



Topic 16: Acacias

Did you know that,

- The common name for acacias is wattle.
- An acacia is the national floral emblem of Australia.
- Australia's green and gold sporting colours arose from the colours of the leaves and flowers of acacias.
- It is the largest group (genus) of plants in Australia with more species than the eucalypts or grevilleas.
- Acacias are used by Aboriginal peoples for food, weapons, tools and ornaments.
- Acacias are easy to grow and grow rapidly.

Acacias – or wattles as they are commonly known - are one of Australia's most important and best-loved plant groups. The Golden Wattle, *Acacia pycnantha* is Australia's national flower. Botanically, the *Acacia* genus is a member of the Fabaceae family, and the sub-family Mimosoideae. They are broadly considered to be legumes as they produce their seeds in pods and their roots contain nitrogen fixing bacteria.

The ancestral forms of Australian acacias are believed to have developed in tropical regions, before they spread to and became adapted to the drier climate of this country. Although there are well over a thousand species of acacias worldwide the greatest number occur in Australia (between 900 to 1000 are native to Australia). They are very widely distributed across all states and territories.

The Leaves

Acacias in Africa and the Americas have [bipinnate](#) true leaves and are often armed with large thorns. Australian species while retaining bipinnate leaves in the young plant and some species, mainly develop a modified leaf-like structure called "[phyllodes](#)" in the adult and they do not have large thorns. Phyllodes are regarded as an adaptation to a drier climate. A common feature of *Acacia* leaves is the presence of "[extra floral nectaries](#)", normally called "glands". These can secrete a nectar which may be consumed by ants. The flowers of *Acacias* by contrast lack nectaries.



Bipinnate leaf



Phyllode

The Flowers

The flowers of acacias are very small and coloured pale cream to golden. They can provide an impressive display, because many flowers can be clustered together in either globe-shaped heads (up to 130), or cylindrical-shaped spikes (up to 500).



A flower showing the petals

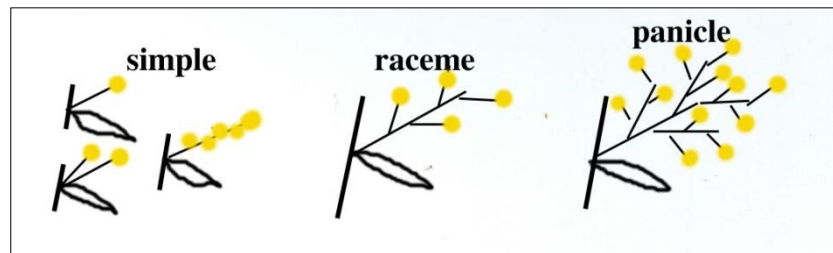
Globular flower heads

Cylindrical flower spikes

(Note the "ball-shaped" flower buds on both the heads and spikes. The number of flowers on a head or spike is best determined when the flowers are in bud form.)

The arrangement of heads or spikes within the whole inflorescence may be classified as "simple", or as a "raceme" or "panicle":

Inflorescence Arrangement



Finally, the **fruit** of all *Acacia* species is a pod (or legume) the shape of which is often useful in identification of the species.

The Acacias of the KWG

The KWG contains at least 21 species of acacias many of which have been introduced (indicated below with an asterisk). This is a good representative collection of many types of the Australian acacias.

A simple classification of *Acacias*

Many features are used in the identification of acacias including, flower type and flowering times, the pods and leaves. A simple initial classification of *Acacias* based on leaf characteristics is given below for the *Acacias* of the KWG.

Bipinnate leaves, **A baileyana*, *A decurrens*, *A parramattensis*, *A terminalis*, **A elata*

Prickly phyllodes, *A ulicifolia*, *A echinula*, *A oxycedrus*

Phyllodes which are not prickly. **A binervia*, **A falcate*, **A fimbriata*, *A floribunda*, **A implexa*, *A linifolia*, *A longifolia*, *A longissima*, **A melanoxyton*, *A myrtifolia*, **A prominens*, *A suaveolens*, **A vestita*.

Bipinnate Species (*sp*= meaning of species name)

****Acacia baileyana*** (*sp*, Bailey original collector)
Tree or shrub 3-10 m high.

Foliage: silvery, blue-green (several different coloured leaf forms available from nurseries), bipinnate, 2-6 pairs **pinnules** (leaflets), pinnules 5-9 mm long x 1.2-1.6 mm wide, gland at junction of each **pinna** or on top few only.

Flowerheads: numerous, bright lemon-yellow, globular heads on racemes with 20-25 flowers on each of 8-30 heads.

(Potential weed species)

Flowers: June-September.

Distribution: NSW.

Cootamundra Wattle



Acacia decurrens (*sp*, ridges on leaf stalk continuing on stem) **Green or Black Wattle**
Tree or shrub 3-10 m high.

Foliage: smooth, dark green, fine, bipinnate, 5-12 pairs of pinnae each with 20-35 pairs of pinnules which are more widely spaced than in other species, pinnules 6-14 mm long x 0.5-0.8 mm wide, dark green above, pale beneath, jugary glands present.

