

Griselinia seeds itself very freely, but it grows quickly and loves wind, and people are often glad to have the seedlings, whereas few want the thousands of *Rhododendron ponticum* which one has to grub up. *Olearia Hastii* is also very good, being very resistant to salt spray and all kinds of bad weather.

I would also recommend those who are planting good Rhododendrons to put them at least twelve feet apart and let them each grow into a single large bush. This saves a lot of labour in shifting them later on.

A few years ago a great horticulturist visited us here, and I felt extremely shy of letting him see my garden, apologizing for its unkemptness. (I knew that he had about fifty gardeners, while I had only two and a half!) However, he said "Don't alter it, it is lovely and reminds me of a wild bit in Burma or Northern China."

PLANT COLLECTING IN THE MOUNTAINS OF ANDALUCIA

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PART I

(Based on a lecture given to the Society on October 4, 1949)

THE following notes do not claim to be a report on the expedition I had the privilege of making, together with MR. PETER H. DAVIS, to Spain in 1948 on behalf of this Society; such a lengthy and technical document could scarcely be accommodated in these pages. But it is my purpose to select for discussion some of the plants we collected, whether for their intrinsic beauty or because of the circumstances connected with their discovery, and to describe some of the lesser known areas of Spain which we visited.

Seeds were collected of over 180 different species as well as bulbs and corms of 15; these are in the main being grown at the Society's Gardens at Wisley and at the Royal Botanic Gardens of Kew and Edinburgh. We also made about 1,000 herbarium gatherings that are being divided between the herbaria of the British Museum (Natural History), Kew and Edinburgh.

The word Andalucía in the title of this paper requires some explanation: as events turned out we were practically confined to this area of Spain for the greater part of the expedition. Andalucía typifies the Spain of the imagination—"the artist's dream come to life" as the tourist posters run—but there exists in many minds a vagueness as to exactly where and what this pleasant-sounding place is.

We have to turn to geology for a precise definition, and geologically speaking there are two Andalucías—an European and an African separated by the valley of the Guadalquivir (ancient Bétis). The lands to the north of this valley constitute European Andalucía which is terminated by the Sierra Morena (itself forming the southern elevated wall of the Meseta); to the south of and including the Guadalquivir, or Betic,

depression lies African Andalucía, the bulk of which is made up of the Betic Cordillera, a complex system of mountains which runs from the Cabo de la Nao to Cadiz. These mountains, which are divided by a fault (fault of the Genil) into a northern essentially calcareous and a southern predominantly crystalline series, were our hunting ground for nearly three months.

A low humidity has the effect of making the extreme Andalusian temperatures (shade maxima around 110° F.) not excessively uncomfortable, and the slight rainfall in the same period, excluding occasional thunderstorms, simplifies the process of plant-collecting.

We left England in mid-June, and after travelling overland through France by train we arrived in Madrid, parting company (one might say inevitably) with our flower presses and other baggage on the way.

During our enforced stay in Madrid, awaiting our strayed luggage, we made one excursion to the hills around the city—to royal Aranjuez by the Tagus, site of the palaces and gardens of the Spanish crown. The gardens are now poorly cultivated but tall Planes and Cypresses still shade the brown landscape. It was here that Philip II planted noble avenues of Elms (*Ulmus nigra*) introduced from England; but we did not stop to admire—our interest lay in the chalk flora of the nearby hills.

There is something unusually interesting about the flora of chalk, even in this floristically impoverished country of Britain: one always gets the impression that the species are so much more interesting and stimulating than is usual. It is certainly true that many of our rarest and most beautiful plants are calciphiles.

We took the cart track leading from the dusty town to the Mar de Antigola—an inland lake. *Eryngium campestre* and a violet-flowered Crucifer were the first plants of the expedition, and soon on the gypsum declivities masses of yellow *Helianthemum*, golden *Calendula*, white Thyme, purple *Matthiola* (*M. tristis*), and lilac *Calamintha* made us stop to fill the presses. Seed was collected of an *Iberis* which made bushes, a foot and a half tall, of velvety leaves. We are told it is *I. subvelutina*, a highly desirable plant with rose-pink or white flowers (there were none for us to see) which is confined to these dry hills near Aranjuez but appears again, according to the *Prodromus*, near Córdoba in Andalucía. *Frankenia Reuteri* grew here; it is a densely caespitose pink-flowered form—'the most elegant of all the species' is Willkomm's comment. Prominent on the hillside was *Reseda suffruticosa*, a magnificent giant among Mignonettes which was for long confused with related species; an annual, it dwarfed the surrounding vegetation with its 4-foot spikes of white flowers rising from thick dissected papillose leaves. There were other Mignonettes here, probably *R. Gayana* and *R. ramosissima*, but they were quite commonplace. The pale lilac buds of *Limonium divaricatum*, clustered in long pyramidal panicles, were beginning to open in damp hollows where it was locally abundant. Other notable plants of this halophytic community included the rather rare and beautiful var. *minor* of *Hedysarum humile* with bright pink-purple Pea flowers, and *Lepidium subulatum* covered with profuse white crosses.

