Travelling for plants in Argentina and Chile

Keith and Lorna Ferguson

So many plants in the gardens of enthusiasts derive from collections made in Argentina and Chile that it seemed a good region for a pair of botanist gardeners to visit.

Argentina and Chile form the lower part of the South American continent. They have a wide climatic diversity and altitudinal range. Chile is some 2600 miles long but only 250 miles at its widest; it is flanked by the Pacific to the west and the high Andes to the east, with desert regions in the north through the warm, temperate wine-growing region to the rich agricultural Patagonian Lake District with high rainfall, and then extends southward through fjords and glaciers to the spectacular southern national park – Torres del Peine and Cape Horn. Argentina is a very much larger country with the Atlantic Ocean to the east, and the Andes mountains forming the western border with Chile. Its climate and vegetation are much more varied with a lowland tropical region to the north east where the country meets Brazil and Paraguay, south of which are very large areas of Pampas where cattle, sheep, wheat and other crops are farmed. Northern Argentina, in the rain shadows of the Andes, is generally drier than Chile, but there are



humid valleys with a rich flora. Travelling southwards one goes through the Argentinian winelands then on into northern Patagonia; here are areas of *Araucaria* (monkey puzzle) and large *Nothofagus* species forming Valdivian Forest which extends over the



Fig. I Trichocereus atacamensis

Fig. 2 Loasa tricolor



Fig. 3 Nicotiana glauca



Fig. 4 Cestrum parqui

border and into Chile. Northern Argentinian Patagonia and the Lake District of Chile are the source of many of the South American plants that are hardy in our gardens in Britain. As one travels south, *Araucaria* gives way to *Austrocedrus*, *Fitzroya*, species of *Nothofagus* and a host of smaller trees and shrubs including *Buddleja globosa* and *Fabiana* species, until sub-arctic Tierra del Fuego is reached.

We travelled first to northwest Argentina, to the provinces of Jujuy and Salta, an arid area where what moisture there is is generally confined to the valley bottoms where crops are cultivated. Here, near where the Tropic of Capricorn crosses the road to the Bolivian border, we saw crates of beetroot being loaded on to lorries. The dominant vegetation is spiny leguminous shrubs interspersed with giant columnar cacti (Trichocereus atacamensis (fig. 1) and *T. tarijensis*). There are many smaller species of cactus amongst the rocks and, in slightly less arid microhabitats, there are plants we know well such as Verbena peruviana with rich red flowers. Here too are species of Loasa (fig. 2), a family confined to South America and a plant not to be trifled with, for, despite its curious pretty flowers, it has stinging hairs which can be an extreme irritant. Loasa species are offered in specialist seed exchanges and can be grown as half hardy annuals. Somewhat surprising was a white-flowered clematis (C. campestris) climbing over the rocks and spiny shrubs. This region is the home of Nicotiana glauca (fig. 3), which can be grown in conservatories, and is now widely naturalised in the USA and Mediterranean region. On the passes towards Chile, Rhodophiala species can be seen, pushing up through stony ground, and the first

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Calceolaria occur near springs on the mountainside. At 3000m, great mounds of one of the high-mountain *Apiaceae*, *Bolax gummifer*, cover the rocks; it is a close relative of *Azorella trifurcata*, which we later found further south. At about 3350m one emerges

on to a huge salt plain with much succulent vegetation at its edges, providing good grazing for herds of llamas and the less tame vicuna.

In the moist valleys which catch the afternoon mist running up from the foothills into the alto plano are a number of plants we know, including a rich-orange-flowered Cestrum parqui (fig. 4), which closely resembles the form offered by UK nurserymen as 'Orange Essence'. We drove along a road lined with Iochroma australe, its purple, flared, trumpet-like flowers hanging from shrubs up to 2m high, and sheets of a delightful Rhodophiala with long white tubular flowers. A striking *Bomarea* with very large white-blushed-pink flowers was one of the highlights. Here grew one of the few species of Passiflora found in the region, and the low-growing yellow-flowered shrub Heimia salicifolia (fig. 5) (in the Loosestrife family), looking like a small-flowered Hypericum (hardy in a sheltered spot, provides autumn interest in Gloucestershire garden). Higher in the mountains, to both north and west, are the highest-growing woody plants in the world, in the genus Polylepis in the Rose Family. P. australis (fig. 6) is the only one of some 14 species in South America that is in wide cultivation in the UK, its tan peeling bark a pleasing sight in spring; it is totally hardy for us and has made a 2m tree in 8 years. Here Begonia boliviensis (fig. 7) reaches its southern limit in Argentina; it has been used as one of the parents in the currently popular range of patio-pot 'Million Kisses' begonias, but the straight species itself, with its rich