Flowerheads: perfumed, small, clear yellow, globular heads on racemes or panicles with 21-30 flowers on each of 10-45 heads.

Flowers: July-early September.

Distribution: NSW.



Acacia parramattensis (*sp*, collected from Parramatta)
Shrub or tree 2-15 m high.

Minute raised veins down outside of stem.

Foliage: dark green, bipinnate, 6-18 pairs pinnae, pinnules 3-5 mm long x 0.5-1 mm wide. **Jugary** and inter jugary glands.

Flowerheads: pale yellow, globular heads on racemes with 25-40 flowers on each of 10-20 heads.

Flowers: Late November – early February.

Distribution: NSW.

Parramatta Green Wattle



Acacia terminalis (*sp*, terminal inflorescences)
Erect shrub to 6 m high.

Foliage: dark green above, paler below, bipinnate, 2-6 pairs of pinnae each with 8-20 thick, tough, pointed and hairless pinnules, 8-29 mm long x 2-5 mm wide. One large gland.

Flowerheads: pale to mid-yellow, globular heads on racemes or panicles with 6-15 flowers on each of 15-40 heads.

Flowers: December – February.

Distribution: NSW, Vic, Tas.

Sunshine Wattle



****Acacia elata*** (*sp*, tall)

Large tree to 20 m with large bipinnate leaves.

Foliage: dark green, 3-5 pairs of pinnae each with 10-20 pairs of pinnules which are 30-60 mm long x 7-12 mm wide. One gland.

Flowerheads: creamy yellow, globular heads on racemes or panicles with 30-50 flowers on each of 10-60 heads.

Flowers: December-February.

Distribution: NSW, Vic, Tas.

Mountain Cedar Wattle



Prickly Phyllode Species

Acacia ulicifolia (*sp*, prickly leaves like Gorse/*Ulex*)

Sprawling to erect shrub to 2m high.

Foliage: phyllodes short (8-14 mm long), stiff, slightly flattened, swollen at the gland, if present along the margin. Phyllodes taper gradually from base to apex

Flowerheads: cream, globular heads, 8-10 mm diameter, solitary.

Flowers: Winter – Spring.

Distribution: NSW, Qld, Vic, Tas.

Prickly Moses



Acacia echinula (*sp*, spiny like sea urchin *Echinus*)

Spreading low shrub to 2 m high.

Foliage: phyllodes cylindrical (5-9 mm long), very sharply pointed. One small gland at base. Phyllodes contract abruptly at apex

Flowerheads: bright yellow, globular heads, solitary, axillary.

Flowers: Spring (from June).

Distribution: NSW.

Hedgehog or Hooked Wattle



Acacia oxycedrus (*sp*, leaves sharp, cedar-like)

Erect to spreading shrub to 3 m high.

Foliage: phyllodes rigid, sharply pointed 1.5-4 cm long, 2-6 mm wide, usually with 3 or 4 longitudinal veins prominent.

Flowerheads: cylindrical, bright to pale yellow, 1-3 in leaf axil.

Flowers: July-October

Distribution: NSW, Vic, Tas.

Spike Wattle



All Other Species (i.e., ones with phyllodes, not prickly and not bipinnate)

**Acacia binervia* (sp, leaves two veined)

Erect or spreading tree to 16 m high. Bark very dark, and flaky.

Wood hard and fragrant – used for pipes and boomerangs.

Foliage: silver grey, finely furry phyllodes, 3 main veins, 70-150 mm long x 5-20 mm wide. Glands absent or one conspicuous at base.

Flowerheads: bright yellow, cylindrical spikes on short racemes.

Flowers: September – October.

Distribution: NSW, Vic.

Coast Myall



**Acacia falcata* (sp, leaves curved like scythe)

Erect or spreading tree or shrub to 5 m high.

Foliage: grey-green to green, 7-19 cm long, 9-40 mm wide, with a prominent midvein. 1 inconspicuous gland near base.

Flowerheads: pale yellow to cream-coloured globular heads on racemes or panicles with 12-20 flowers on each of 6-20 heads.

Flowers: April-August.

Distribution: NSW, Qld.



**Acacia fimbriata* (sp, fringed leaf edges)

Erect or spreading shrub or tree to 6 m high.

Foliage: Mid-green phyllodes with fringed margins (a hand lens is needed) tapering to a non-sharp point, 20-50 mm long x 2-5 mm wide. One gland near base.

Flowerheads: bright yellow, globular heads on long racemes with 10-20 flowers on each of 8-25 heads

Flowers: July – October.

Distribution: NSW, Qld.

Fringed Wattle



Acacia floribunda (sp, abundant flowering)

Erect or spreading shrub or tree 3-8 m high.

Foliage: thin, textured phyllodes, 50-150 mm long x 2-10 mm wide with one branching vein and one slightly stronger central vein. One gland near base.

Flowerheads: inflorescence arrangement is simple (solitary or twinned), pale yellow, cylindrical spikes.