After a few days our flower presses reached Madrid and we took a south bound train en route for Cazorla, over the tableland of the Meseta and through the pass of Despeñaperros to Baeza. Cazorla has no railway station, or at least the Cazorla-Los Propios halt which serves it is 15 miles from the town; one has the choice of leaving the train at Los Propios and hoping there will be a lorry the same day for Cazorla, or, as we did, of staying on till Baeza which is an uncomfortable junction, connected by *tranvia* with Ubeda. From Ubeda a bus leaves for Cazorla, but having failed to get our luggage accepted on the first *tranvia* we had to wait some hours for the second: consequently we missed the bus at Ubeda. But we struck a bargain with a lorry driver and were violently conveyed to Cazorla.

The road ran through an undulating countryside planted here and there with wide groves of Olives; the violet and blue hues of the evening light cast their shadows on the trees, turning the brown landscape into a vast stepped amphitheatre. Soon the glimmering lights of Cazorla could be seen; the road climbed to meet them and the lorry stopped at the *fonda* in the square and dropped us.

In an earlier article in this JOURNAL* I described briefly a three days' trip in the Sierra de Cazorla; last year (1948) we decided to make an extensive exploration of these mountains because of their paramount horticultural and botanical interest.

Cazorla, as will be realized from what is written above, is a dead end: beyond it lie the mountains. Largely due to the lack of authoritative maps it has become customary to apply the name Sierra de Cazorla, erroneously, to all of the mountains of the State of the Sierra de Cazorla of which it in fact forms part. Details would be superfluous here but in summary form the Montes de Cazorla† consist essentially of three separate lines of peaks—the western outer Sierra de Cazorla, the central Sierra del Pozo Alcón and the eastern Sierra de la Cabrilla.

The climate is characterized by a minimal summer rainfall—36 mm. in June–August, being 5 per cent. of the annual total—and high mean and maximum temperatures varying from 8·5–12° C. and 32–38° C. respectively. We were favoured all the time with fine and warm weather although morning mists were extremely dense at high altitudes.

At the Cueva de la Magdalena in the Peña de Alcón Cazorla's celebrated troglodyte *Pinguicula vallisnerifolia* was still in flower hanging suspended from the tufa roof and walls of the cave. The biology of this Butterwort requires investigation for plump seeding capsules were rare and what seed we did collect failed to germinate although hurried by airmail to Wisley. Short of bringing the plant back alive embedded in its native rock, I see no certain way of securing it for cultivation.

The various formations around and below the Cueva were strikingly rich: on the dry rocks *Potentilla caulescens* var. *villosa* was dominant (as it is on similar exposures throughout this region) with associates including *Sarcocapnos enneaphylla*, frail and curious, with rounded dark green leaves and white flowers centred with yellow; the neat saxatile clumps

* "Through the Spanish Sierras." *R.H.S.*, 73 (8), 257–266 (1948).

† A convenient abbreviation of their full title, Montes del Estado de la Sierra de Cazorla.

of *Teucrium rotundifolium* (*T. granatense*) whose flowers open a lacteous-white, later fading pale purple; and *Globularia spinosa*.

The *Globularia*, which, according to SCHWARZ's monograph of the genus should be typical *spinosa* in this area of Spain, is very unlike the plant known in cultivation. In habit the Cazorlan plant is very robust, forming thick woody root-stocks with numerous spiny rosettes from which arise strong peduncles varying in length from 6 inches to over a foot (the latter height is most common). Only on the limestone slopes of the Cuerda de las Moras did the *Globularia* show much resemblance to the cultivated plant. There the flowering stalks were very dwarf and the rosettes small and few.

