ISTLETOES! Maybe we should begin with these plants, typically summer-flowering, and traditionally associated with Christmas, though less so here than in Britain where the mistletoe at that time, the depth of winter, is in fruit. During our summer, look into wattles such as the Jam Tree and you will spot the Wireleaf Mistletoe (Amyema preissii) clinging firmly to the branches, with bright red flowers among the narrow leaves. Around Perth they have 'invaded the invaders' by adapting to non-native species such as the Queensland Silver Wattle. In the Wheatbelt, look into gums such as York Gum and Wandoo and you will see a different species, Amyema miquelii, its leaves mimicking those of its host. Maybe mistletoes have evolved to flower at this season because they can provide food for the birds that pollinate them. Drawing on their host trees for moisture and sustenance, the summer drought does not affect them.

Not always thought of as a mistletoe but belonging to the same plant family is the Western Australian Christmas Tree, almost unique among these semi-parasitic plants in being a large tree. It is at its flamboyant best in early summer (and this year is out earlier than usual), but along the south coast it will flower well into summer. Most mistletoe flowers are unscented, but the Christmas Tree has a strong honey perfume. Towards the end of summer the strange three-winged fruit develop, yellow-green at first, ripening to a mid-brown as they dry and fall for the winter rains.

It is commonly held that our native plants flower only in spring, but this is an old wives' tale, originating perhaps from the fact that most massed displays may be seen at that season which is also a good time for travelling. Apart from very few habitats, there is, in fact, something to be seen at any season, and some summer, autumn and winter flowers are just as colourful and intriguing as those of the spring. Indeed, summer flowers are quite amazing in their capacity to appear at a time when temperatures can be



WESTERN AUSTRALIA

by Alex George



Xylomelum angustifolium



Grevillea polybotrya

very high. Some are so delicate that it is a wonder that they avoid shrivelling and carry through pollination and seed set. Here I have space to mention only a few of these plants.

The northern kwongan has many summer flowers, especially in the banksia and myrtle families. Summer Smokebush (*Cono-spermum crassinervium*) appears in large drifts on sandy areas, its funnellike flower head waving atop a slender stem. It is at its best a couple of years after a fire (Christmas Trees also respond to fire, sometimes showing no foliage as their blazing flowers cover the tree). Summer Dryandra (Dryandra vestita), seen on the northern kwongan and through the central wheatbelt, has rather hidden golden flowers but is equally attractive for its whorls of twisted leaves separated by bractcovered stems. Around Eneabba and northwards Caramel Grevillea (Grevillea polybotrya) is showy during December and January, its creamy, heavily-scented flowers attracting a wide array of insects. An equally showy species with masses of cream flowers in summer is Grevillea nematophylla, a tree of inland districts between the Gascovne River, the Goldfields and Nullarbor Plain. Another small tree is the Sandplain Pear (Xylomelum angustifolium) which also bears clusters of cream flowers; its grey woody fruit remain on the tree awaiting a fire to open them and are an interesting feature at any season.

Banksias are prominent in summer and autumn. Indeed, more species are in flower at these seasons than in spring. Acorn Banksia (B. prionotes) is a widespread orange-flowered species, found between Wagin and Shark Bay, with a long flowering period through summer and winter. Its close relative *B. burdettii* is a shrub seen between Eneabba and Muchea but flowering only during February and March. In Kalbarri National Park there are further spectacular species flowering in summer. First is *B. sceptrum*, with large golden spikes during December and January, followed in February by the Woolly Orange Banksia (B. victoriae) and clear yellow Porcupine Banksia (B. lindleyana).

Along the south coast from the Stirling Range to the Oldfield River *Banksia baxteri* can make spectacular displays at this season. It is another species with attractive features besides the flowers, both the young foliage and new fruit being attractive shades of brown and red. In February, sharp-eyed visitors to the western parts of the Stirling

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Range may spot the curious *B.* aculeata which hides its red and yellow hanging spikes within very prickly foliage. Its fruits are among the largest of any banksia. Travellers along the highway east of Southern Cross may see, in the kwongan in December and January, the small shrubby *B. audax* with intense golden flowers.

Some of our most colourful eucalypts bloom in summer. In January and February the scarlet blossoms of Red-flowering Gum (Eucalyptus ficifolia) may be seen in its restricted wild habitat, on the south coast near Walpole and occasionally farther east. Much more common is its near-relative the Marri (E. calophvlla), its creamy white flowers a rich resource for beekeepers. This year in many areas Marri had two major flowerings, its normal one in late summer and another in May/June. The latter seems to have been a response to the heavy rain that fell in January, an interesting 'throwback' to its presumed origin during a time when the climate was tropical. Most bloodwoods are tropical trees. If you wish you may recognise these gums as a genus distinct from 'true' eucalypts and call them Corymbia. Experts are divided in their opinions on this point, but either name is acceptable.

