



Leucostele skottsbergii



Eriosyce oederi (above)

Copiapoa delabata

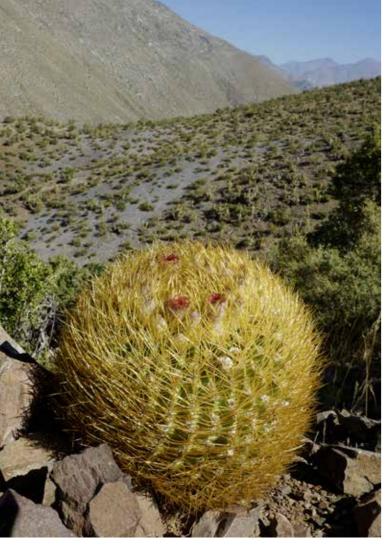
Copiapoa dealbata

white flowers. And cacti do have beautiful flowers. These can be various colours, but the general design is always the same a dense mass of stamens surrounding (often) prominent divided styles, squarely aimed at their main pollinators; bees. Many times, I've witnessed bees diving into the flowers and 'swimming' around in the stamens, covering themselves in pollen, before emerging again.

Most of my cacti experience has been Chile, a country which has a broad range of cactus forms, not just the towering *Leucostele atacamensis*, but everything from tiny buttons to big barrels. It also has a wonderful endemic genus; *Copiapoa*. The members of this genus also vary in size, but at their best they exist in extensive populations of multi-headed domes along the coastal fringes of the Atacama. Here they are nurtured by frequent fogs known as camanchaca on which they very much depend. The yellow flowers are rather modest are invariably nestled within the spines. At Llanos de Challe there are amazing gatherings of *Copiapoa dealbata*, some of the plants with two hundred heads and centuries old. A little farther (for Chile that is - this translates as about six



Copiapoa gigantea



Eriosyce aurata



Eriosyce chilensis



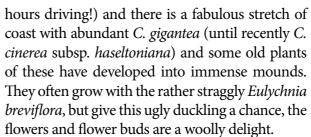
Eriosyce aurata



Eriosyce heldriechiana



Maihuenia poeppigii



Search the same areas carefully and with luck one can find the diminutive Eriosyce oederi growing in the gritty sands, virtually below ground. Its presence is only detected when it produces its showy greenish-yellow flowers. E. heldreichiana is even lovelier, but only marginally easier to find. Eriosyce come in many forms, from the striking golden barrels of *E. aurata*, beset with swirls of strawberries-and-marshmallows flowers, to the crisp pink of *E. chilensis* that adorn coastal cliffs along the Mediterranean climate coast. One species; E. curvispina even makes it south into the southern beech forests (sometimes growing with bamboo for the strangest combination of plants imaginable) extending its range into the high Andes, where I've seen it at over 3000 metres. Another more southerly species is Maihuenia poeppigii, a mat-forming species that colonises





Eulychnia breviflora



Browningia pilleifera





Trichocereus macrogonus var. pachanoi Browningia candelaris



Espostoa lanata



Melocactus bellavistensis



Trichocereus macrogonus var. pachanoi



Ferocactus cylindraceus (above and below left)





Ferocactus viridescens (above)

matorral and the black ash slopes of volcanoes. The spiny spreads are peppered with brimstone flowers that attract a tiny black bee.

Transporting instantly to the very far north, there occurs another higher altitude giant; Browningia candelaris. These are a remarkable sight in the way up to Putre, growing from 2500 to 3000 metres and scattered across the most austere rocky desert. The genus occurs farther north into Peru, where there are other species such as B. pilleifera in statuesque candlestick stands in the drier interior valleys. Peru also has a rich cactus flora including the rather fun Melocactus bellavistensis (a relative of the first species to be introduced to Europe) with their peculiar topknots of densely packed bristles from among which squeeze little bright pink flowers, the peculiar columns of Espostoa lanata with flowers lining the stems and even woolly mounds of Austrocylindopuntia floccosa that hunker down on high Andean slopes above 4000 metres. And then there is another whopper; Trichocereus macrogonus var. pachanoi, and this magnificent organ pipe cactus is often planted around Andean foothill villages and you can understand why when you see the flamboyant huge flowers. Peru, Bolivia and Argentina have a great many species and Mexico is another the diversity hotspot. I've yet to explore this country for cacti - it's on the list.

Immediately to the north, the US has some excellent species too and even on a short visit to Anza-Borrego in southern California it's possible to see superb populations of Ferocactus cylindraceus, which in March-April are adorned with rings of yellow-green flowers fringed by rings of (sometomes pink suffused) large spines. And spines are very much a cactus thing. Near San Diego a second species F. viridescens can be found with heavier defences. Others such as cholla; Cylindropuntia echinocarpa bristle with white spines and it flat-stemmed cousin Opuntia basilaris, a rather handsome cactus with showy pink flowers has tiny irritating spines packed into nodules on the stems, and these wedge uncomfortably into the skin with the slightest contact. There are some other beauties in California and the US I'm keen to see; showy Echinocereus, the interesting cold tolerant mountain steppe species in Colorado and saguaros of course, though whether these giants can match the impressive soaring Andes backdrops enjoyed by the Chilean version remains to be seen.

And that is half of it with cacti, they invariably grow in the places of raw scenic beauty that it's well worth a spine or two in the wrong place.



Cylindropuntia echinocarpa



Opuntia basilaris