Below the Cueva on the chalky-sandy hills grew a twiggy thyme-like plant with short linear leaves and conical spikes of purple flowers; not until we returned did we identify this intriguing form as *Coris monspeliensis*, an anomalous member of the *Primulaceae*. It has been previously in cultivation but seems in most parts to have died out.

Because of the great development of forests these mountains are well provided with roads connecting the numerous Casas Forestales with the town. On June 25 we drove with our guide, Juan Garcia, to the Casa Forestal at la Nava de San Pedro (1,290 m.) which we made the centre of our operations. The Forest Station of San Pedro, the most important in the Sierra, is a strongly constructed building with a suite of rooms for visiting forest officers, and we were installed in these in great luxury.

Shortly after arriving we climbed the limestone peak known as the Cabeza del Tejo and Pico de Gargantas. The path led through forests of Pine where the ground species included *Scabiosa tomentosa*, *Aphyllanthes monspeliensis*, and *Helleborus foetidus*, the latter being widespread in this area and almost invariably parasitized by an *Orobanche* with reddish-brown flowers. Further afield in the Serrania de Ronda and Sierra de Grazalema the Hellebore was frequently found in association with apparently the same species of *Orobanche*.

On climbing out of the *Pinetum* to the limestone slopes of the Cabeza del Tejo we found in the north-facing rocks a rich community of alpiners at about 2,000 m. comprising notably *Globularia spinosa*, *Erodium cheilanthifolium*, *Linaria anticaria*, *Saxifraga Rigoi*, *Draba hispanica* and a variety of *Arenaria armerina*. The plants of *E. cheilanthifolium* collected showed considerable variation in colour. Normally the petals were pale-pink with dark lilac veins and the two upper petals blotched, but plants with almost white unblotched petals were seen. The *Arenaria* was a typical example of the curious adaptation of a species to ecological conditions at high altitudes. It resembles *A. tetraquetra* in general habit, differing mainly from this species by its larger pedunculate flowers. The leaves are much more densely imbricated than in *tetraquetra* resulting in more compact mounds with a finer surface; and the silvery-green colour of the leaves gives the whole plant a stone-like appearance.

We descended the pine-covered slopes to the Barranco de Gargantas where, opposite the Fuente de la Garganta on a rocky outcrop, *Hypericum ericoides* was in bud; it looked, as its name suggests, like a dwarf

heath. Associated with it were *Anthyllis cytisoides* and *Teucrium rotundifolium*.

Not many people seem aware of the variations in habit shown by *Hypericum ericoides*. All the plants from the Cazorlan mountains belong to the upright form* with small flowers unlike the fleshier, larger-flowered plants collected between Alcoy and Jijona (prov. Valencia), and quite distinct from the prostrate variety, as yet unnamed, from Porta-Coeli, near Valencia, and (according to the late DR. GIUSEPPI) from the cliffs by the roadside not far from Almeria.

In stony places near the Rio de Garganta a surprising find was *Dictamnus Fraxinella*; the plants were by no means typical—the flowers were a vivid lilac with darker veins on the upper petals, and the anthers green. Although the identity of our plants was checked in Madrid it is worth noting that REVERCHON collected *D. hispanicus* and LACAITA *D. albus* var. *purpureus* from the Sierra de Cazorla but the status of these forms is in need of revision.

On a later day we set off with mules for the Casa Forestal at the Nava de San Pablo. Our route took us through the Barranco de Guadalentin which is well wooded in part and supports a rich ground flora including *Paeonia Broteri*, *Lonicera splendida* and *Verbascum Hervieri*. Altogether we collected at least six distinct species of *Verbascum* in the Montes de Cazorla; of these *V. Hervieri* is the most distinct. The rosette leaves are very large and silky and the flowering stem is more or less naked and solitary, branching above into a striking pyramidal inflorescence bearing yellow flowers singly. The plants (in fruit) may reach up to 10 feet in height and a single specimen fills a flower press. A peculiar feature of *Verbascum Hervieri* is the absence of thick woolly indumentum, typical of other species, on the flowering stems which are here quite glabrous and a shining mahogany colour.

