

# American Rock Garden Society Bulletin



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# AMERICAN ROCK GARDEN SOCIETY BULLETIN

Albert M. Sutton, Editor

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## LETTERS FROM JAPAN

JACK CRAIG, *Shizuoka, Honshu Island*

Mr. Craig is an American fluent in Japanese. His letters are translations of plant names, plant lore, and attitudes toward plants from the Japanese language and mind into American English. He is the first man able and interested in discussing Japan's rich and heretofore hidden store of rock plants, first with the nurserymen and specialists who grow them, and then with us.

Edited for the *Bulletin* of the American Rock Garden Society, Mr. Craig's letters have great and timely value. Many of the plants he introduces to us are disappearing from Japanese culture, just as the culture which produced them is disappearing in the new industrial age of Japan. There remain a few gardeners who cherish the plants, but tend not to propagate them.

Jack Craig and his wife, Ginko, are textile designers now living and working in Japan for the second time. Between times, the Craigs have lived and gardened in southern California. His letters begin with descriptions of dwarf bamboos he sent to me from their California garden before their return to Japan last summer. In successive letters he covers their plant hunting and gardening during the fall months. From place to place in the letters, I've made comments and closed them off in brackets.

George Schenk

Dear George,

Yesterday, we went to Gotemba to visit our friend, Mr. Maeshima. He is an extremely wealthy collector of bamboos and has easily the world's largest collection. I have mailed you today a booklet on them that I got from his workshop. It is the best thing I've seen in English on hardy bamboos and it will help to explain the varieties that you have.

I wish that you could see the dwarf Orosshima-chiku (*Pleioblastus pygmaeus distichus*), that you have, at Mr. Maeshima's place. He uses it extensively as a ground cover, or one may say lawn. In back of one house the bamboo forms a solid, three inch tall mat that flows around stones that step up to the entry.

Planted ten inches apart, dwarf bamboos cover the ground in a year or

so and the effect can be as restful as a grass lawn. They are also used here as container plants (what isn't?) and the smallest varieties are grown over rocks in bonkei and bonsai gardening. All these dwarfs are best cut to the ground each spring before new growth appears. This keeps them clean and compact and smaller than if left to mound up and hold their old leaves and other trash inside.

Of the other bamboos that you ask about, Rakkyo ya daki is *Pseudosasa japonica* var. *tsutsumiana*. The name means arrow bamboo, green onion variety. It is a sport of the regular arrow bamboo (*P. japonica*) which has very straight, slender culms that were used for arrow shafts. The rakkyo, or green onion form is swollen between the joints both stems and roots, looking more like strings of bottles rather than onions. It is easily one of the most interesting of all exotic bamboos. The piece I gave you is one of the very few in the United States and should be extremely valuable commercially. Do you remember the sensation and high prices that the bamboo called "Buddah's belly" commanded when it was first introduced? The plant proved to be very tender, sending out its new growth in mid-winter. It can't be grown much north of Los Angeles. Rakkyo ya daki is of the same form but fully hardy. It will take it three to five years to establish enough to show its true character. To contain it as a garden plant (once you have enough of it to be so extravagant) just give the soft new shoots a yank when they come up in an unwanted place. They will not reappear until the following spring. I got that tip from a gardener in Kumamoto, luckily, for if it is left alone, the rakkyo form tends to be a wide spreader. In Kumamoto, I once saw a very trim and neat clump of the regular arrow bamboo only about eighteen inches through the base. Previously, I had only seen this plant in the wild with its sparse upright growths usually under pine trees. I was most surprised when the gardener told me what the clump was and how he kept it that way. Kamuro zasa, known here as "King of the Garden Bamboos," is *Pleioblastus viridis-triatus*, a plant with bright chartreuse leaves with dark green stripes. It will stay under ten inches if cut back each year; grow to eighteen inches, if not.

Yakuzasa (*Pseudosasa owatarii*) is the tiniest of tiny dwarfs from Yakushima. When planted on a rock and displayed, it is one of the jewels of all for such use. It is a much slower grower than Oroshima-chiku, and forms upright culms reminiscent of a tree bamboo, but under ten inches in the open ground. Cut to the ground each year, or grown in a pot, it stays only three to four inches tall. This bamboo and the next one are both rare to the vanishing point, even here in Japan.

Kintai Chishima (*Sasa kuriensis* f. *aureo-striata*) has large leaves broadly and heavily striped with gold and is known here as the best and rarest of all variegated bamboos.

The Latin names are all from Muroi's book published about five years ago. He is probably the world's leading authority on bamboos. I am trying to get enough books together to track down Latin names for plants I see here but is isn't easy. Most of the Japanese books give only common names which, as Roy Davidson has observed, are surprisingly consistent.

[Few Japanese horticulturists use Latin names for Japanese plants, since there are common names in their language for thousands of horticultural varieties of Japanese plants developed over the centuries. There is

less confusion and overlapping in their system of nomenclature than we have in the Latin binomial system].

Recently we happened upon a new dwarf bamboo which is not listed in any of our books. It is called Yaku kuma zasa, evidently a dwarf form of the kuma zasa (*Sasa veitchii*) collected on Yakushima. It is only four inches high, the tiny leaves forming a fan on the top of each stem.

Yakushima is a little, round island off the southern tip of Japan. The name has special meaning in Japanese horticulture. Almost every Japanese plant occurs there in its most minute form. *Viola yakushimana* is a good example. The island is so famous here for its plants that Mr. Susuki, [the alpine nurseryman], says that unscrupulous nurserymen have often said that new plants they wanted to push came from Yakushima when they really didn't. Automatically, the price doubles. Ginko and I went there just before we left Japan about three years ago. We got caught in a cloudburst and had to turn back before reaching the alpine plateau where all the goodies are. We collected many very rare plants from the lower elevations, though, but they were mostly subtropicals. We hope to make another trip there next summer. Harold Epstein wants to go along if he can arrange to be here at a good time. When Mr. Susuki went he had to wait in a hotel at the bottom of the mountain for three weeks before the weather cleared so that he could go in!

You asked me to compare the climate on Honshu with a similar climate in the United States. Because of our sticky summers, central Honshu can be compared to Louisiana or the Gulf Coast. Due to the humidity, we probably have more epiphytes than any other temperate climate in the world. The climate changes here dramatically from south to north, from the coast inland, as well as from sea level to high in the mountains. In this part of Japan there is never frost at elevations below thirty feet above sea level. *Crinum asiaticum* is extremely tender to frost and occurs only on this level, so it is called hamayu or beach lily. It dies of cold even in Dr. Hirao's garden in Zushi within sight of the ocean.

Shimizu, where we live, is also mild with no killing frosts until January. We are only a few hundred feet above sea level. We can see Mt. Fuji from our house and the Arctic winter has already closed in on the upper half with a deep cover of snow which will last until next summer. Through the entire summer we can never get a glimpse of Fuji because of the steam, mist, and cloud cover through that season. Then as the autumn sun gets weaker the atmosphere clears so that from now through the winter we get a clear view of Fuji almost every day.

In California, cycads and many Japanese plants that take full sun in Japan and are better for it had to be grown in half shade. I burned them up for two years before realizing that they missed the atmospheric moisture blanket of Japan's summer.

Our good friend, Dr. Shuichi Hirao, thinks that perhaps plants will stand less cold here than the same variety would stand in California. He thinks that the intense heat night and day makes them softer and that the fall is not transitional enough to harden them off and prepare them for winter. Dr. Hirao, besides being the leading hybridizer of Japanese iris, is a collector of *Primula sieboldii*. I would like to send you a collection of 60 or 80 named varieties in exchange for other plants, if you are interested in this many. Be-



Forest and meadow dwarfs from the mountains of Japan. Shown life size on opposite page. (At top - L to R)

*Pyrosia tricuspidata*, *Lepisorus ussuriensis* (mountain roof fern), *Lemmaphyllum pyriforme* (bean fern), *Lepisorus onoei* (dwarf roof fern). (At bottom - L to R) - *Equisetum scirpoideum*, *Pleiothlasius pygmaeus distichus*, *Asarum kooyanum*, *Miscanthus sacchariflorus* (dwarf form). Among these plants are a rush, a bamboo, a grass, and epiphytic ferns that the Japanese use in container gardening.

tween Dr. Hirao and Ginko and me, plants are a sort of community property.

When Harold Epstein was here last summer, Dr. Hirao took him to Mr. Kubota's nursery in Tokyo. Harold really flipped over the hybrid gentians and I trust that you also will be favorably impressed. One of these plants is *G. septemfida* X *G. scabra*. The parentage of other gentian hybrids such as Shin Kirishima, Oba Kirishima, and Kumagama, I'll have to check. All of these gentians are, I believe, virtually unknown to gardeners outside Japan. There are also some unknown campanula hybrids.

I'm sure that I can find potted plants of dwarf nandinas, but if not, I'll be glad to grow them on for you. I'm not terribly enthused about them because many of the varieties are grotesque little mounds of stems with absolutely no leaf blades attached. Many others have distorted, crimped, and variegated leaf blades. I'm sure there are at least 200 named varieties here. [Many more of these four to six inch tall miniatures of nandina are perfectly proportioned in leaf, trunk, and branch. They are hardy wherever the typical nandina will grow].

Of *Selaginella involvens* there are easily 300 named varieties and they are more my cup of tea! They grow only about one half inch per year so that it takes years to obtain a salable plant. I'll try to find plants grown in soil, but except for the commonest varieties it will be impossible. The Japanese plant everything rare and valuable in live sphagnum moss. Surprisingly enough they all grow and do well with a little abura casu (ground rape seed similar to cottonseed meal) as fertilizer. This also is universal. I'm sure that the humid climate has much to do with success, because we could never keep sphagnum moss in condition to grow plants in California. It was always too wet or too dry. [See Correvon's *Rock Garden and Alpine Plants*, pages 54 to 62, for directions for growing alpine plants in sphagnum—the method he considered most effective in hot, dry climates].

We haven't done much nursery touring since returning to Japan and we are anxious to make the rounds. We toured the first in Izu a few days ago while we were looking at land. In Izu, the residents plant a small succulent, *Orostachys erubescens*, on the straw thatched roofs. At this season the plant tips roof tops with white spires of bloom six to eight inches tall. It is called tsumi rengai, or clawed clover (the little, spine-like leaf tips resembling clover).

Here we also found clumps of shortia in the leaf mold under pieris and rhododendrons, but roots were so spreading and sparse that I gave up trying to collect it. A sign on top of Mt. Amazi warned against eating box lunches under the eighteen foot tall forest of *Pieris japonica*. One person died, and a number of others were deathly ill from accidentally eating its blossoms which fell into their food.

A friend of ours, Mr. Kakimoto, lives on the Izu Peninsula, and operates

a nursery there. His place is about fifteen minutes by foot trail in the mountains from the nearest road wide enough for cars to pass. He raises small bulbs for a living and the genus *Oxalis* is his specialty and his main "cash crop." Mr. Kakimoto has an extremely rare and beautiful plant which, if you have anything like Japanese taste for plants, you would really treasure. I can't wait to grow it myself. It is a vine called *Hatsu yuki kazura*, or first snow vine, with evergreen leaves about one inch long, tough and polished. His plant is nearly fourteen years old and the stem is about one and a half times the diameter of a pencil and the total height about four feet. He has kept it cut back by propagating from it, but the strongest part of the top shows about ten inches of growth for this year. The entire new growth is flushed beautiful rose and pink shades gradually turning to creamy ivory, then finally to deep green with sparse pencil lines of ivory variegation.

The Latin name of this first snow vine is *Trachelospermum jasminoides* var. *sekida kazura f. variegata*. We saw the common *T. jasminoides* growing wild in Izu, and I've seen it often all through Honshu. It grows as a forest carpeter, rambling through weeds and grasses, usually in half shade.