Fig. 5 Heimia salicifolia



Fig. 6 Polylepis australis



Fig. 7 Begonia boliviensis

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orange flowers, is desirable. Fragrant *Verbena platensis* with long white tubular flowers, only recently widely available, is delightful on a warm summer evening and well worth a place which can be kept frost-free. Bromeliads and orchids festoon the trees, and among the surprise plants were a 2m *Eryngium pandanifolium* and a giant *Araceae*

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Fig. 8 Rhodophiala andina



Fig. 9 Grindelia chiloensis, thriving in Glos.



Fig. 10 Monkey puzzle trees, Araucaria araucana

which turned out to be the very local endemic *Gorgonidium vermicidum*.

Into the foothills of the Andes, close to the base of Aconcagua (at 6962m the highest mountain outside the Himalayas), we found sheets of Tropaeolum polyphyllum growing on loose scree and covering the disused mine railway track. Another striking plant was Argylia uspallatensis in the Catalpa family (Bignoniaceae), with yellow flowers blotched purplish brown – unusual to see a member of a family that we usually think of as being large trees growing as a ground creeper. The greenhouse annual Schizanthus hookeri made a splendid show with its deep mauve-blue flowers on the loose scree. Pushing through the stony soil were dozens of Rhodophiala andina (fig. 8) with pretty deep-red tubular flowers. Some hillsides were clothed in golden-flowered Grindelia chiloensis (fig. 9).

Entering Patagonia proper and going south across the Andes into Chile, we began to find

more and more genera and species familiar to us from British gardens. The dominant tree was *Araucaria araucana* (fig. 10), making a splendid foreground for the many spectacular snow-covered, coneshaped volcanoes that are a feature of the region. Many of the herbaceous plants extend from northern Patagonia to Tierra del Fuego. A big surprise was to find in abundance in moist areas *Primula magellanica* (fig. 11), the only *Primula* in South America. At the

comparatively high altitude of 1600m we found sheets of the charming little Caltha sagittata, one of the first plants to flower after the snow melts. A spectacular white-flowered Calandrina (fig. 12) (a form of C. affinis) carpeted bare ground, with huge stands of vivid red Mimulus cupreus (fig. 13) and Olsvnium (Sisvrinchium) junceum, and on moist sandy soil were areas dense with Oxalis adenophylla. Another spectacular find was the rosulate violet V. columnaris (fig. 14). As so often when plant hunting, we saw it frequently once we knew the habitat it liked: it was on patches of very fine, well-drained gravel amongst huge boulders. Above on the hillside Colletia hystrix and the strange solanaceous Jaborosa kurtzii. From here southwards we saw *Ribes* species and many different Berberis.

Following a valley from Junin de los Andes westward towards the Chilean border, we found unspoiled mature Valdivian Forest resulting from the rainfall carrying over lower mountains. The dominant species of tree included huge monkey puzzles and two species of Nothofagus (southern beech), N. dombeyi (fig. 15) and N. alpina, 20-30m tall, with a fascinating under-storey of huge bamboo, Chusquea cunninghamii, Berberis darwinii. Azara lanceolata. Gaultheria mucronata and many other less familiar species including Discaria trinervis (Rhamnaceae) smothered in small white tubular flowers. and Ovidia andina (Thymelaceae) with terminal clusters of white tubular flowers closely resembling its near relative, Daphne.

In more open areas of the valley were a host of herbaceous plants, most notably the lovely Rhodophiala mendocina (fig. 16) with Fig. 14 V. columnaris



Fig. I I Primula magellanica



Fig. 12 Calandrina



Fig. 13 Mimulus cupreus



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Fig. 15 Southern beech, Nothofagus dombeyi



Fig. 16 Rhodophiala mendocina



Fig. 17 Chloraea magellanica

creamy-yellow petals with deep-crimson marks at the base. The frequent Lathyrus magellanicus, Calceolaria species, sheets of Anemone multifida and, most astonishingly, Armeria maritima, a variant so far from the sea with tall flowering stems and very pale, almost white flowers, differing markedly from our British native coastal form. Two of the lovely ground orchids, Chloraea alpina with yellow flowers, and the white and orange-brown Chloraea magellanica (fig. 17), were abundant here and through much of Patagonia. Also widespread was the rather lovely leguminous Adesmia boronioides with sticky glandular yellow inflorescences; it is one of some 50 species in the genus Adesmia which is confined to southern South America, and all of them are easily recognised by a very characteristic upright or even slightly reflexed upper petal (standard). We were also delighted to find sheets of another rosulate

violet, *Viola dasyphylla*, which we later saw at high altitude.