By the Rio Guadalentin a *Narcissus*, in fruit, was locally abundant; it was a tall species ranging from 2 to 4 feet with glaucous, more or less twisted leaves. The peasants called the plant 'Nardos Favoles,' and it seemed probable that it was *N. longispathus*, a new species described from the Sierra de Cazorla by PUGSLEY; but when our Cazorlan bulbs flowered in this country they did not agree with PUGSLEY's description nor did they retain their field characteristics. The spathe of the cultivated flowers was only 2–3 cm. long instead of 8–10 and the plants themselves were only 20 cm. tall. The problem awaits a solution.

We arrived in good time at the Casa Forestal of San Pablo which lies in a wide depression at the top of the Barranco de Guadalentin. It is the highest of the Cazorlan forest stations and is a good centre for excursions to the Sierra de la Cabrilla and Los Organos.

Above San Pablo we came to an alpine lake, evidently the result of a tectonic depression, for, towards the margins, jagged stumps of submerged trees were jutting out. At the far end of the lake we gradually ascended to the Fuente de la Umbria and soon approached the pinnacles of Los Organos—*locus classicus* of the rare endemic *Ptilotrichum Reverchonii*. A stream which flows over the highlands towards the base

* This is the form in general cultivation in Britain—collected by DR. P. L. GIUSEPPI in the Sierra de Cazorla.

of the peaks is known as *Aguas Negras* (Black Waters), but at the breath-taking precipice it cascades down the gorge to form the Rio Borosa in the valley below. In 1947 I climbed down to the foot of the gorge searching for *Ptilotrichum Reverchonii* with indifferent success, but this year I explored the 'organ pipes' above and found the rare Crucifier in abundance along with *Sarcocapnos crassifolia* var. *speciosa* (by far superior to *S. enneaphylla*), *Saxifraga Camposii* and *S. Rigoi*, *Erinus alpinus* var. *parviflorus* and *Viola cazorlensis*.

Naturally *Viola cazorlensis* was much in evidence throughout our excursions; not always did it grow where and how we expected. On the Pico de Cabañas, Sierra del Pozo Alcón at 2,000 m. the *Viola* leaves its customary rock fissures, which it occupies at lower levels, and grows in the loose calcareous summit scree with *Juniperus sabina* var. *humilis*, *Convolvulus nitidus*, *Erinacea Anthyllis*, *Thymelaea granatensis* and others. In this locality the *Viola* forms small poorly developed plants showing great variation in colour, size and shape of flower—carmine to pale pink, blotched with intense carmine or immaculate. Seeds of an albino form were collected from this locality in August 1948.

The departure of chasmophytes from crevices to scree and loose rocks, above certain altitudes, seems to be not unusual in the Mediterranean region.

When we returned in the afternoon to San Pablo, the masses of *Helianthemum*, which in the morning had been covered in yellow flower, had dropped all their petals to gild the ground. Nearby, the short grassy turf looked promising for bulbs and, as soon as we had unloaded the mules, we went out again to investigate. We were in luck, for in a few minutes we had found a dwarf *Narcissus* and two Tulips (mixed with a *Colchicum*!) all in fruit. The *Narcissus*, well known to the forester as being the first flower of spring, was a tiny species growing only 1–2 inches tall. We collected bulbs which flowered in Sussex on Christmas day, at Wisley a few days later and at Edinburgh in mid-February. These were identified as *Narcissus hedrianthus*.

Narcissus hedrianthus is a rare species previously known only from the type gathering; it is related to, although outwith, the *N. Bulbocodium* complex. In horticultural circles it has attracted considerable attention and a paper giving fuller information is in preparation.

The succeeding day took us through the rather uninteresting Barranco de Ginez and up a long gentle slope to the approaches of Las Empanadas, peak of the Sierra de la Cabrilla. Las Empanadas is a disappointing peak. On the lower slopes grow a few stands of *Pinus Clusiana* and above that a scrub of dwarf Juniper giving the rounded dome a bare appearance like the mountains to the east. From about 1,800 m. a formation of spiny cushion-forming xerophytes—*Erinacea Anthyllis*, *Ptilotrichum spinosum*, *Astragalus* spp.—was dominant. In the dry grey scree *Pyrethrum spathulifolium* appeared occasionally all the way up to the summit; *Convolvulus nitidus* was quite frequent in full flower along with *Erodium cheilanthifolium* and on the summit itself *Arenaria tetraquetra* var. *frigida* associated with *Ptilotrichum spinosum*. The flowers of the latter at this altitude were frequently pink or pale-purple instead of the usual white, a phenomenon also observed in the

plants of *P. spinosum* at about 2,000 m. in the Sierra Nevada below the Peñones de San Francisco where I collected seed in September from plants marked in July.