Mr. Kakimoto grows a miniature scouring rush, *Equisetum scirpoideum*, in a pot deeply shaded by a bench. I grew the plant for two years in California and it never got over four inches tall in half shade where I kept it.

Another of Mr. Kakimoto's pets is *Aster pseudo-asagrayi*, a beauty of compact growth. It is called isoideru no giku, or hurried aster because it blooms in January and February, the very coldest part of the year here. I haven't seen the flowers but he says that they are deep blue [mauve in some soils] borne on almost no stem at all. My only concern is that it is native to beaches of southern Japan, so its hardiness may be questionable. The correct and current name for the aster is *Heteropappus hispidus arenarius*. This is just off the press!

[Following are some notes Mr. Craig made after browsing and buying mainly at the alpine plant nurseries of Mr. Suzuki in Yokohama and Mr. Kubota in Tokyo. These men are Japan's major growers].

Japanese specialists in selaginella dry the plants off in late fall. The plants turn brown and roll up into balls and at this time they are knocked out of their pots into wooden crates, like so many potatoes, and put under the house where they spend the winter, dark, dry, and protected. In the spring they are put back in their pots, watered, and soon start into new growth.

Mr. Suzuki grows the selaginella that you catalogue as "Japanese species." It is one of our favorite plants, Hari tatchi gani kazura in Japanese, wire vine in English, and *Selaginella sanguinolenta compressa* in Latin! Beside this variety, Mr. Suzuki has two others, unnamed, and the regular *S. sanguinolenta*.

The find of the trip was the rare and expensive *Selaginella sibirica*. It is found only rarely in Hokkaido, but Mr. Suzuki says that it is plentiful in Manchuria; Japan being only the fringe of its range. It looks like something off the moon.

I got two clumps of *Iris minuto aurea*. It is quite rare here, too, and does not come in any forms or selections.

The little *Orostachys warenge boehmeri* is a plant that I find irresistible. This succulent grows on rocks or any place you put it, and sends up three-

or four-inch high white spires. In leaf it is the Japanese equivalent of *Sedum 'Capa Blanca.'*

I think that you would like the *Melica onoei* grass. It is grown in shallow pans or trays, and the old leaf bracts are picked off by hand. When so grown, it looks just like a miniature forest of bamboo. The dwarf suzuki grass (*Misanthus sinensis* form) grows only to about six or eight inches. The regular suzuki grows about six feet tall with plumes similar to pampas grass, but more open and slender. It is one of the seven grasses of fall and the Japanese go all sentimental when the roadsides become covered with their silvery plumes, especially when there is a full moon. The dwarf form of *Misanthus sacchariflorus* is a grass of similar value. It is like a cane in miniature. The leaves are only a couple of inches tall and the fruiting stem stands only eight or ten inches high. It looks like it might be a nuisance if grown outside a pot. [Perhaps not. A typical six foot tall *M. sacchariflorus* spreads slowly]. Such plants are in demand here for bonkei and bonsai.

*Botrychium ternatum* makes a beautiful rock plant here, especially when grown several together. Plants four inches tall are probably older than you. [Living fossils]. They rarely increase and put out only one leaf a year. Some varieties spend the first nine or ten years of their life underground as saprophytes before breaking surface.

We were lucky in finding small grafted plants of the rare junome pine, a variegated form of the Japanese black pine. The name means snake's eye, as does the name junome applied to umbrellas made of wax paper. They are black with a yellow ring, like the eyes (so it is said) of the giant snake of Japanese mythology. Viewed from the tip down the pine has the same pattern forming a brilliant yellow band. Here it is used mostly as a pot plant. I plan to grow mine in the garden and train it into an interesting low form. In the garden such plants are extremely hard to place, but if well done it should be a conversation piece and a prestige item as well as a plant of great beauty, at least from a Japanese point of view.

You wrote about the introversion of Japanese horticulture. I agree that the Japanese have developed an astonishing variety of horticultural forms of their native plants. They never seem to discard any new plant that crops up no matter how grotesque. At Mr. Maeshima's we saw a very rare shibori, or crepe form of the Leopard plant [*Ligularia*]. Its leaves were distorted and like crepe in texture. If such a mutation should occur in the Western world, probably 99 out of a 100 gardeners would chuck it as being "stunted," "sick," or "unnatural." To the Japanese, such a mutation is viewed as truly a gift of the gods. According to their philosophy it couldn't otherwise have happened. To destroy it would be a sacrilege.

The Japanese are a sentimental race. They like food that reminds them of the mountains, the seashore, or of places and things glorified by the poets. You may be served a bamboo leaf and a single tiny fish on a big plate, but beautifully arranged. Gardens are the same. The landscape simulated is not of a foreign place, but of scenes familiar to the Japanese. The plants in all the famous gardens of Kyoto are not rare varieties and most all can be found wild in the immediate vicinity. It is the form these plants have taken with age that makes them so valued.

The wealthy class here by and large support the nurseries, or did until

recently when wages rose to the point where the lower classes are beginning to have some buying power above subsistence. There is as yet no real middle class in Japan. Recently, a middle class has begun to evolve and already adverse effects are beginning to show on horticulture as well as on various arts and crafts. During the Second World War, Mr. Suzuki actually went without food in order to keep his collection of plants alive and intact. Now, it is a common lament of the older nurserymen that the younger generation intends to drop scads of the rarer items and raise popular varieties cheaper and in larger quantities. So it appears that rare plant nurseries here are going the same direction as nurseries in the United States. Wealthy gardeners here are especially involved with raising and collecting oriental cymbidiums, raphis palms, and *Rohdea japonica*. Some plants of these are worth a fortune. We have seen six-inch pots of rare raphis palms going for \$45,000 each, and a fine rohdea valued at \$65,000!

[Japan is always having an attack of tulipomania over rare varieties of some native plant or another. But these prices are more understandable to me as an exaltation of the value Japanese place on transitory beauty, on the perfection that seconds and centuries bring to living things; stones, too. In America, a collector who spends a million dollars or more on a painting enjoys it as art and as an investment.]

Plants are expensive here, at least anything rare. Living and also travel costs and hotel rooms are about the same as in the United States. Japanese make about one seventh of what Americans make. They simply live hard, eat differently, and do with less. Prices for having a house built are the same as in California, but the quality of construction here is far inferior, and even skimpy. When we build a house here we plan to do much of the work ourselves.

This October we've been enjoying a seasonal delicacy called Mioga (*Zingiber mioga*). Knowing of your interest in culinary plants, I recommend it to you. It grows about two feet tall and looks much like the common ginger root which is used so extensively for seasoning here in the Orient. At this season the plant sends up three-inch cones around its base. If left, these cones bear a succession of cream-colored ginger flowers which are no great show. These cone-like spikes are delicious when sliced thin and tossed in a salad, used in soup (pour the hot broth over thinly sliced raw mioga and let it set a few minutes in the bowls before drinking), or in su no mono which is shredded vegetables in a sauce (one half vinegar, one half water and salt and sugar to taste). The flavor is roughly between ginger and onions, very pungent and quite delightful. I believe that it will be hardy for you there. Another plant that you should have is sansho (*Zanthoxylum piperitum*). It makes a bush or small tree if you let it go. Its young leaves are one of the most exotic spices in Japan. You simply drop them into hot soup and let steep a few minutes before serving. The ground seeds are wonderful on teriyaki, etc. It grows wild all over central Honshu.

Ginko and I went on a collecting trip into the mountains above Shizuoka. We were very pleasantly surprised to find iwa tobacco (*Conandron ramondioides*) growing wild on the damp walls of a canyon. It is usually found in deep shade or where it gets only early morning sun. In short, it must never, ever dry out. When happy it is very lush with shiny leaves to eight or ten



Don Normak

Favorite alpine miniatures of Japan grow among built-up stones in this bonkei (landscape garden in a tray). The photograph shows a portion of the landscape nearly life size. Upper left: the minute violet leaves of *Viola yakushimana*. Lower left: *Selaginella caulescens*, the "golden fern." Center: *Pseudosasa oyatarii*, one of the smallest bamboos. Adjoining the bamboo at 11 o'clock and 6 o'clock: mats of *Coptis quinquefolia*, an evergreen carpeter of slopes and outcrops in the Alps of Japan. Adjoining the bamboo at 2 o'clock: a dwarf *Nandina domestica* variety, carrying old lance leaves, winter-rusted at the edges. Far right, from bottom to top: the trunk and main branches of *Pieris japonica pygmaea*, a strange pygmy (perhaps a witch's broom) which bears tiny, thinly whitish urns along its branch tips.

Miniature container gardens usually do best in part shade, with daily watering in dry weather, annual pruning and thinning to balance the plant composition. During spring and summer, use a complete fertilizer the way a creative cook uses herbs; frequently and without fear, but with respect.

inches long and clusters of one-half-inch lavender bells. Iwa tobacco is quite rare here and highly esteemed by the Japanese.

On Mt. Kiso, we found two marbled gingers, *Asarum blumii*, with a large, pointed leaf, reminiscent of a caladium, and *A. kooyanum*, with a more rounded, blunt-tipped leaf, like a cyclamen. Collecting these asarums was as exciting as an Easter egg hunt. No two plants are alike in the amount or form of the marbling. [These species are even showier than *A. hartwegii* or *A. europaeum*.]

*Coptis quinquefolia*, *Cornus canadensis*, and *schizocodon* are the main constituents of the subalpine mat on Mt. Kiso, at places one predominates, and then another. They grow on exposed slopes as well as in the more shel-

tered places. [In American gardens, *copitis* and *cornus* usually require moist, woodsy conditions; *schizocodon*, always].

We climbed to within a couple hundred meters of *Pinus pumila* before getting caught in a snow storm so heavy that we had to turn back. We'll try again next year, but earlier. This timberline tree is a favorite of Japanese photographers and is of extremely slow growth in the mountains as well as in gardens. Trees two feet tall are old.

Yesterday afternoon we took a chance on the gloomy weather and climbed 1,000 meters up Mt. Ryuso, the tallest mountain within sight of us with the exception of Mt. Fuji. From looking at wild flower books, a rare plant which I had hoped to find was *Tricyrtis nana*, growing only three to five cm. high with little, upfacing, yellow bells and beautiful spotted foliage. About 900 meters we were lucky to find sparse patches of it in seed. We found that *T. nana* formed larger leaves of pale color in deep shade under bushes. I don't consider such plants typical. Most plants were in half sun and the better light tended to make them even dwarfer and bring out the foliage color. We were lucky, too, to find a colony of the rare dwarf fern *Lepisorus onoei* on a big rock. Like other lepisorus and the bean fern, it is an epiphyte and was growing in scant leaf mold on the rough surface of a stone.

There are many epiphytic ferns here in the mountains which will, I think, do well for you. They grow on stones or tree bark in filtered shade or half shade. Most of them should make good rock garden plants. If you have, or can get a little unchopped sphagnum moss it is the best medium for getting the epiphytic types established. Wrap their roots in it and pack them into crevices or spaces between rocks where they will establish. You can also wrap their roots in the moss and then tie securely to a rough-barked tree stump or limb until they take hold. Both the bean fern and the strap-leaved lepisorus are well treated this way. [Roy Davidson grows these epiphytes vertically on blocks of osmunda. I'm trying them in pots among heaped fragments of stone intersticed with leaf mold].

*Pyrrosia tricuspidata* is a distinctive 3-lobed fern that grows on northern slopes and there makes a thick mat of roots meshed with *Selaginella involvens*.

Because of our late start, we didn't make the summit of Mt. Ryuso. We saw a few plants of wild *Selaginella involvens* growing with their roots in a trickle of water. It was pitch dark when we reached the bottom of the mountain. While waiting in a small shop for the bus, the shopkeeper told us that the top of the mountain where the trees grew short and sparse had the rarest and most interesting plants, and that on the north side are cliffs and boulders covered with the selaginellas. We can't wait to get back up here.