Flowers: July – October.

Distribution: NSW, Vic, Qld.

White Sallow, Sally Wattle



****Acacia implexa*** (*sp*, relating to twisted pod)

Erect or spreading tree 5–12 m high. Bark hard, smooth becoming corrugated or fissured at base.

Foliage: dark green, , 7–18 cm long, 6–25 mm wide with 3–7 longitudinal veins prominent and 1 inconspicuous gland at base.

Flowerheads: pale yellow to white globular heads on racemes with 30-50 flowers on 4-8 heads.

Flowers: December-April.

Distribution: NSW, Qld, Vic.

Hickory Wattle)



Acacia linifolia (*sp*, straight-leaved)

Erect or spreading shrub to 4 m high.

Foliage: soft, crowded phyllodes, 20-40 mm long x 1-2 mm wide, on slender branches. One small gland about 1/3 distance along phyllode from base.

Flowerheads: cream, globular heads on racemes with 6-12 flowers on each of 5-9 heads.

Flowers: January – April.

Distribution: NSW.

Flax-leaved Wattle



Acacia longifolia (*sp*, long-leaved)

Erect or spreading shrub or tree 1–8 m high.

Foliage: fairly stiff phyllodes 60-200 mm long x 4-20 mm wide with two main veins (var. *sophorae* is a lower growing variety common on sand-dunes and in coastal and estuarine regions).

Flowerheads: inflorescence arrangement is simple (solitary or twinned), golden yellow cylindrical spikes

Flowers: July – November.

Distribution: NSW, Vic.

Sydney Golden Wattle



Acacia longissima (*sp*, very long-leaved)

Erect or spreading shrub/tree 2–6 m high.

Foliage: drooping, long slender phyllodes, 60-300 mm long x 1-6 mm wide with one main vein. Glands absent.

Flowerheads: solitary, pale yellow cylindrical spike.

Flowers: December - January (some flowers at other times).

Distribution: NSW, Qld.



Acacia melanoxylon (*sp*, dark-coloured wood)

Erect or spreading tree 6–30 m high.

Foliage: dark green 6–14 cm long, 7–30 mm wide with 3–5 or more longitudinal veins prominent, and 1 gland near base.

Flowerheads: pale yellow-white globular heads on axillary racemes with 30-50 flowers on 2-8 heads.

Flowers: July-December.

Distribution: NSW, Vic, Qld, Tas.

Blackwood



Acacia myrtifolia (*sp*, myrtle-like leaves)

Prostrate to erect shrub 0.3–3 m high.

Foliage: tough, hairless phyllodes, 20-60 mm long x 5-30 mm wide with thickened and usually red margins and red stems. One small gland along margin.

Flowerheads: pale yellow, globular heads on axillary racemes with 2-8 flowers on each of 3-8 heads.

Flowers: May – August.

Distribution: NSW, Vic, Qld, Tas, SA, WA.

Myrtle or Red-stem Wattle



Acacia prominens (*sp*, prominent gland)

Erect or spreading tree 4–18 m high.

Foliage: slightly grey-green phyllodes, 30-50 mm long x 8-12 mm wide with one main vein. Very prominent gland on margin.

Flowerheads: lemon yellow, globular heads on axillary racemes with 8-15 flowers on each of 10-25 heads.

Flowers: July – September.

Distribution: NSW.

Gosford Wattle



Acacia suaveolens (*sp*, sweet smelling)

Prostrate to erect shrub 0.3–2.5 m high.

Foliage: blue-green, stiff, thick, smooth, slightly curved phyllodes, 50-150 mm long x 2-10 mm wide arising at 90 degrees on slightly flattened stems and spirally arranged. One or two small glands near base and apex.

Flowerheads: buds at first enclosed in conspicuous scaly deciduous bracts, fragrant, pale lemon yellow, globular heads on short axillary racemes with 20-50 flowers on each of 8-17 heads.

Flowers: April – September.

Distribution: NSW, Vic, Qld, Tas, SA.

Sweet-scented Wattle



****Acacia vestita*** (*sp*, clothed=hairy)
Spreading shrub 1–4 m high.

Foliage: crowded, softly and markedly hairy, grey-green phyllodes, 10-20 mm long x 6-10 mm wide narrowing sharply at tip into a fine, hairy, hooked soft point. No glands.

Flowerheads: bright yellow, globular heads, on racemes with 10-30 flowers on each of 10-20 heads.

Flowers: August – October.

Distribution: NSW.

Hairy Wattle, Weeping Boree



References

Keys

WATTLE: Acacias of Australia, B.R. Maslin CD.

<http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=gn&name=Acacia>
(a key to acacia of NSW on PlantNET)

General

<http://www.worldwidewattle.com/>

Acknowledgement

These notes contain hyperlinks to materials, including images, illustrations, plant descriptions and a glossary from PlantNET, with the courtesy of The Royal Botanic Gardens & Domain Trust, 2011.

For general access to PlantNET see also <http://plantnet.rbgsyd.nsw.gov.au/>

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