The view from Las Empanadas is impressive: to the west the crests and valleys of Cazorla, sometimes grey, sometimes dark green with Pines, stretch for miles; to the east beyond the dry slopes of the Sierra Seca (S. de Castril) lie the gaunt uninviting ranges in the north of the province of Granada, and the nucleus of the Sagra.

To the south the Sierra de la Cabrilla is prolonged into the Poyo de la Carilarga—a long range of mountains which have to be attacked from a rather dangerous goatpath which leads along below the sheer limestone walls. The substrate is mainly a loose chalky rubble and difficult underfoot. Among the few chasmophytes we had time to collect here was a tiny Campanulad with flowers in heads but unfortunately still in bud. When I returned to Cazorla in August this plant was in flower—it was *Jasione foliosa* subsp. *minuta*, a very delicate blue-violet-flowered relation of the sheep's bit scabious. Later I collected it in several other localities in these mountains. A study has been made by Spanish botanists of *Jasione foliosa* and it concluded that the Andalucian plant (from Sierra Tejada, S. de la Nieve, S. de Yunquera, S. Maria, Macizo de Magina, etc.) represents a subspecies of the type of Cavanilles from the kingdom of Valencia (S. de Mariola, S. de Aitana). The most apparent difference of the Andalucian plant is its nearly spoon-shaped (not spatulate) leaves, although other characters separate the two forms. It is very difficult to find this species in the rock fissures as it forms such tiny rosettes and flowers in late August.

Our final journey from San Pablo took us back to Cazorla by a devious route: along and down the banks of the Rio Guadalentin which wound through the Styx-like gorge of the Cerrado Utrero we rode, later crossing the river at a well constructed bridge, guarded by an armed *vigilante*. Gradually we climbed up wooded slopes, the haunt of wild mountain goats, through a *Rosmarinetum* (mainly *Rosmarinus officinalis* and *Teucrium* spp.) to the Casa Forestal at the Fuente de la Yedra (Fountain of Ivy).

Early on the morning of July 1, with thick mist shrouding the surrounding mountains, we left La Yedra to climb the Pico de Cabañas (2,027 m., peak of the Sierra del Pozo Alcón). The high mountain path lead through forests of *Pinus Clusiana* in which we collected *Chamaepeuce hispanica*, *Catananche coerulea* and an apparently new species of *Verbascum* with ivory-white corollas faintly shaded with pale greenish-apricot. It was a biennial grey-leaved plant, simple or unbranched, and just coming into flower. We found the same species later at the Fuente del Tejo, but at neither locality was it common.

Passing on the way an ancient gnarled specimen of *Taxus baccata*—the first we had seen, and the only one we were to see—we reached the spot known as Cabañeros, not far from the Fuente Cabañela where we left our muleteers and set out to climb the Pico de Cabañas with our guide.

On the summit is a tiny shelter where a *vigilante* keeps a lonely watch. From this height the village of Pozo Alcón can be seen in the

far distance at the end of the wide valley of the Rio Guadalentin. Below the peak there is a curious limestone arch around which we collected several plants of interest: *Fasione foliosa* subsp. *minuta* in many of the crevices, and an occasional white-flowered form, a dwarf *Geranium* with white flowers veined with violet and resembling a saxatile *Erodium* in habit, and a blue-flowered *Aquilegia* 6 inches high. On the slopes below the arch we dug up a dwarf *Narcissus* which was growing through dwarf Juniper. Bulbs brought back have flowered and been identified as *N. rupicola* by the Narcissus Committee; but the plants are by no means typical and show considerable resemblances to *N. calcicola* from Portugal. It is interesting to note that Cuatrecasas records *N. jonquilla* from the Macizo de Magina, having previously called it '*N. rupicola* Duf. for. vel var. *pedunculata* in sched.—a typo floribus pedunculatis, non sessilibus, pedicellis 3–12 mm. long. perigonii tubo brevior, discrepat.' This differentiation applies equally well to our plants.

We climbed down to the opposite slopes of the Cabañas, collected our mules and rode off to the Casa Forestal at La Cañada de las Fuentes (Glade of Fountains) where the forester joined us as far as the sources of the Rio Guadalquivir. Further on we crossed the young river and took to the mountain path reaching Rasos Nuevos, which stands at 1,190 m., in the early evening.