Our last plant exploration of the year was at Joren Falls in Izu on Christmas eve. At Joren there were ferns everywhere—all larger growing types. On higher ground around the canyon was a sparse growth of bamboo to one inch diameter and some trees. Under these we found the rare *Rhododendron serpyllifolium* which must be one of the tiniest-leaved of all. Here it is called komi tsusuji or rice azalea. Bowers lists it as growing to four feet high, but with slight pinching at the crucial time you can easily keep it to under twelve inches indefinitely. It seems to form round, compact little plants which build up strength, then shoot up 16 to 18 inches, fall over, root, and repeat the process. On the cliff walls it gave a beautiful misty effect hanging to three

or nearly four feet, but it was never erect to this height. We also collected some *Goodyera repens* called dwarf mountain quail, and *Ophiopogon umbrosus*, the tiniest-leaved of all ophiopogons. Its big blue berries look almost out of place among its grassy foliage, which is quite open.

We found some calanthes which should be readily identifiable in flower. About six varieties are native to Izu. Choicest of all is *C. tricarinata*, the monkey mask calanthe with a brick red lip on a generous chartreuse green flower. Next choice is *C. striata* with pure yellow flowers.

After a frost-free fall, our winter at Shizuoka has come suddenly with a cold, dry wind from Siberia which freezes the ground and leaves four-inch pots looking bone dry in one night. My garden of pots (wintering in deep shade) has frozen solid and has stayed frozen for a week. I've covered many pots with vinyl bags and next week I'll build a frame and vinyl covering over all.

Indoors, for the time being, I find myself wondering at this fall's surge of activity. Rock gardening is a very new thing to me and it seems as exciting as sky diving, or going to the moon (neither of which I've done yet). More later.

Best regards,  
Jack

## REQUESTS BY MEMBERS

Will any member who is able to fulfill a request, please contact directly the person who has made the request!

Plants of any species of *Pinguicula*, *Hottonia inflata*, *Drosera filiformis*, or any other interesting or unusual bog plants hardy in New England. Will buy or trade, supplying Drabas, Dianthus, Penstemons, and Primulas. Mr. G. K. Fenderson, Grout Hill, South Acworth, N. H. 03607.

Plants of Japanese varieties of *Shortia*, *Mahonia repens*, *M. pinnata*, *M. brevipes*, *Helleborus lividus*, *H. viridis*, and *H. orientalis* var. *colchicus-punctatus*. Mrs. Howard A. Nelson, 3113 Brookwood Rd., Birmingham, Alabama 35223.

Ivan J. Donaldson writes, "Since seeing Billowy llaretta in the July, 1961 issue of the National Geographic magazine, I've been trying (unsuccessfully) to locate propagules of this Andean plant. Several correspondents listed its scientific name as *Asorella dispensioides*. Other plant students think the name has been changed. Can anyone tell me where to obtain the plant and instructions for its culture? Address: Ivan J. Donaldson, Fisheries Research Biologist, Route 1, Box 27, Stevenson, Washington 98648."

Please send your requests to Mrs. Sallie D. Allen, 18540 26th Ave. N. E., Seattle, Wash. 98155. For inclusion in a specific issue of the *Bulletin*, requests must be received by the first of the month, two months prior to publication date. It is impossible to acknowledge receipt of requests.

## PLANTS TO KNOW AND GROW

### SILENE PENNSYLVANICA

*Silene pennsylvanica* is one of my favorite plants for the rock garden or wild flower garden. It grows nearby, usually on banks in partial shade, but it is not easy to transplant. With careful digging, some smaller plants may be removed, but, since there is wide variation in color and size of flower, I find it best to take cuttings. The root is a long carrot shape, with smaller thongs coming from it, so I presume it would strike from root cuttings. But it is easy enough to detach one or more of the little side shoots. They root easily in a mix of perlite and peat. Will Curtis at Garden-In-The-Woods told me that if the tap root is cut beneath the crown one season, the plant will make many auxiliary roots and will thereafter transplant readily. But by taking only cuttings the original plant can be left in the wild; there are not too many of them left.

The plant, in case you do not know it, is a veritable bouquet of wonderful pink blossoms in May. Some are pale pink, others deep rose. Linc Foster has a clone he thinks might be a tetraploid as it is so large flowered and is a luscious shade of deep salmon pink.

I've planted *Silene pennsylvanica* in the rock garden with *S. virginica* and *S. wherryi*. They make a splendid show. Other plants are along the edges of the wild garden and there they combine very well with *Viola pedata*. In fact, they both enjoy the same gravelly acid conditions and are often found growing together. When they have finished blooming, the plant is rather untidy looking until the seed heads are cut off, then the foliage continues to be attractive.

I haven't grown *Silene pennsylvanica* from seed yet, but I presume it is as easy to get up as *S. virginica*; that is easy. Last summer I collected some pods from plants growing with *S. virginica* and *S. wherryi*, so I am expecting some interesting variants, or hybrids.

Virginia Howie, Millis, Mass.

### DODECATHEON PATULUM AND D. GLASTIFOLIUM

I wish to draw attention to two of our dodecatheons that seem to have escaped the attention of our gardeners and the press of our alpine and rock garden bulletins. This is not an exposition on these species as much as it is a question as to why in the many years past these two lovely plants of the Primulaceae have not had their due recognition.

Old timers will probably remember the days when Carl Purdy had a nursery where he sold native plants and listed both of these species. His nursery was located at Ukiah, California. In all these years I have never seen an article on these two species (Editor's note—See ARGS Bulletin for July, 1966, Vol. 24, No. 3, for article "Two Unusual *Dodecatheon* Species" by Laura Jezik, of Seattle.) although I have seen quite a few write-ups on dodecatheons, listing many of the other fine species.

*Dodecatheon patulum* is a rather short-stemmed species with oblanceolate leaves only a couple of inches in length. The flowers are white with a very conspicuous blotch on the tip of the beak. It is one of my favorites.



Virginia Howie

*D. glastifolium* has a stem about eight to twelve inches in length with ovate leaves of a medium green. These leaves are about the size of the leaves of *D. hendersonii*. The flowers are of the usual purplish-red, but by selection one can occasionally find a pure white, or some good bright red ones. Both species are as hardy as most of the others.

Both of these "shooting stars" are found in northern California. In the garden, they should have a fairly well-drained, humus soil that is a bit on the heavy side, such as red clay, or soapstone. In the area where these two species are found, there are several places where natural hybrids appear. Most of them favor *D. patulum* in the length of stem, with leaves midway between the two. The flowers are pink or rose in color.

I firmly believe that all who are interested in dodecatheons should add these two wonderful species. Congratulations to the ones responsible for choosing this genus for the emblem of the ARGS.

C. L. McDonald, Salem, Oregon

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PLANTS TO KNOW AND GROW—Under this title several short articles were combined in the January issue of the *Bulletin*. This composite article has resulted in more than usual comment and may well become a regular feature of future issues. In the current issue, we have again "Plants to Know and Grow." If you are happy with this method of bringing worthy plants to the attentions of our readers, and want the feature to continue, please send in short articles, even paragraphs concerning your own favorites. Write about some plant that you can recommend, that has been easy for you where others seem not too successful. The subject need be neither rare nor completely difficult. If you get pleasure in having it growing happily in your garden, tell our readers about it.

## NOT SO COMMON

MAJ. GEN. D. M. MURRAY-LYON, Pitlochry, Scotland

The plants I propose describing are not necessarily "new" but they are not as well known as I think they deserve to be.

My remarks about hardiness, and suggestions for cultivation will, perhaps, be of more value if the reader knows that my garden is on a southwest facing slope, about 600 feet above sea level in the Central Highlands of Scotland. The soil is acid, rather poor, gravelly and stony, and deficient in humus. This has been partly rectified by the addition of large quantities of peat and leaf mould. The annual average rainfall is 34 inches, and sub-zero frosts are by no means unknown.

I shall start with three members of the Liliaceae from Western China which do well in a reasonably rich scree in full sun.

*Allium beesianum* has bright blue, pendulous flowers carried in umbels on ten- or twelve-inch stems in June. It is easy and free-flowering and increases well. This species received a Certificate of Preliminary Commendation from the Royal Horticultural Society on 2nd September, 1965.

*Allium cyathophorum* var. *farreri* is a little taller than the previous species and has reddish-purple flowers in September.

*Allium mairei* (Syn. *yunnanense*) is smaller, being only four inches high, and produces pretty rose-coloured flowers in August.

Most, if not all, alliums are easily raised from seed and flower in three years, or so, from time of sowing.

Another bulbous plant requiring similar conditions to the alliums is *Anoiganthus luteus* from South Africa. It grows to about six inches high, and has clear yellow, funnel-shaped flowers in May. It seems to be quite hardy, having survived three winters in the open here in Perthshire. It is growing on the top of a scree wall, and it has flowered each year.

Two more bulbs for the scree are *Fritillaria karadaghensis* and *Romulea longituba alticola*. The fritillaria is found in Iran and Turkey (Furse 2423) and is only six inches high. The bell-shaped flowers are largish for the size of the plant, and are maroon with yellowish-green stripes inside.

*Romulea longituba alticola* is one of those plants with which the taxonomists have been having fun. It is sometimes known as *R. l. altissima* and has also been known as *Syringodea luteo-nigra*. It comes from the Drakensberg Mountains in Basutoland. The thin, green, rush-like leaves may eventually reach eight inches in length. The flowers, produced in autumn, are rather like neat little crocuses and are a good, clear yellow.

A new Lewisia hybrid which received a R. H. S. Preliminary Commendation in 1967 is *L. 'Phyllelia'*. It is a cross between *L. brachycalyx* and *L. cotyledon* hybrid. The pink flowers and the evergreen nature of the leaves take after the latter, while the shape of the foliage is very similar to that of *L. brachycalyx*. It appears to be sterile, but it is most floriferous, having flowered here in May and again in September. It has not produced any

offsets yet, and I have not tried root cuttings which I imagine might be a possible way of propagating it. Having only the one plant, I wintered it in a cold frame, so I cannot say how hardy it is going to be out-of-doors. In view of its parentage I think it should be all right. I planted it out last spring in a west-facing wall where it is now looking quite happy a week before Christmas after having already stood up to 17 degrees of frost.

*Gymnigritella suaveolens* is a natural hybrid between *Gymnadenia conopsea* and *Nigritella nigra*. My plants came from the Savoie Alps and they are growing well in a peaty bed in full sun. The flowers are a good, deep rose and sweetly scented. Happy in similar conditions, but with some mid-day shade, is *Lithophragma parviflora*, an attractive member of the Saxifrage family. Perhaps "I" should not be writing about a North American plant. American readers probably know much more about it than I do, and may say it is common and easy; here it is not. It has grain-like bulblets from which in early spring six-inch stems develop and these carry the starry pink flowers in April. Soon after flowering, the plant disappears below ground again where it remains dormant until the following spring. It is, I believe, a native of California.

*Gentiana pumila* belongs to the Verna group of gentians and is found mostly in the eastern Alps, including the Dolomites, usually on limestone. In my garden, however, it does not seem to object to the acid soil. It is very similar to the typical *G. verna*. The main differences are that *G. pumila* has a looser rosette, with longer, narrower, and more pointed leaves. The flowers are a little smaller, but a lovely azure blue. Conditions similar to those enjoyed by *G. verna* (rich scree), but, if anything, a little moister, seem to satisfy it. I give it a good dash of leaf mould. It is not as easy to grow in gardens as *G. verna*, I should say, but it is not too difficult. Here, it flowers in April-May, but at home in the Alps it will be under snow at that time and will probably not be in flower before July. Cuttings, I find, are rather slow to strike. My records show that it took two months in 1965.

