P	#	#							#	#	#	#	#
	Xanthostemon verticillatus	Bloomfield Penda	H 2-5m	n	P									#	#	#	#	#
Lagerstroemia archeriana	Queensland Crepe Myrtle	H 5-7m	N	P	#	#	#	#					#	#	#	#	#	
Alphitonia petriei	Sarsaparilla Pink ash, white ash, pink almond	H 6-10m W 4-6m	N	P									#	#	#	#	#	
Atractocarpus fitzalanii	Native Gardenia, Yellow Mangosteem	H 4-6m W 3m	N	P									#	#	#	#	#	
Corymbia ptychocarpa	Swamp bloodwood	H 8-12m	n	P			#	#		#							#	
Syzygium luehmanni	Small leaved lilly pilli	H 6-8m W 2-3m	n	P													#	
Syzygium fibrosum	Rain cherry, Fibrous satinash	H 8-10m	N	P				#	#								#	
Buckinghamia celsissima	Ivory curl	H 7-8m	N	P	#	#	#						#	#	#	#	#	
Leptospermum madidum	Weeping tea-tree	H 2-4m W 2-4m	n	P	#	#	#	#		#		#	#	#	#	#	#	
Melaleuca linariifolia	Flax-leaved paperbark Snow in summer	H 5-10m W 3-6m	N	P	#	#	#	#								#	#	
Backhousia citnodora	Lemon-scented myrtle	H 15m	n	P	#	#	#	#								#	#	
Macadamia integrifolia	Macadamia	H 15m	N	P								#	#	#	#	#	#	
Syzygium luehmanni	Small-leaved lilly pilli, Riberry, Cherry satinash	H 4-8m	n	P									#	#	#	#	#	
Brachychiton acerifolius	Illawarra Flame Tree, Kurrajong	H 10-25m	N	P	#	#	#	#					#	#	#	#	#	
Eucalyptus sideroxylon rosea	Red flowering ironbark	H 15m	N	P	#	#	#	#		#		#	#	#	#	#	#	
Eucalyptus populnea	Bimble box	H 20m	N	P	#	#	#	#					#	#	#	#	#	
Eucalyptus microcarpa	Greybox	H 25m	n	P	#	#	#	#									#	
Eucalyptus melanophloia	Silver-leaved ironbark	H 6-20m	N	P	#	#	#	#					#	#	#	#	#	
Angophora floribunda	Rough-barked apple	H 15-25m	N	P	#	#	#	#									#	
Corymbia citriodora	Lemon-scented gum	H 15-50m	N	P	#	#	#	#			#		#	#	#	#	#	
Grevillea robusta	Silky oak Australian silver oak	H 15-25m	N	P	#	#	#	#					#	#	#	#	#	

Some native bees feed primarily on native plants, while others are less fussy. This list is just a selection of the many native and non native plants that grow in our region that provide food for pollinators. If you want more information on planting pollinator friendly gardens and landscapes check out *Bee Friendly: A planting guide for European honeybees and Australian native pollinators* by Mark Leech at <https://www.agrifutures.com.au/wp-content/uploads/publications/12-014.pdf>