On moist, steep rock faces grew the striking red tubular-flowered *Ourisia poeppigii* and with it *Mimulus luteus*, tiny *Calceolaria tenella* and *Nertera* sp., the bead plant. This association we found again in similar situations in the Lake District of Chile.

Access to the high-alpine plants of the southern Andes seemed to us easier from Argentina and, having visited the high mountain above Caviahue by car, we drove 120 miles south to San Martin de los Andes, where we set off on foot to scale Cerro Chapelco. The lower slopes were of southern beech draped in lichen, but beneath was, for us, an exciting shrubby layer of *Berberis valdiviana*, a handsome species we grow at home. On reaching the scree slopes, we found a feast of plants that are a challenge to alpine growers to

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cultivate; they included *Tristagma nivale*, *T. patagonica*, *Sanicula graveolens*, *Gaultheria pumila*, *Viola dasyphylla*, and the remarkable and beautiful *Ranunculus verticillatus* (fig. 18) with large, white, water-lily-like flowers, a find that more than justified the climb.

As we moved south, Araucaria was replaced as the dominant conifer by Austrocedrus chilensis. Our next objective was to explore the region near the towns of Villa Angostura and Traful, where there were more plants we know and grow: Eccremocarpus scaber twining surrounding shrubs, lovely mounds of Junellia (Verbenaceae) with mauve tubular flowers, Calceolaria species, yellow Viola reichei, further species of Adesmia and the mounds of the Carrotfamily genera Azorella and Mulinum. We took the ski lift up at the resort of Cerro Bayo. The mountain was relatively poor in high alpines, but off the ski runs the slopes were covered with dwarf southern beech, Nothofagus pumilio scrub. Near the ski lift base a small stream was lined with small Gunnera and large Gunnera magellanica tinctoria, interspersed with Mimulus luteus.

The road to Bariloche, a big ski resort and tourist centre at 770m, was lined with the familiar yellow *Oenothera stricta* (fig. 19). Nearer town and all along the adjoining lake we found a blaze of yellow – our European broom, *Cytisus scoparius*, which has invaded every available habitat and is spreading rapidly as a pernicious weed. We took the cable car and ski lift to 2388m El Catedral. Near the cablecar station we saw huge areas of fine, tall whiteflowered *Fabiana imbricata*. On the mountain top were further challenges for the grower of alpine plants: another charming rosulate violet,



Fig. 18 Ranunculus verticillatus



Fig. 19 Oenothera stricta



Fig. 20 Sophora macrocarpa

V. sacculus; a remarkable cushion-forming yellow *Oxalis, O. erythrorhiza*; the now familiar pink *O. adenophylla*; a pinkish-white *Ourisia fragrans* and sheets of yellow-flowered *Oreopolus glacialis (Rubiaceae)*. Species of the strange *Asteraceae* genus, *Nassauvia*, proved taxonomically very difficult.

Bariloche is a traditional crossing point into the Lake District of Chile, so a convenient place to move on to our Chilean experiences. The inland roadsides in this region of Chile

are lined in spring (November) with *Embothrium coccineum*, which occurs in a wide range of shades of orange to deep red, along with *Fuchsia magellanica*, *Buddleja globosa*, *Abutilon vitifolium*, *Lomatia hirsuta* and *Escallonia*. In moist ditches by the roadside grew huge clumps of *Gunnera tinctoria*, *Blechnum chilense*, and *Coriaria*

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Fig. 21 Weinmannia trichosperma



Fig. 22 Crinodendron hookerianum, at home.



Fig. 23 Fragaria chiloense

ruscifolia with long arching stems. Further south on the eastern shores of Lake Llanquihue, Sophora macrocarpa (fig. 20), very similar to the New Zealand S. microphylla, emphasised the floristic similarities between the two regions. The road goes through an old lava flow, now colonised with vegetation, and here we found many shrubs about 1.5m high of Weinmannia trichosperma (fig. 21).