*Aster uliginosus* (Compositae) is a most attractive little aster from Basutoland mountains, which has proved itself completely hardy here. Its specific name implies that it is a plant "of marshes," but here in Perthshire, however, it does not require a marsh to keep it happy. I have it growing well in two places. One clump is in a dwarf conifer bed in rather peaty soil with a little light shade around mid-day. The other is in full sun in a rich scree, but with its roots tucked under the north edge of a rock. When planting, I gave it a good handful or two of leaf mould. It is a shrubby little plant, perhaps a couple of inches high. The leaves are small and greyish and the flowers, up to two inches across, are an attractive shade of mauve. Its main time of flowering is June-July, but it carried a few flowers right into October. It may be increased by division or by cuttings.

I shall finish with plants which, because of their time of flowering, are of special value to the rock gardener. They bloom in autumn; even late in that season.

First—*Acaena microphylla* var. *depressa*, a carpeter for a dry, sunny place in poorish soil. It is a New Zealander and a member of the Rosaceae which shows in its tiny briar-like leaves of grey and bronze. It hugs the ground and roots as it grows. It is not as rampageous as some other members of the

genus, but it should not be planted too close to anything really small and precious. In my garden it lights up a flight of rough stone steps on a sunny October day with its bright red burrs.

Second—*Kniphofia galpinii* (Liliaceae) is a native of the Transvaal, and is quite hardy here in a really well-drained position in full sun. It has the typical grassy leaves of a "Red Hot Poker," but these are comparatively short, up to twelve inches, or so, in length. The flowers are borne on stiff stems and are bright saffron-orange. They are quite striking, and their value is enhanced by the October-November flowering time. It received a "First Class Certificate" from the R. H. S. in 1953.

Third—*Satureia repanda* (Labiatae) hails from the Mediterranean region, and is a low, twiggy, spreading shrub of about three inches high. As might be expected, a position in full sun, in well-drained, light soil is what it requires. Like its close relative, the thyme, it is very aromatic. A sunny wall sheltered from cold winds is probably the best place for it. The flowers, which have been likened to those of a white heath, are out in October. Cuttings taken in June strike with ease.

## GARDENING IN THE WHITE MOUNTAINS

MRS. INGE BARTHO, *Center Conway, N. H.*

Spring seems to come to our mountains every year at a different time, fluctuating as much as three or four weeks. Since fall came early this year, we do hope spring will be early, too.

Oh! this marvelous time, so long yearned for, when the ground comes up out of the snow again. The feel of it! The first looks at evergreens, hugging the rocks tightly where the heavy snow has pressed them all through the long winter months! Even if it snows heavily after this, one does not mind too much.

It is then that I start the search for the first breaks in the soil, mostly just heaved little spots. Coming out of the snow, as it melts around them first, are the Drabas. They are the first to bloom, too, their little yellow heads looking like small earthbound suns shining up at one. They are really my best friends. (I do not include small bulbs, etc. in this, as I have none in my rock garden). Drabas are so cheerful, dependable, and pretty. They are classified as just simple plants, but I feel that we need them here. They never leave us.

Drabas can stand the changing weather wonderfully. Here it is warm one day, icy cold at night, and all kinds of weather the next day, ranging from rain to snow, from warm to cold. Many a finer, more sophisticated plant will not take this. It is my experience that most of my losses come at this time of year. One day a plant will bloom, looking wonderful, and the next, after a cold night, it is brown and dead.

Next come the Anemones, together with Arabis, making the garden a place to visit often each day. As there is no longer the threat of snow or nights too cold, everything starts to come up fast and bloom. There is a riot of color from mid-May on, and it gets lovelier and more

cheerful day after day. By mid-June the garden is at its peak. But in a very special respect the best time for me seems to be at the very beginning. Then there are not too many plants and flowers to obstruct each other. The main reason for this feeling is that I am just "hungry" for the looks of garden and plants.

The fast changing temperature conditions around our place cut down heavily on the material that can be grown here. All hardy Anemones, Arabis, Aquilegias, Alyssums, Phlox, Arenarias (really a pest as I have a native one which covers paths in the vegetable garden), Dianthus, Phyteumas (not *P. comosum*, for it died), Potentillas, Oenotheras, and some ferns and many others always come up. But nearly any other kind is a gamble. I shall not make a list of those plants with which I have success, nor one of failure, either; they would be too long. There are hundreds of plants in the garden, at that.

For soil I take the best loam I can get around here and mix it with sharp sand and oyster shells and lime for one group; chicken grit for the other. Our soil here is very acid. Real good loam is hard to get as most coverings of good soil are mighty thin and have yellow sand under them. New Hampshire is really built on rock and sand around here. Perhaps the lowlands are better off.

It is sad that we have no natural outcroppings on our ground, and so we have had to drag rocks of all sizes into our rock garden's planned places. Sure, it was very hard work, but we laughed a lot as the many funny situations occurred while building the different sites. Big rocks we moved with a crowbar, smaller ones on a homemade wagon. This wagon might interest some of you. My husband built a platform, made two axles and put wheels on them like you see on children's carts, low, sturdy. The front axle is moveable on a bolt, and a heavy triangle was made at the local smithy to fasten the shaft to. This we can hitch on to the Scout and so transport rocks easily from anywhere the car can go. This way nearly all the big rocks were transported into the garden and then heaved by crowbar into place.

To find rocks that looked like real outcroppings we would have to go too far. Of the rocks near us, all seemed to have been made of different combinations, and not many could be found that were flat. So we had to do the best we could. The result was not at all what we had hoped for, but I try to "cover" the rocks with plants and so hope they will look much better. All this has taken time, especially since plants seem to grow but slowly the first two years, after which they grow at a faster rate. The same is true with the miniatures. It must be the climate which prompts this. Plants of all kinds alien to this region have a really hard time getting used to our conditions. The natives we transplanted from all around Mt. Washington need a year at least to get going again. All plants here need a lot of watering in the summer. The hot sun and slight winds forever going over our place dry leaves and soil out rapidly. We, the humans, are very happy about the little breeze; it cools and refreshes us always.

Plants from Mt. Washington like the east side of my slopes and plenty of moisture. It took us a long time to find out how we should treat them successfully. Now, except for the Kalmias, all are happy in our garden and bloom profusely.

I do not give food in any form of fertilizers to my plants. But wood ashes

and a yearly dressing of chips seem to please them. Primulas do get some bonemeal. And I often wonder if the Gentians would like something, but what? On the other hand, the charm of alpines is their smallness, combined with the perfectness of flowers and foliage which for full appreciation calls for close scrutiny, for one to get one's nose and eyes close to the ground! Bees and honey collectors like them too as do many other insects that are not liked by us, (though I never use sprays or poisons). Dewdrops and the cute little Ladybugs when on the plants make them into real jewels.

The best time in my garden is still in the early mornings, between five and six o'clock. Then the birds sing their sweetest, no human sounds disturb nature's melodies, there is dew on every plant, insects hum and are busy, the soil is moist and soft, stones and pebbles have a moist sheen, dewdrops take on all the hues of the rainbow, and a myriad of gems are around us. The sun slowly warms the garden and the fields and good, delightful smells waft through the air. Each year I enjoy this with gratitude and in the long winter months I am reassured and have many happy thoughts for the coming year. The very early morning is the best part of the day. Later on, I get my hands into the soil, a marvelous feeling no matter if the hands get dirty. They have to stay this way more or less through the summer with broken fingernails, craggy skin for which no amount of washing and creaming seems effective. But, I do not mind for I love all that goes with gardening. Every free moment I am outside and, it seems, I never go out without finding something to do. There is never time enough to get all done that is planned for either the day or the season. How good this is; it lets one off with the knowledge that there is much more to plan, to do, enjoy (never mind the failures, for the day comes when one can laugh about them). There is much to talk about and dream about. This knits the days and the seasons together and lets one look forward to the "next" always.

Then there are many times that I need advice, and I get it too, and it seems that it is very good, yet often my plants don't like it. Then I have to do my own trying. That is really fun, but still there are many failures. But in the end it teaches me a lot. Raising plants from seed is another very interesting and time consuming activity. I simply love this. My failures run into astronomical figures because, I am sure, I try too many things that have no place here in the north. But I always hope anew. The seed boxes are fun to watch for I am always on the lookout for the tiny greens to show up. Wow! What if they turn out to be grass or some weeds? This happens often; perhaps the wind has blown in the wrong seeds.

The saddest part to me is the loss of plants given me by other gardeners. These losses hurt! Because, every time I look at a plant given to me I also see the person who gave it to me, and that is a satisfactory picture always and a real pleasure, too. Plants purchased do not have this appeal, for they are impersonal. But, if one may say so, I love all my plants and worry about them constantly. What gardener does not do this?

Perhaps I should have written about how, when, and where to grow specific plants. But, if you ask me, it seems that the same plants react differently in different locations. The rules for soil and other pertinent matters can be found in books, yet they must be adapted to each one's locality. Even here in the White Mountains there are differences. I have noticed that Mr.

Lennox in Jefferson (on the north side where I am on the south) can grow other plants than I can. How much difference is there between lowland and mountain, then? And still, it is amazing how well plants can adapt themselves to conditions that are very alien to them.

Gardening is a thing in life which embraces all feelings, sorrow for losses, delight, fun, wondering and waiting, speculating if one beats nature at her own rules, pride in accomplishment, and best of all, always, satisfaction. This goes on from one year to another, never lessens, but always to more intense heights.

Oh gardening! You most satisfying of all occupations! You bringer of friends, and of beauty!

## PLANT HUNTING IN MONGHOLIA

ING. VLADIMIR VASAK, *Pruhonice, Czechoslovakia*

### 2. Chenteian Alpines Part I

My pilgrimage for alpines of the Chentei Mountains was not only very interesting, but no less romantic. In Mongholia, these mountains are called "Chentijn nuruu" and the part where the highest peak, Asralt chairchan, is situated is called "Centijn nuruu" (The Small Range). The entire Chenteian mountainous area is, from a geographical point, the southern continuing of the mountain system known as 'Apple-tree' Ridge, coming from the territory of URSS.

Forests of Siberian Pine, *Pinus sibirica* (Rupr.) Mayr, dominate the area where I collected plants and seeds. Sometimes there was larch mixed with the pine. The alpine zone (1800 to 2200 m.a.s.) is characterized mostly by mountain tundra with lichens, interspersed with alpine meadows with various *Carex* species, and with a variety of low-growing shrublets. Above 2200 m are mostly large, stony fields without any life relieved by small areas of lichens and an alpine vegetation. In higher mountain valleys are characteristic formations of shrubby birches, *Betula fruticola* Pall. and *B. gmelini* Bunge.

We started in our small terrain car on September 5th, 1966 from the main town of Mongholia—Ulaan Baator. We were only a small expedition of the Botanic Garden of the Czechoslovak Science Academy and the Mongolian Academy of Sciences. Going with me into the Chenteian Mountains was Dr. Sodnomdorz, the veterinary who works in the Dept. of Pharmacology at Ulaan Baator. He was interested mostly in some of the Gentianaceae.

Because the promontory-like ridges of Chentei reach nearly to the periphery of Ulaan Baator, we could not use the car for the greater part of the way. We drove through the 70 km wide valley of the Gacurt River (Gacurt is the Mongolian name for spruce) and later climbed to the pass which might lead us to the valley of the river Tereldz which has its source under Mt. Asralt chairchan. Even the name of the river Tereldz is in relation to vegetation. It is named after *Rhododendron dauricum* L.

Before the start, those at the Academy in Ulaan Baator tried to dissuade me from this proposed way to Asralt chairchan because of its

relative inaccessibility, but for me the plants of this area were too attractive.