The last stage of our journey took us to the Vertientes de Gualay and past the Cueva de Lorno where we collected the rare *Ptilotrichum longicaule* in flower—'depressed heaps . . . flopping boughs of a foot or two in length . . . frail stems carrying showers of white blossom,' is FARRER's fanciful description—and climbed into the mountains of Navahondona, reaching San Pedro by mid-afternoon. We covered the last miles to Cazorla in a lorry, stopping at the historical Puente de Herreras (Bridge of Forges); according to tradition, it was built by Isabel the Catholic during the pursuit of the Moors hiding in these retreats.

While our lorry was being loaded with Pine planks from the Sierra, we looked at the plants growing near the bridge and by the banks of the Guadalquivir which it spans. It was a change to find a mesophytic and hydrophytic flora here after the predominance of xerophytes in the mountains. Species pressed included *Trachelium coeruleum*, *Anagallis tenella*, *Ruscus aculeatus*, *Buxus sempervirens* and *Samolus Valerandi*.

A bumpy journey along the forest road past the outer peaks of the Sierra de Cazorla, through La Iruela, and we rattled tired and dirty into Cazorla where we found that the village's water supply had run out!

On our last excursion from Cazorla we left by the road to La Iruela and at a short distance from the town took the goat path which leads up the mountainside to the Caballo del Prado Redondo with the Peña de Alcón, the peak which dominates Cazorla, on the right and the castle of La Iruela on the left.

In the rocky crevices of the first crests of the Prado Redondo *Viola cazorlensis* was found frequently with a rich consort of *Fasione foliosa*

subsp. *minuta*, *Salvia lavandulifolia*, a rather attractive purple-flowered species, *Globularia spinosa*, still showing some colour and *Erinacea Anthyllis*. The *Viola* forms extensive colonies here and flowers several weeks earlier (it was in young fruit on July 4) than in the more elevated localities such as the Cerro Cabañas.

Further east on the Cuerda de las Moras and the summit of the Prado Redondo, the long-overlooked treasure of the *Dipsaceae*, *Pterocephalus spathulatus* is a memorable sight. Here on the hot summit screes of smooth white Jurassic chalk it appears to attain its ecological optimum, forming a distinct association with *Convolvulus nitidus*, generally accompanied by *Fumana procumbens* and an unidentified *Helianthemum*. This remarkable xerophytic community is strictly localized, but where developed forms extensive silvery-white mats. The *Pterocephalus* may cover the limestone for several yards to the exclusion of all other plants, or, as is more usual, it forms the above mentioned association with *C. nitidus*.

Along the crests of the Prado Redondo, within the dominion of the *Pterocephalus-Convolvulus* association, the most typical species were *Erodium cheilanthifolium*, *Helianthemum frigidulum* (?), *Arenaria tetraquetra* var. *frigida*, *A. armerina* var. *elongata*, *Teucrium capitatum*, *Globularia spinosa* and *Linaria aeruginea*, all combining to form a near perfect rock garden.

In the steep south-sloping sunbaked screes overlooking the Cañada del Tejo and Cañada de la Magdalena *P. spathulatus* shows its maximum development in size. The individual plants are as much as 10-12 inches across and the flowers show variation in colour from dark to pale pink. Few species can accompany it in such a specialized habitat—only the *Convolvulus* and *Fumana procumbens* and a white-leaved, yellow-flowered *Centaurea* were noted.

This incredibly beautiful Dipsacad is having mixed fortune in cultivation. The plants which last year prospered in ordinary soil in the rock garden at the Royal Botanic Garden, Edinburgh, have since inexplicably disappeared. But at Wisley a host of healthy young plants have been raised, and perhaps we may dare hope for some flowers next summer.

After descending to the Fuente del Tejo where we had lunch, we followed the mountain path to the Iruela-Cazorla road. On the rocks below La Iruela we collected *Campanula mollis* var. *giennensis* and *Potentilla caulescens* var. *villosa* which grew in profusion on the limestone cliffs. Then we guided our mules for the last time into the *plazeta* of Cazorla.

A second halt was made in Granada. The city stands about 2,180 feet above sea level and the mountains rise up above it to 11,400 feet. One can if desired make the ascent by taxi following the highest mountain road in Europe. We did not.

(To be concluded.)

Editor's Note—It is hoped to publish some photographs to illustrate this article with the second part in December.