One of our great delights was the discovery of large Crinodendron hookerianum trees (fig. 22) growing by the unmade road into Parque Alerce, where we had our first sight of good specimens of Fitzrova. The road to the ski resort at Antillanca is lined with clumps of Chusquea, the giant fern Lophosoria quadripinnata, Azara lanceolata, Baccharis sp., Berberis darwinii and Ribes magellanica. Under the southern beech were the shoots, not vet in flower, of Alstroemeria aurea and Desfontainia spinosa. In an early season, the first of the *Mutisias* can be found scrambling through shrubs and over rocks and sprawling down scree slopes. An ascent of Volcan Osorno by car offers magnificent views in clear weather, but on both occasions we have visited the region in early December and the volcano has been hidden by cloud, mist and rain.

In the coastal mountains and on the coast itself we found many plants familiar to gardeners in the British Isles. The climb from the town of Angol to the Parque Nahuel was very rewarding, with big trees of *Drimys winteri* covered in flowers, *Fragaria chiloensis* (fig. 23), a parent of our culinary strawberry, shrubby *Calceolaria dentata* and herbaceous *C. biflora*,

Lathyrus subandinus, Gaultheria myrtilloides, Puya coerulea, Rhaphithamus spinosus and a charming pale-mauve dwarf Verbena. Perhaps most striking was a large red-flowered Rhodophiala advena (fig. 24) dotted about in open spaces between the trees and shrubs. In the Parque proper are fine stands of monkey puzzle and southern beech

with a host of small and colourful herbaceous plants, including *Luzuriaga radicans* clinging to trees trunks in moist shaded places, and a splendid mistletoe, *Tristerix tetrandrus* (fig. 25), with long red tubular flowers that at first glance could be mistaken for a climbing honeysuckle.

Near the coast north of Concepcion we found the edges of the Eucalyptus plantations covered with a vivid-pink Bomarea salsilla. Leaving the forestry plantations behind we were delighted to see huge stands of Lobelia tupa (fig. 26) and on the grassy roadside Geum magellanicum and Herbertia lahue. On the coast there was a very rich flora including a delightful, very striking, pink, heavily marked Alstroemeria pelegrina (cover), Margyricarpus pinnatus creeping over the rocks, and abundant Calceolaria dentata with Eupatorium salvia and Puya venusta on the cliffs. Many more exciting plants were to be seen: many members of the Myrtle family, with the naming of which we never got to grips; a most notable mauve- and pink-flowered Anemone hepaticifolia in moist places; again great fronds of tree-fern-like Lophosoria quadripinnata; the pink-flowered Elytropus chilensis and the extraordinary blue pitcher-like flowers of *Latua pubiflora* in the Potato family.

We made our way to Puerto Montt for the flight over glaciers and ice fields to Puntas Arenas in southernmost Chile to visit the famous national park, Torres del Peine (fig. 27). The 2800m granite spires – The Towers – with 700m vertical rock faces rising from relatively low surroundings, are an impressive sight. We saw guanacos, the third camelid seen on these trips, grazing quietly on open areas, rheas



Fig. 24 Rhodophiala advena



Fig. 25 Tristerix tetrandrus



Fig. 26 Lobelia tupa

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Fig. 27 Torres del Peine

sprinting across the countryside, and Magellanic penguins on the coast. Many of the plants we had seen at higher altitudes were here also, and some plants we might have seen earlier in our travels: the Red Gorse, *Anarthrophyllum desideratum*, so called because of its vivid scarlet flowers; yellow *Chloraea magellanica*; *Saxifraga*



Fig. 28 Calceolaria uniflora

magellanica; an unusual but striking white member of the Santalaceae, Arjona patagonica; Acaena sericea and Gaultheria pumila, to mention just a few. New finds included Leuchera purpurea, a delightful crimson-flowered composite resembling a very upmarket hawkweed; the low-growing and creeping Alstroemeria patagonica; and the most remarkable Calceolaria uniflora (fig. 28), perhaps the most photographed plant in the Park as it is confined to the southern tip of Chile and Argentina.

This is just a glimpse of a rich floristic region full of friendly people and empty roads.

Keith and Lorna Ferguson, retired professional botanists and life-long gardeners, now have a maturing garden in west Gloucestershire and travel widely looking at plants.