At our first stop in the pass, when Dr. Sodnomdorz and I tried to climb and visit various parts of the high hills around the pass, Dr. Sodnomdorz looking for his "dygds" (this is the Mongolian name for various Gentians and for *Lomatogonium*), and I for my small alpine plants, I have seen my far-distant aim—the peak of Asralt chairchan. Now I could see that the Mongolian "chairchan", i.e. pretty, nice—is well used for this peak. Among the thin Siberian pines I saw the regularly conic top of the mountain protruding from the large group of bluntly rounded lesser peaks not covered with forest. From this distance the view of Asralt chairchan was truly magnificent. Its altitude is 2751 m.

Around me on the stony ground were to be seen formations of "urgest arca" (*Empetrum nigrum* L.), the circumpolar tiny shrub, widespread on the peaty soils of cooler areas in the Far North on nearly all mountains. In Europe and Asia it is represented by var. *typicum* Koehne, and has black fruit; in North America mostly by var. *purpureum* DC.; and in the Chilean Andes by var. *andinum* DC. Besides this *Empetrum* there was growing here *Bergenia crassifolia* with fleshy leaves which were much smaller here than in plants I saw in the mountains near Baical, or in gardens. I brought seeds of this *Bergenia* and I should like to introduce this small-leaved variety into our gardens. Another distinct, but not rare species, was *Ledum palustre* L., with fragrant leaves, forming shrublets under the Siberian pines. Even our well-known *Vaccinium vitis-idaea* was present here, but with only a little fruit.

On the first day I collected many interesting plants. Of these which we have known from the area of the Gobian Altai were the gray button-shaped *Androsace incana* Lam., the purplish-red *Dianthus versicolor* Fisch., the rare miniature *Iris tigridia*, and two *Sempervivums* similar to *Umbilicus spinosus* DC (*Orostachys spinosa* C.A.M.).

Many of the alpine gems were quite new to me though they are widespread in the Mongolian north and in the mountains around Lake Baical in URSS. One of these was *Anemone crinita* Jus., here full of ripe seeds. It is closely related to our well-known *A. narcissiflora* L. It is referred to sometimes as *A. narcissiflora* L. var. *demissa*. This Anemone is called in Mongolian "buguin cagan ceces" which could be translated as "White Hart's flower," or even "The White Pasqueflower," in Mongolian "cagen irgoj." In relation to the first name there are interesting details. Dr. Sodnomdorz told me that evening in our tent that *A. crinita* Jus. is a strong afrodisiacum as known in Tibetan and Mongolian medicine. It is said that harts, and perhaps roebucks and elks, eat this anemone in the fall though in the spring and summer they neglect it. In the old days in Siberia it was used in the preparation of poisonous arrows.

I have met three species of Gentians; *Gentiana macrophylla* Pall. and *G. decumbens* L. are both called in Mongolian "ucher dygd", i.e. "The Big Gentian" or "Cow Gentian"—it is for their strong growth as these gentians are large plants. *G. macrophylla* is not too decorative, as its flowers are all nearly hidden in green leaflets under their calyxes, but *G. decumbens* seemed to shine from a distance for its pure blue flowers were brought together in many dense inflorescences. This is a well-known alpine, but

*Orostachys spinosa* (L.) C.A.M.

Vladimir Vasak

mostly only in literature. In gardens it is met with but occasionally. It is variable in its extensive range, inhabiting mountains from the Himalayas to Siberia and is often known under the synonym of *G. mongholica*. The third gentian, *Gentiana barbata* Froel. is a semi-parasitic species, annual or biennial, 20 to 40 cm in height, closely related to the showy European *Gentiana ciliata* L. It is a desirable species for the rock garden as it flowers in autumn and is very decorative, but it is said to be very difficult even as is its European counterpart which has not yet been established in gardens. Perhaps it is as well—we cannot have all such beautiful alpines at home, and if we want to see some of these we must climb up into the mountains. For this Gentian it would require too long a trip. So we must now be content with only one of these three Gentians in the garden—*Gentiana decumbens*.

I have seen many less attractive plants this first day, for example; scarce specimens of tall *Pleurospermum uralense* Hoffm. (Umbelliferae); *Tanacetum vulgare* L., a shorter plant than the one in Europe and with larger composite flowers; *Vicia cracca* L.—let's stop here for there are many more interesting plants to write about for alpine gardeners.

In light larch forests were scattered about small meadows where the shrub *Spiraea alpina* was growing in abundance. It has an attractive epithet in "alpina" but it is too large a shrub for the rock garden. In the same meadow, I saw the tall *Delphinium cheilanthes* Fisch.; *Astragalus propinquus* Schischk., which is the Asiatic counterpart of our European *A. penduliflorus* Lam. (Syn. *Phaca alpina* L.). This Asiatic plant is much larger and less decorative, its flowers are smaller and dull, greenish-yellow in color and I cannot recommend it as a desirable plant. But it is appreciated highly as a utilitarian plant. Its mighty roots are often used as a universal medium in Chinese medicine. Previously these roots were exported in

quantity from Mongholia to China.

Another Astragalus of the first day was *A. frigidus* Bunge, which from its name should be a nice plant, bringing to mind mountains, the snow and ice on highly situated slopes—the true paradise of all dwarf and beautiful alpines. But, not so! This Chenteian *Astragalus frigidus* is relatively tall (to 40 cm) and in no way resembles our nice, dwarf Astragali from the High Tatras. Our own specimens are similar in many respects to *Hedysarum obscurum*, and are very fine alpines, retaining their small size even in rock gardens.

One Astragalus found there was very desirable—*A. fruticosus* Pall., a member of the subgenus *Cercidothrix* Bunge and section *Xiphidium* Bunge. It grows on rocks, in ravines and at the edge of forests, and is a very low-growing shrub, usually 10-30 cm high, with purplish-violet flowers in racemes and it has woody fruits. Its blooming period is in June but it often reblooms in September. *Astragalus fruticosus* has a large range and is wide-spread from Altai over all of northern Mongholia to the area of Jakutsk and on east to the seacoast.

On this first day I saw my first fertile Siberian Swiss Stone Pine, *Pinus sibirica* (Loud.) Mayr. They are fine, majestic trees with fragrant needles and smooth, flexible branchlets. The younger branches are silky and yielding. Fruits of this pine are one of Nature's great gifts to Siberia and Mongholia. Cones in outline resemble long bananas and enclose among their bracts the sweet and edible nuts which are very oily and of excellent taste. These nuts are one of the distinct components of food of many animals; squirrels, burunduks (*Eutamias sibiricus*), sobols (*Martes zibellinus*) Clark's nutcracker (*Nucifraga caryocatactes*); even people eat these nuts as a delicacy.

As evening came, we were sitting about our camp fire, drinking the true Mongolian tea, which is green, and eating our dinner prepared for us by our driver and was of very good taste, given to it by the best cook—our hunger.

Next morning (the 6th of September) our tent was stiffened with frost. I had no joy from this frost as the plants were quickly losing their vivid green and were turning more to the typical fall red and brown shades. But later the day turned nice and sunny as we hastened to our far mountain. But we could not drive too far with our car. The mountain river, Tereldz, did not permit us to cross to the other side for in these mountains there are no bridges. As it was necessary for me to cross to continue on my way, I parted from my two Mongolian friends, promising to return in three days. I packed the most necessary things into my rucksack, mainly numerous packets for seeds and some plastic ones for plants. Then I started alone to find my way further into the mountains.

The Tereldz River curved closely amongst slopes and as I did not wish to cross it here, I squeezed along rocky banks above the water. Here, in one place I saw for the first time the whitish flowers, dotted slightly with blue, of *Gentiana algida* Pall., here called "cagan dygd," the White Gentian. It is one of the important plants in Mongolian medicine and is found in the mountains of Turkestan, Siberia, Mongholia, China, and Japan. In moist crevices in rocks I found our well-known *Viola*

*biflora* L. with its characteristic kidney-shaped leaves and yellow flowers. But here it was in fruit only. Far before me I saw the high, naked ridge running to Mt. Asralt chairchan. The way was very slow for I disliked taking the too cold bath in the Tereldz.

Finally I decided to cross the river. At the first two fords I made a "ceremony of undressing and dressing of pilgrim." It was very difficult to go; the river was rough and the stones in it gliding, and my ankles were much less hard than the stones of which are built the Chenteian Mountains. Because of this, beginning at the third ford, I went into the water fully dressed. The river was not too deep at this place, the water being only up to my knees, sometimes higher, but it had the temperature of a well-going refrigerator. After that I walked all day in wet clothing, nevertheless it helped me to draw nearer to the majesty of Asralt chairchan where I hoped to collect the tiny gems.

In the neighborhood of one ford, I found one very nice plant, still unknown in culture—*Ephedra monosperma* C.A.M. This plant could be an excellent alpine for the rock garden and not less suitable for bonsai culture as it is a miniature shrub, often with the "trunk" as in true trees, at most 10 cm high, with dense, horsetail-like branches and with very decorative red fruits. It is a fantastic shrub resembling a fossil plant. Hanelt and Davazamc (1965) states that *Ephedra monosperma* C.A.M. is identical with *E. sinica* Staph., which grows to the south of the area of *E. monosperma*.

In several places in the valley I was in, I noticed a very strong scent of some *Valeriana* species. I sought for the source of it and finally found it although it was not a valerian. I found it to be two different species of *Patrinia*, somewhat damaged by frost in those parts above ground, now dried by the September sun. The first one, lovely and not very high, was *Patrinia sibirica* (L.) Juss., and the second, only a little higher, was *P. rupestris* (Pall.) Durf., both inhabitants of stony slopes of the steppes to mountain zones. *P. sibirica* even climbs to the alpine zone. Both have nice, clear yellow flowers, rather small, but they could become good alpines for the garden.

In the same valley, I collected a small but nice yellow-flowered *Saxifraga hirculus* L. and the common *Allium schoenoprasum* L. The latter in solitude and not in clumps as we know it in our gardens. These specimens were a little different from the European ones, smaller and with a more vivid colored flower. Sometimes I met even the white asterisks of *Leontopodium campestre* (Ledeb.) Hand. Mazz., still very elegant though near its vegetative end. In some spots in yellowish clumps of low grass were shining the pale blue eyes of *Lomatogonium carinthiacum* (Wulfen) A. Br. (Syn. *Swertia carinthiaca* Wulfen). It makes colonies of tiny plants up to 20 cm high and the small leaves are not to be seen under the abundance of flowers. Very valuable is its late blooming period. It grows mostly in moist places. I saw but one plant of *Rubus arcticus* though far to the north in the area of Baical it is not rare. This is one of the few species of this genus that we may meet in our gardens.

One of my favorite plants (they are mostly *Astragalus* and *Oxytropis*), *Oxytropis deflexa* (Pall.) DC. was growing near the river. It is a small

plant with stems only to 10 cm high and with pale, bluish-lilac flowers in clusters, followed by pendulous pods full of olive-brown seeds. It is not the most showy of the genus, but it is interesting. It grows in the mountains from Altai to the east, nearly to the seacoast.

As the day neared its end, I began looking for a suitable camp spot. At one of the last fords, I saw in the clear waters of the Tereldz a nice fish of about five kg (*Hucho tajmen*), and in one smaller pool, edged by sphagnum bogs were very nice Siberian trout waiting for their prey. But let us stop this short notice about fish—I had no time for any fishing!

I climbed quickly through the valley of a creek which flowed into the Tereldz to find some suitable place for spending the night and there prepare a satisfying quantity of wood for my camp fire. This fire would have to burn all night for I had not with me any tent or sleeping bag. Without them it is easier to climb in the mountains and there is more room in which to carry back plants and seeds.

I was convinced that, though I had no detailed map, I was now on the slope of the ridge which might lead me directly to the main massif of Asralt chairchan. Finally, I found a nice place to spend the night amongst many sterile Siberian Swiss Stone Pines where there was one tree which had an abundance of fruit. Some years before Mongholian hunters had had their camp fire under this tree and now the damaged tree, feeling that the end was near, had produced plenty of seeds so that now I had a good reserve of edible nuts for the coming night.