Summer and autumn also see the flowering of the curious Illyarrie (*E. erythrocorys*). Growing naturally from Jurien north beyond Kalbarri, its straggling form is enlivened by the large buds with sculptured scarlet caps that fall to expose clusters of yellow stamens. The massive gumnuts that develop later are also strangely sculptured.

Though its small cream blossoms are rarely noticed, Karri (E. diversicolor) flowers during the hot months, as does the Swamp Yate (E. occidentalis). One may become aware of the flowers only by seeing them fallen on the ground. Summerflowering mallees of the South-West White-leaf include Mallee (Eucalyptus albida), Hook-leaved Mallee (E. uncinata), the blueleaved Tallerack (E. pleurocarpa, formerly known as E. tetragona) and Yuna Mallee (E. jucunda).

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In December the Morrison Featherflower (Verticordia nitens) vies with Christmas Trees as its brilliant orange flowers bestrew banksia woodlands north of Perth. Its flowers have a curious 'hot metal' scent, Scarlet Featherflower (V. grandis) may be seen in flower at any season between Badgingarra and Geraldton. Other summer featherflowers include the whiteflowered V. albida near Three Springs, the pink and silver V. argentea near Eneabba, and the bright pink V. tumida in the central and south-eastern wheatbelt. In late summer, depressions in the kwongan between Albany and Esperance may be colourful with the pink flowers of V. sieberi.

Two striking bright red bottlebrushes are *Beaufortia* squarrosa and its recently named close relative, B. aestiva. The former is a small shrub, locally common in low-lying flats and sandy slopes from the Whicher Range north to Eneabba, flowering mainly in February and March. Beaufortia aestiva (the species name means 'of summer') is a larger shrub seen from the Eneabba district north beyond Kalbarri; it has been recorded inland at Wongan Hills and Tammin but may have disappeared there now. Besides red flowers it commonly has yellow ones. Flowering starts in late spring and continues throughout summer.

In sandy woodlands near the west coast (where summer sees the last flowers of *Banksia attenuata* and the first of *B. menziesii*) the bright pink Summer Fringe-myrtle (*Calytrix fraseri*) is at its best from mid to late summer. Two more bright myrtles of the kwongan north of Perth are the widespread cerise Summer Coppercups (*Pileanthus*)



Personata soccata



Cephalotus follicularis

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Beaufortia sparsa

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filifolius) and Superb Starflower (*Calytrix superba*), the latter confined to the Eneabba district. Through the central wheatbelt one can be surprised to see the deep pink flowers of Large Myrtle (*Hypocalymma puniceum*).

Worth a look at any time in summer are the swamps of the far south-west and south coast. Soil moisture keeps a number of species flowering, and some are at their peak during the hot season. Among the most spectacular is the Swamp Bottlebrush (Beaufortia sparsa), at its best in February. The pure whiteflowered Swamp Paper-heath (Sphenotoma gracile) is very common on sandy flats between Augusta and Albany. A few orchids may be seen well into January, in particular the tall Christmas Leek Orchid (Prasophyllum brownii), seen at its best the season after a bushfire, the Chestnut Sun Orchid (Thelymitra fuscolutea), and the Club-lipped Spider Orchid (Caladenia corynephora). In shady

forests south from Perth the Slipper Orchid (*Cryptostylis ovata*) can be a surprising find. It is pollinated by male wasps that try to mate with the flowers, and flowers right through to autumn.

Most people are familiar with Albany Pitcher Plant the (Cephalotus follicularis), at least its modified leaves that trap minute animals and decompose them to provide nutrients for the plant. Few, however, know the plant's tiny flowers. These appear in summer, on long stalks. They have a strong, sweet scent. Always associated with the pitcher plant is the unusual Spindle Heath (Cosmelia rubra), with narrow red flowers borne on a slender stem that waves above the dense swamp vegetation. These swamps, and other low-lying parts, are also home to the climbing triggerplant (Stylidium scandens) which clings to other plants by its encircling leaf tips and produces clusters of bright pink flowers throughout summer.

An unexpected sight in many parts of the south-west – from the forest to the desert fringe – is the climber *Billardiera bicolor*. Inconspicuous for most of the year, in summer it produces clusters of cream flowers with fine purple lines, opening widely like a hand.

On coastal sand dunes and a little way inland, from Perth to Albany, is the Tangle Daisy (*Ozothamnus cordatus*). A perennial herb, it produces its new stems and foliage during winter, then the leaves die away as the flowers develop in clusters on many fine woolly branches. Picked and dried, these will last indefinitely in dried arrangements.

I do not have space to discuss many other summer flowers of our bushland. Go out yourselves and look (but maybe choose a cool change to do so); you may be pleasantly surprised.

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