*I did not sleep all the night. I was very excited by my chance of visiting tops of these mountains and the finding of some plant gems, and the air was cool this night, with moonlight, and the hot sparks of larch wood, springing far from my fire, gave me not to sleep. I prepared tea, wrote some notices in my diary and was waiting for the light. It is a nice experience and sensation to know that a man is alone in these phantastic mountains to spend night with camp fire, to loose surplus fat of the urban civilization on the little distinct mountain paths, to listen to soft crackling and sizzling of fire and far voice of stream below in gorge.*

\* \* \* \*

**CONRADINA AGAIN**—Mr. Leonard J. Uttal, who now lives in Roanoke, Virginia, writes, "I am glad to see Dr. Wherry so active. I can get him *Tiarella wherryi*, and plan to tell him so. The problem is that most botanists today list it as a variety of *T. cordifolia* (whatever it is called, *T. wherryi* is a distinct and beautiful plant). His recommendation of *Conradina* also interested me. We have one slope of the Cumberland plateau in the extreme southwest corner of Virginia. Chances are not great that there are many Cumberland endemics there, but the area does not seem to have been thoroughly searched. It is hard to get to, but I hope to do some scouting out there. I know the Florida Conradinas very well. I would not dismiss them as not hardy. Many North Florida plants can take rather severe winters since they are geologically of continental origin. They are not in cultivation, but should be. They are beautiful, fragrant plants."

## GARDENS AND PLANTS IN EUROPE

OWEN PEARCE, *Orinda, Cal.*

Europe is many things to the many people who tour it and are observant. Because of its cultural age, resultant history and ways of living, its climate, its latitude and other conditions all varying so greatly from the same aspects of our own country, the American visitor to Europe has many vitally absorbing subjects to command his interest. Therefore, in order to obtain the greatest value and enjoyment from such a journey, he must eventually pinpoint the subjects he appreciates most and concentrate his deepest attention upon them.

On my recent tours, with my wife, two interests were paramount: 1—the picturesque character of the countries, and this embraced many facets of discovery; old homes, churches, countryside roads and scenery, living conditions whether in the city or the country, and 2—the growing of plants, particularly those related to, or members of, the *Ericaceae*, and those classified as "rock" or "alpine" plants. The interest of this story, of course, is in the plants, and since most of my opportunities to see and talk about them occurred in England, it is mostly of England that I will write. Also, since the interest of the readers of this *Bulletin* lies in rock plants, I will make but short mention of the rhododendrons and azaleas that it was my joy to see.

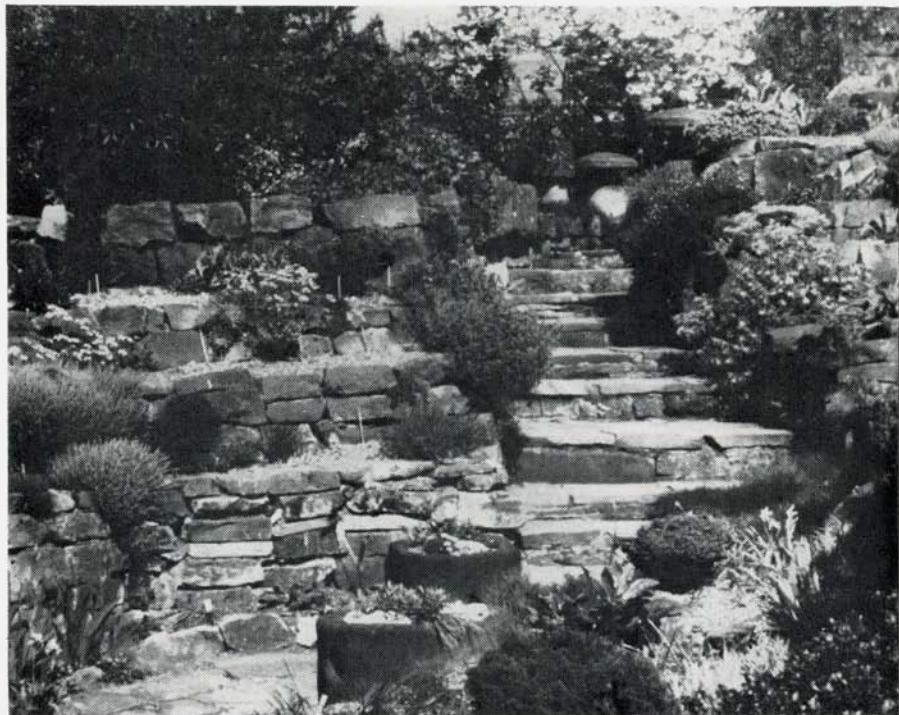
We arrived in London on our first trip (in 1965) in time to see the Rhododendron Show, held by the Royal Horticultural Society, in its Hall, on the first of May. While there was a good display of flowers, I felt that the number of varieties, both species and hybrids, which were exhibited was quite limited. This was because so many were not in flower due to cold weather. However, in another room in the R. H. S. Hall, I found an exhibit of rock plants, and here I was more excited, for there were many plants exhibited as only the English can. The most interesting plant, to me, was *Phyllodoce alpina*. I was familiar only with *P. breweri*, native to our California High Sierra, with its almost magenta, open flowers. *P. alpina* has a creamy flower, urn-shaped, very unlike our own—more like a *Menziesia*. This plant was not labeled, but I obtained the information from a courteous visitor, who informed me that it was a "Phyllo-do'-che." It took me a bit of time to realize that it was "Phyllo'-do-sy"—the way I knew it. I had many later experiences in adjusting my habits of pronunciation to those of the English.

In Saville Gardens, in Windsor Great Park, I saw the famous Rock Garden Wall; an ancient brick wall with a beautiful rock garden at its base, having shrubs hanging over the wall from the top. Though the season was a little too early for the full effect of blossom, there were flowers on *Iris lacustris*, *Rhododendron hanceanum nanum*, and *Viola saxatilis*. In the gardens were gorgeous borders of *Primula polyanthus* hybrids, tulips, wallflowers (*Erysimum*); and a lazy little stream bowing through a small marshy area was bordered by large yellow flowers of *Lysichitum americanum*, the skunk cabbage of our Pacific Northwest.

Leaving London on our tour of England, the first point of interest was Wisley, the garden maintained by the Royal Horticultural Society. It has many aspects of plant life to study. Mr. Kenneth Aslett, who is in charge of the famous rock garden, has greatly changed its layout during the last few years; he is very proud of it, with good reason. The garden is located on a slope leading upward from a wide strip of lawn to a row of trees at the top. The rocks have been "planted" naturally, and the rare, well-grown plants are so beautifully placed that the casual observer never realizes that the planting has been done so recently. An attractive small stream courses down through and among the rocks, in little falls, surrounded by pockets of colorful, unusual, water-loving jewels. The plants most difficult to grow are to be found in the Alpine House; a cold, or unheated, greenhouse. Here we saw rare saxifrages, androsaces, campanulas, asperulas, and many other genera, all happy and healthy, many of them in radiant bloom. Among these genera, particular notice was taken of *Androsace imbricata*, *Asperula arcadiensis*, and *Campanula aucheri*. Probably the most unusual and beautiful of the plants was *Corydalis cashmeriana*, whose flowers, pastel blue in color, seemed to be tiny bluebirds hovering over the plant. There were lewisia in quantity, and these I shall mention later. The day ended all too soon, and we had to leave Wisley without seeing many parts of the garden which would have been of interest.

In the Cotswolds we visited Mr. E. B. Anderson, past president of the Alpine Garden Society, whom I had met in San Francisco and Reno a few years before. He lives at the Old Schoolhouse in Lower Slaughter. Isn't that a nice old English address? At one time he lived to the south of London, where he had quite an extensive rock garden. In his new location, however, he has but a small garden, where he raises only the rare and difficult plants, and he is a master hand with them. Among those which we particularly enjoyed were *Anchusa caespitosa*, *Tulipa maximowiczii*, *Ranunculus amplexicaulis*, *Gentiana acaulis*, and *Fritillaria meleagris* 'Aphrodite.' *Calceolaria darwinii*, notoriously cantankerous, or "miffy," as the English say, was growing freely in a bed out-of-doors. I was interested in seeing a plant he called *Polemonium confertum*, a name which is a synonym of *P. eximium*, of the California High Sierra Nevada. Mr. Anderson's plant was grown from seed collected from the Rocky Mountains, but our *P. eximium* is truly much superior to it.

During our 1967 trip, we again had the pleasure of visiting Mr. Anderson, but it was a couple of weeks later in the season than on the first trip. For this reason there were totally different flowers to observe. *Hebe macrantha* was a most outstanding dwarf shrub, with its large, white flowers. *Eccremocarpus scaber*, a vine, with long, tubular, red flowers, tinged yellow at the open end, was a lovely sight against the old stone wall of the house. *Primula 'Inverewe'*, a candelabra type primrose, with brilliant, brick-red flowers, and *Alstroemeria pelegrina* were both interesting. Two plants, of which Mr. Anderson was proud, however, were *Penstemon scouleri*, seed of which he had obtained from Margaret Williams, of Reno, Nevada, and *Aquilegia vulgaris dumeticola*, a North African plant, if I remember correctly. The flowers of the columbine were large, short-spurred, of good substance, with blue petals and cream-colored



Entrance to Roy Elliott's rock garden in Birmingham, as seen from his living room windows.

Owen Pearce

cups; altogether very beautiful. In order that it produce seed as true as possible, Mr. Anderson had removed all other columbines from his garden.

Next, to Birmingham, where I was kindly received by Mr. Roy Elliott, who had just recently returned from a visit to the United States, where he addressed the ARGs annual meeting. He and his wife were very cordial and he showed me through their own private rock garden, which impressed me no end. The visitor has really to admire his accomplishment in building a great work of the plantsman's art under such adverse circumstances. Being located in the heart of an industrial city such as Birmingham, with its fumes and soot, the gardener has three strikes against him before he starts work. This garden is only some twenty years old, having been started since the end of World War II, and the illustration can only indicate a part of what a magnificent accomplishment is his. The picture cannot bring to the fore the rare and difficult-to-grow plants he is successfully cultivating. Among those which especially caught my eye were *Salix reticulata*, *Phyllodoce aleutica*, *Petrophytum hendersonii*, and the androsaces. The willow is an absolutely prostrate form, with heavily-veined (reticulated) leaves and is a beautiful plant, even without the catkins. With the abundant catkins standing stiffly erect above the leaves, it is even more striking. Inside a cold house in the garden is a rock wall "cliff," of tufa, and in this wall are grown plants which Mr. Elliott says he could never keep in other locations.

Mr. Elliott has spent much effort in collecting lewsias, which are all of them, endemic to the western part of the United States. The English experts have taken this American plant (mostly *Lewisia cotyledon*, including its var. *howellii*) to their hearts and have done wondrous things with it. Their hybrids are extremely floriferous and they have developed gorgeous deep reds of a size never seen in the homeland. A selected cultivar named 'Comet' is particularly fine. In 1967, I had the opportunity of visiting Will Ingwersen's nursery in Kent, and there I saw a whole greenhouse, perhaps fifty feet long, with all of its benches completely submerged in a fairyland of lewsias in full bloom—a sight which completely took away my breath!

Another sight in Mr. Ingwersen's nursery, which made me drool, was of a mature *Daphne petraea* about ten inches high and as much across, completely covered with blossoms, and, if such a thing can be, smelling more lovely than it looked.

One of the most pleasurable visits in England was at the Waterperry School of Horticulture for Women, not far from Oxford. Here, Miss Valerie Finnis, who has charge of the rock garden work at the school, has developed a very beautiful rock garden, in which many plants are grown to perfection. *Solanum crispum*, although not a rock plant, but a vine, was very beautiful in blossom, and a hybrid verbascum, *V. 'Letitia'*, covered with yellow flowers, made a plant very desirable to have. A large group of Russell's lupines made my mouth water, for this wonderful flower cannot be grown in Central California, to the regret of many of us.

One other plant, of which mention must be made before we leave England, is the pink form of *Thalictrum dipterocarpum* which I saw at Hidcote Manor in the Cotswolds. Although definitely not a rock plant, for it grows to five or six feet, nevertheless it struck me as being one of the most beautiful of all the flowers I saw on my trips. It has, in the first place, unusually large flowers, and they are of a most luscious beige-pink color, if there be such a term. This plant would certainly be a show piece in any garden.

From the Cotswolds we went on north to Edinburgh where the season caught up with us, so to speak. Although it snowed during the first night of our stay there, we found more plants blooming than we had seen heretofore. Actually, we were told, rhododendrons flower earlier in Edinburgh than they do in southern England.

Days can be spent in exploring the plants in the Royal Botanic Garden here without reaching the end of interest. I had two days observation and spent them to good purpose in going through both the rock garden and the rhododendron areas. Miss Winsome Muirhead gave generously of her time in conducting me around the rock garden which, I am sure, must be the most beautiful in existence. It has age, climate, and knowledge working for it, plus the fact that it was laid out with great foresight and an eye for beauty in the first place. Constructed with wide, winding paths, huge rocks and small ones, rare plants and those not so rare, all lovingly planted and maintained, it is full of striking vistas and colorful growths of all varieties. One scene which I vividly recall is that of a white *Rhododendron sargentianum* (a prostrate species) in full bloom,

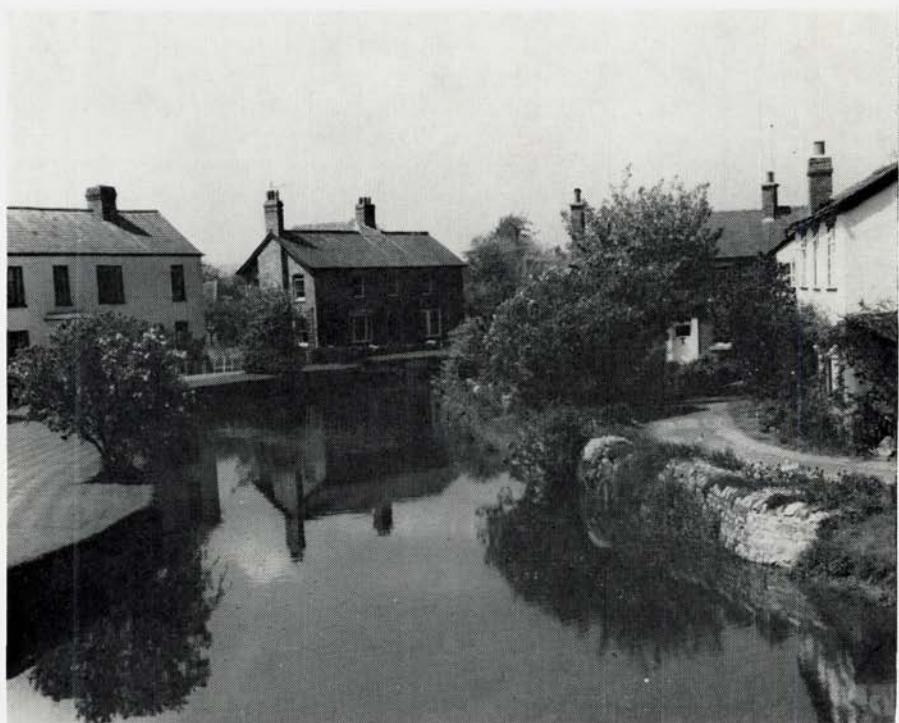
creeping over an area which I would estimate to be about ten feet square. As this plant is a very slow grower, it has been thus beautifying the rocks over which it is draped for many years.

On the way back to London, we stopped in Cambridge for a visit with Mrs. Anna Griffith. In addition to being a very gracious hostess (she furnished us with luncheon and tea), we were impressed with her ability to grow to perfection many fine species of rock plants. She grew her best specimens in pots or troughs. One trough in particular held a beautiful group of *Erinus* sp., *Saponaria ocymoides*, *Rhodothamnus chamaecistus*, and others. Other plants to admire were a large bush of *Daphne cneorum*, a lovely spread of *Linnaea borealis*, both planted in the ground: a profusely blooming plant of *Ramonda pyrenaica*, placed in a crevice in the rocks; and in pots, *Ramonda serbica* (not as striking as *R. pyrenaica*); *Primula reidii*, a lovely single flower on a single stalk; and *Ranunculus parnassifolius*, probably the most beautiful individual flower of all that I saw in her garden.

She was interested in my desire to see *Eritrichium nanum* a month or so later, when I should be in the vicinity of the Dolomites, near Bolzano, in Italy. She gave me explicit instructions to follow a trail starting at the Pordoi Pass, then to a point where, as soon as I should see a lake in the distance, I should, at the same time, find a large rock at my right, and under the lee of the rock I should find the desired plant! I did follow her instructions and I found the rock and the plants, but, alas!, although buds were visible, none of them were open.

Walking the trail from the Pordoi Pass, however, was not wasted for there I saw many of the alpine flowers of which I had read and dreamed of seeing. The surprise was to find *Daphne cneorum* as a native, high altitude plant, at home when buried under the snow for half the year! Perhaps that explains the difficulty in keeping it happy in our Central California climate; perhaps if we could give it treatment approaching its native conditions, it would do better for us. Here, I also saw *Gentiana acaulis*—deep blue; *Pulsatilla vulgaris* (*Anemone pulsatilla*) in several colors, but chiefly a deep yellow; and the lovely *Soldanella alpina*, with its deeply fringed petals, the blossoms hanging their heads and nodding gently with the breezes. It was still early in the season at this altitude and all these flowers were just opening out at the edges of the snowbanks all around them.

But I am not yet through with England—actually a horticultural tour of England is, of course, never completed! Visiting the cold house and rock garden in Kew Gardens in London, I met Mr. Robert Preston, in charge of that portion of the park, for a park, in our sense of the word, is what Kew Gardens really amounts to. He was pleased to acknowledge contributions of seed from two of our California-Nevada members of the ARGS, when I discovered the names of Margaret Williams and Wayne Roderick on tags set in the pots of a lewisia and *Linanthus dianthiflorus*, respectively. The latter, in particular, was a flowering plant at the time. Two other plants caught my eye in the outdoor rock gardens here, which, incidentally, were well-labeled. A thriving colony of *Roscoea cautleoides* was yellow in blossom, and *Helichrysum marginatum* made a fine, prostrate ground cover, with large white flowers contrasting startlingly with



Garden village of Eardisland, in Shropshire. Stream banks are lined with rock gardens.

Owen Pearce

the gray of the foliage.

A short visit in Seven Oaks, Kent, to the garden of Captain Mooney, a former president of the Alpine Garden Society, was rewarding. His garden was beautifully arranged and he had many noteworthy plants. Those in bloom were: *Orchis elata*, with tall stalks capped heavily with lovely purple flowers; *Gaulthetia wisleyensis*, a fine intergeneric hybrid between *Gaultheria* and *Pernettya*; and *Calandrina umbellata*, a low, spreading plant covered gaudily with flowers of a powerful and carrying purple—somewhat reminiscent, from a distance, of some of the vivid helianthemums.

On our first trip we were in Switzerland too early to see any of the high alpine flowers, for snow abounded everywhere in the higher altitudes. However, the second trip found us in that country at a more seasonable time. At Arosa in the Grison country, at Lucerne, and at Zermatt we rode the cable cars to higher altitudes where I saw *Gentiana clusii*, *G. verna*, *Rhododendron ferrugineum*, *Dryas octopetala*, *Silene acaulis*, *Globularia cordifolia*, and campanulas and dianthus of various species, and others. Walks to discover and observe these flowers are, of course, entralling and I invariably worry my wife when I don't return at the time promised.

In Munich, Herr Wilhelm Schacht was awaiting me, to show me through the city's Botanical Garden, of which he is the director. In spite of a heavy rainstorm in the middle of this tour, I saw many interesting plants, in a well-planned garden, and I was particularly impressed with the rock garden which he has developed. Here I saw *Phyteuma comosum*, the

rarest and most striking of the phytomas, very odd in appearance, but attractive in its oddity. An extremely attractive and effective plant bordering some paths in this garden was *Alchemilla mollis*, with a rather smoky inflorescence of a light yellow color. I think this plant could be used to advantage in our country.

In retrospect, our tours were, perhaps, as far as horticulture is concerned, rather quick observations of interesting plants from a collector's point of view. We definitely did not plan to study the culture or science of growing plants; although that would have been enjoyable, it would have required more time than we wished to take. I am very grateful to a number of friends, who by means of letters of introduction, brought us great pleasure in providing intimate contacts with some of the gardens and their hosts and hostesses—experiences which would otherwise have been impossible. We found that the English people grow plants superbly, but I like to think that a great deal of this ability is due to a lucky accident—that of being blessed with a climate conducive to the plants' well-being. They do have green thumbs, without doubt, but I am sure that there are thumbs in our country which are just as green.

Green thumbs or no, and regardless of whether or no I might have the desire to grow many of the plants which I saw, my purpose in this story has been mostly to try to convey what was really the greatest joy of the trips: the real, deep-down enjoyment of the plants we saw—the result, I should like to believe, of my associations with this society and its very good members.

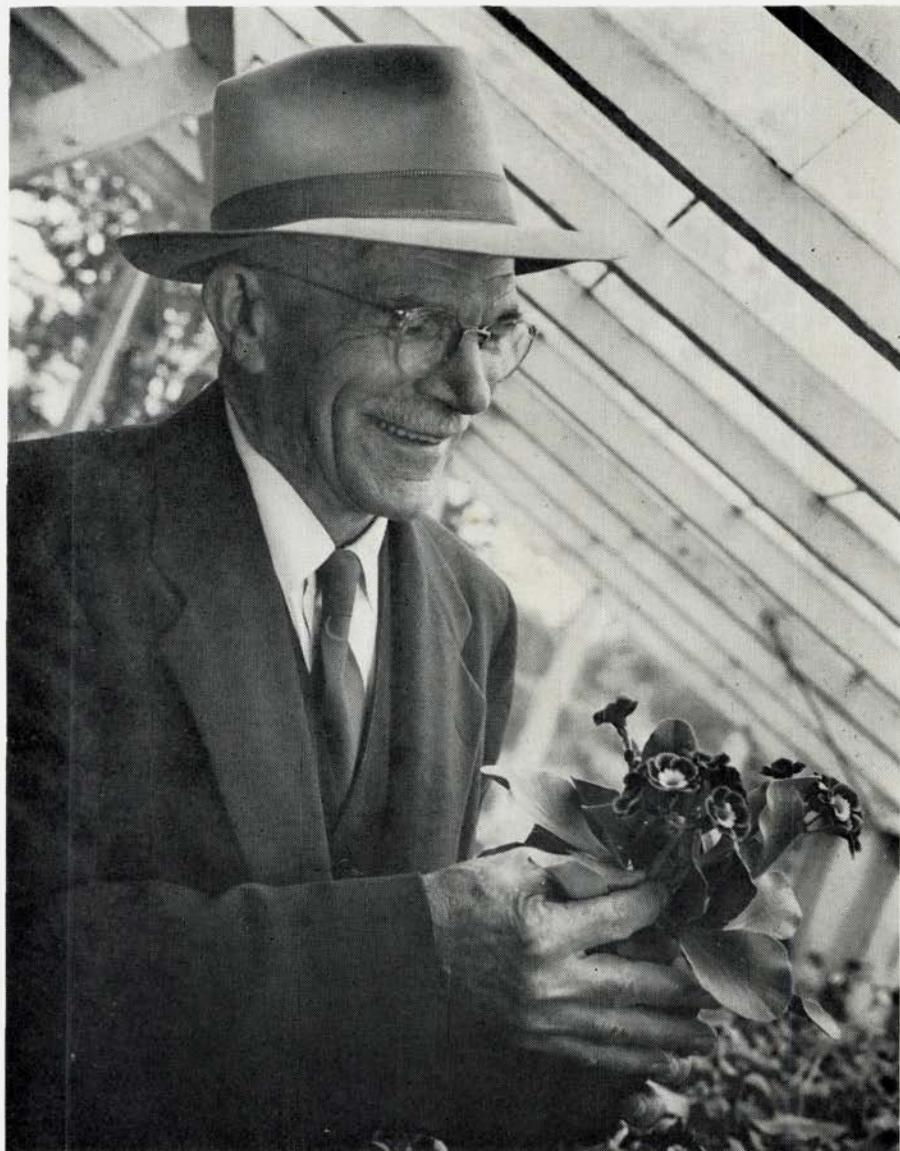
## FRANK H. MICHAUD

Many honors have come to Frank Michaud in the course of his more than ninety years. He is a lucky man, well endowed with a fruitful imagination, a feeling of "something new happens every day," and a practical ability to make the earth more beautiful. His mind is keen and he can communicate the joys he finds in his plants and in the people who love to grow them.

Michaud & Company, Alpenglow Gardens, is east of New Westminster and the Patullo Bridge on "old 99," in Surrey, B. C. Canada. Thousands of alpines are to be found there. The waiting list for many, especially the slow to propagate, is very long, since Michaud customers include almost every Botanic Garden in the free world, as well as amateur collectors. The miniatures and dwarfs among the conifers are hard to come by, hard to propagate, and hard to keep in adequate supply. They come with dreadfully expensive tolls in original and transport payment. Boxes of dozens may arrive with only one or two alive enough to be an eventual source for propagation. They bear mysterious oriental names, and names listed as "very rare" in Den Ouden & Boom's *Manual of Cultivated Conifers*.

Where his son, Roger and daughter, Christianne, find time to do all the propagating is a mystery to their friends. They may apologize for a few weeds, for horticulturally intelligent help is not to be found easily, but every plant is in its known place. Time is certainly at a premium at Michaud's.

If we could learn the lesson Frank Michaud has learned so well! His



Frank H. Michaud looking at a named Alpine Auricula of his own hybridizing.

Ed Pryor

interest in rare plants and in the people who grow them is so intense that when troubles come, like death of a loved one, financial disaster such as the washing out of his first well-established nursery in France, or bouts of painful and debilitating illnesses, he treats them as a mountain man treats his packsack. Troubles are packed on his back, at times heavy and difficult to manage, but riding high, when beauty takes over the mind.

Susan B. Watson

## OMNIUM-GATHERUM

A member (not a nurseryman) writes about buying from nurserymen, "It is time that 'social buyers' realize that a nurseryman's time is something of great value to the nurseryman. It is easy to calculate that five dollar's worth of plants in an order would not pay for a half hour's time as well. Most nurserymen give of themselves and then work before and after hours to make up for it. Most nurserymen enjoy people who know the value of time and who really love plants. I was in a nursery the other day where a man was taking time the nurseryman could ill afford. His purchase was a 50¢ packet of seed. His conversation totally about his own health."

It would be of interest to our readers, and perhaps delight nurserymen everywhere, were some nurseryman with a flair for writing to contribute an article to the *Bulletin* on thoughtfulness and good manners while visiting nurseries.

Should not all of us review our own behavior when visiting and buying plants from nurseries? Perhaps most of us are guilty, at one time or another, of wasting a nurseryman's time, whether we buy or not. Usually, we come away from the nursery, not only with the plants we bought, if any, but with a feeling of uplift—of pleasure for an hour spent in looking at and discussing plants (not our health, it is hoped) with the nurseryman. Maybe he enjoyed it, too, though half his mind probably was on the things he had planned to do in that hour. There are always obligations on both sides when seller meets buyer. In the case of a one-man, or a one-family nursery, the nurseryman has a dual role. He is many times the producer as well as the seller. Usually his greatest interest is in production, if he loves plants at all. That is where his heart is. But, to make a living, he must sell as well as produce.

To sell, he must have potential buyers, and buyers have a right to know what is offered for sale, to look over the offerings, to ask questions, to have time to pick and choose. The seller is obligated to show and discuss his wares though the shopper is not obliged to buy should he find nothing to his liking. Perhaps, in this case, both have wasted their time. To merely shop in a nursery, to expect a guided tour among the plants while picking the nurseryman's brain, and then take a belated departure without buying, or with a purchase inadequate to compensate the nurseryman for his time, is an act of great thoughtlessness, to put it most charitably. Surely, unless the nurseryman is a personal friend (even then we should not presume on friendship) we should make our wants known quickly, allow the nurseryman to set the pace, transact our business with dispatch, settle promptly, and be on our way. The nurseryman will bless you and welcome you when you come again.

There is always change! Recently the Society was faced with the necessity of finding a new director for the Seed Exchange. Lawrence Crocker, after three years as director, had earned a rest. No longer will we be sending our seeds to Medford, Oregon. Under Mr. Crocker's dedicated management, the Seed Exchange has grown consistently, year by year. In 1966, the year before Lawrence took over, the number of donors was 116. In 1969, there

were 187 who contributed seeds. The increase in the number of plant listings for the same years was from 1451 to approximately 2425; certainly a very substantial increase. In 1968, Washington State led with 25 donors, followed by New York with 21. In 1969, Washington again led with 27 and New York had 23. These two states were followed by Oregon 14, California 13, New Zealand and Pennsylvania with 10 each, Connecticut 9, Czechoslovakia 7, Maine 6, and Scotland, England, and Ohio were tied with 5 each. The remaining 54 donors were scattered among 19 other states and 9 other countries.

Part of this growth is the normal result of an increasing membership. The other contributing factor is the enthusiasm with which Lawrence Crocker conducted the exchange. Certainly, Lawrence is entitled to a hearty vote of thanks from everyone of our members.

Succeeding Lawrence as director is Mr. Henry R. Fuller, of Easton, Conn. Please note first of all that the ARGs Seed Exchange now has its own address which is different from that of Mr. Fuller. In sending seeds to Mr. Fuller, address him at P. O. Box 158, Easton, Conn. 06245.

Concerning the Seed Exchange, Mr. Bernard Harkness writes, "There was real concern in response to my plea for help on the Seed Exchange succession. Everyone agreed that it should become a Regional and thence a multiple responsibility and a plan is now working out to make it so. The Connecticut group will organize and run it for two years, pass it on to another group (Raden's Delaware Valley group are then in line); I have just suggested to Mr. Lewis that perhaps Northwest would be ready for a turn then. I think the two year limit will make it seem much more feasible for most groups."

A message from the new Director of the Seed Exchange, Mr. Henry R. Fuller: "The earliest spring bloom should be a signal to our members everywhere to start thinking of the seed to be collected for the Seed Exchange. Late summer is not the only harvest time; many of the early bloomers ripen their seed very quickly and scatter them at once, like the *Anemone* *thalictroides*, the *Jeffersonia dubia*, and the most exasperating *Pyxidanthera barbulata*.

"We have a strong committee to share the work of the Seed Exchange. All were selected with two criteria in mind: (1) capable and responsible people, and (2) people not now having jobs in the Society."

There may be some members who have not heard the good news that Claude A. Barr is writing a book about the Great Plains plants. Such a book will fill a very great need. Gardeners everywhere need to know more about the rich floral heritage of these Great Plains, and Claude Barr is a natural to fill this need, for he has lived and worked with the plants of this great area for many, many years. In his advertisement on page 80 of this issue, you will note the line, "The book project on Great Plains plants will occupy our time." This is a gentle remainder that Claude wants you to have the benefit of his specialized knowledge even though it means, for the present, less time for his nursery plant business. One cannot maintain such a business at full efficiency and write a book at the same time and do both justice. Until the book is finished, it will have first call on Claude's time.

## A PROPOSAL

For the past several years the Arnold Arboretum of Harvard University has been attempting to enlarge its herbarium of cultivated plants. While this collection now numbers in excess of 130,000 specimens, there are several areas in which it has poor representations. One of these areas includes plants of rock gardens. In order to correct this deficiency we wish to assure the members of the American Rock Garden Society of our willingness to accept gifts of herbarium specimens. These specimens would serve to document the occurrence of particular species in cultivation in particular parts of this country. Members of the Society are known to grow a broad range of plants, representative of many plant families, and active cooperation would be extremely useful in increasing the scientific value of our collection.

Society members are encouraged to prepare herbarium specimens from their more interesting living plants. For those unfamiliar with this technique, a recent issue of *Arnoldia*, one of the publications of the Arnold Arboretum, includes explicit instructions and illustrations of the preparation of herbarium specimens. A copy is available to anyone writing to the Arnold Arboretum, The Arborway, Jamaica Plain, Mass. 02130 and enclosing one dollar in payment.

As important as the preparation of the specimens are the data which accompany it. Careful records must be kept and included with the specimens. Some of the more important information includes the name of the plant (when known); where grown; date of collection; name of collector and any unusual facts regarding the plants that may be of scientific interest (flower, fragrance, color, etc.). If direct introductions from other countries or native habitats have been made, the date and origin of such introductions would be extremely useful and would add significantly to the scientific usefulness of the specimen.

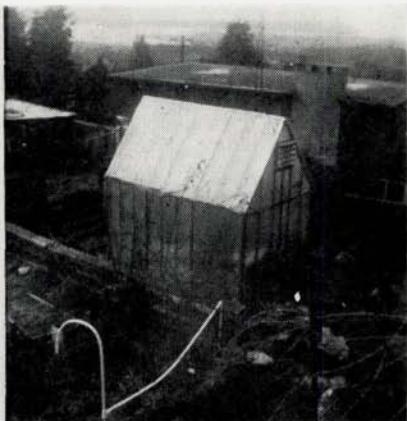
A modest rock garden is being established at the Case Estates of the Arnold Arboretum, situated in the town of Weston approximately 13 miles from the main display grounds in Jamaica Plain. The grounds in Weston are around 110 acres in extent and are used for educational display (ground covers, pruning, and mulching exhibits, for example) and as a nursery area. Any unusual or rare living rock garden plants or seeds that a member may wish to give to the Arboretum for this new garden will be gratefully received. Unfortunately, because of local conditions, only species that grow well in acid soil should be sent.

George H. Pride, Associate Horticulturist  
Arnold Arboretum of Harvard University  
The Arborway, Jamaica Plain, Mass. 02130

\* \* \* \*

**AN INEXPENSIVE ALPINE HOUSE**—In the April, 1968 *Bulletin*, alpine houses were discussed by two members of the Alpine Garden Society of British Columbia. One member, Elizabeth Nunn, told of the inexpensive alpine house that she and her husband built. She has kindly sent in notes on construction as follows:

Size—7' x 11'—Overall height, approx. 11'6"—Height of wall, 6' (This



Elizabeth Nunn

allows utilization of 6' 2x2's which can usually be purchased at far less cost—e.g. \$37.50 per M. up here). Walls and roof sections cross-strung with #9 galvanized wire for rigidity. Lined inside and out with 2 Mill plastic—providing air space insulation. Jalousie-style aluminum vent in the wall opposite the door. Sharp pitch of roof necessary to prevent snow accumulation. Allow extra foot or so of plastic at base to bury in ground to cut drafts. Approx. cost, \$25.00. Construction time—one weekend. It is understood that mylar is more serviceable than plastic. Fasten plastic with  $\frac{1}{2}''$  x  $\frac{3}{4}''$  wooden laths and shingle nails.

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