Magnolia campbellii

Illustrations of Himalayan plants:
chiefly selected from drawings made for the late J.F. Cathcart, Esq.re of the Bengal Civil Service; the descriptions and analyses by J.D. Hooker; the plates executed by W.H. Fitch

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Meetings are held the second Wednesday of each month except July & August, in the Floral Hall, VanDusen Botanical Garden. Doors and Library open at 7:00pm and Meetings start at 7:30pm sharp with the educational talk. Don’t forget to bring a prize for the raffle which goes a long way to paying for the hall rental.

**Cover:** See p. 74 for Ian Gillam’s article
On-line registration for the Western Winter Study Weekend and for Membership renewals is now available from our website: [www.agc-bc.ca](http://www.agc-bc.ca)

The forms are clear and very easy to use. Our registration site is secure so that you can give your details and credit card information in confidence. You will receive an email response to confirm that your registration is accepted, and your credit card details are automatically deleted from our records as soon as the transaction is completed. We guarantee that your details will never be shared with any other organization for any reason.

Seed Exchange List On-line: You can also complete your request for seeds from the exchange on-line. From our website you can click on the seed exchange request heading on the left side of the page. You will be asked for your email address and instructions will be sent within a few minutes to your email inbox.

NB: You MUST be registered as a current member with a current email address on our database to take advantage of this facility. To update your profile follow the links on our website.
THE WESTERN WINTER STUDY WEEKEND 2008: “Plant Treasures for the New Millennium”

As I hope most of our members know we are hosting the upcoming Western Study Weekend from February 29th until March 2nd 2008. These study weekends are among the highlights of the horticultural season. This year we have added an on-line registration form. Updates to the Conference arrangements will be posted on our website and included in our Winter 2008 newsletter. There was a strong preference among past attendees to include the banquet in the base registration fee; also included are a light breakfast and coffee breaks on the weekend.

With an exciting lineup of speakers and the enthusiasm and knowledge that attendees bring to the program there are few better gardening events. Conferences of this nature cannot be successful without relying on our membership to volunteer time to the many tasks required; I hope all of us will become involved in some way.

Suggestions can be directed to me at 604-580 3219. And remember, there will be shopping! Philip Mac Dougall, Co-chair, 2008 Western Study Weekend

SEED EXCHANGE 2007:

The seeds are arriving and look good. The order form for your requests is enclosed with this Bulletin or you can order online – but you MUST register in order to do so. The seed exchange is for members only, so please be sure that your membership is current. Please follow the instructions carefully.

Online Ordering Update: If you wish to be able to place your seed order online please register at http://www.agc-bc.ca/seed-exchange/register.asp between now ordering your seed. You MUST have your email address registered in order to be able to use the online ordering procedure.

Seed ordering: Seed donors have first priority in the choice of scarce seeds. All members may order up to 30 packages of seed. Those who donate seed of five or more different species are allowed up to 60 packages (US members are only allowed 50 packages by USDA regulations). Overseas members receive donor status for seeds from any region.

US members: It will no longer be possible for us to send orders to the US unless an import permit and mailing sticker is provided with the order. www.aphis.usda.gov/import_export/plants/plant_imports/smalllots_seed.shtml and for permits http://www.aphis.usda.gov/permits/ppq_epermits.shtml

In addition, please include a copy of the form, which we will provide, with your order. This will include a list of all seeds requested.

Joyce Fingerut – has very kindly offered to answer questions regarding the permit process for any US members having difficulty.

If there are any questions or comments please contact us at the above postal address or by e-mail.
MEMBERSHIP RENEWALS & NOTES

A reminder that membership subscriptions for 2008 are due with the New Year. The date of expiry of your subscription should appear on the mailing label for this Bulletin. The enclosed membership renewal form gives details of methods of payment. A convenient new option is to renew using our secure website to pay by credit card. (The website is most simply found under Alpine Garden Club on your search engine of choice).

Also available on the website is the Bulletin. There it has the advantage of all relevant illustrations being presented in full colour, something it’s too extravagant to afford in the printed version. (While checking that, take a look too at our new gallery of alpine plants.) The Bulletin only appears on the web about a month after copies are mailed to members. We could save considerable postage costs if enough members agreed to accept the Bulletin by electronic means. However, there are costs in maintaining a site for the distribution. The numbers of those who gave a positive reply to the query about accepting the Bulletin in this way on the previous renewal form provide an estimated saving in postage that just about covers the cost of a site. Many members gave no indication of their preference.

Important note: We do need to know if you do or do not wish to receive the Bulletin by e-mail. Please respond to this question.

We hope you’ll enjoy another interesting and successful year of growing and learning with the Alpine Garden Club of B.C.

EPHEMERAL SEEDS
~ by Ian & Phyllis Plenderleith, Vancouver, BC

We have been concerned, for some time, about the viability of some of the more ephemeral seeds, which we distribute through the Seed Exchange. A series of excellent articles in the summer issue of Rock Garden Quarterly (NARGS) brought the issue again into focus. We have, for some years, stored some seeds, which we identify as ephemeral, in the refrigerator (4C / 40F) when we receive them. This may or may not be helpful in preserving their viability. Certainly, no single rule or set of rules will be applicable to all types of seeds. As well, considerable time will often have passed between the time seeds are collected and when we receive them. How they have been stored during that interval, we do not know and have not provided recommendations.

The genus Salix is one of the notorious ephemerals. We have offered it in our Exchange from time to time, as have other exchanges. Has anyone been successful in germinating Salix obtained for our, or any, exchange? Somewhat less ephemeral is Trillium. It has been said that Trillium rivale has better viability than others. I would be most interested to know what success members have had in germinating Trillium obtained from our, or any other, exchange, recognizing that it will require at least two springs before germination will be seen.

Consider what would happen to Trillium seed in the wild. The seed would fall onto the ground or be removed from the plant in the summer. It would lay in or on the ground through the summer, autumn and winter, at times under leaf litter. In the spring it would begin the process of germination with vegetative growth not appearing until the second spring. It may be that ripe seed falling into a suitable
site can begin germination without a cold period. What can we learn from considering this process – damp storage at outdoor temperatures? How does one avoid rotting?

Please let us have the benefit of your experience. Let us know what success you have had with ephemeral seeds, particularly with *Trillium* obtained from exchanges. What suggestions do you have which will enable us to better preserve the viability of our seeds? What can we do and what can we recommend to those who collect seed for our exchange? Any and all suggestions will be appreciated and could provide some follow-up material in the Bulletin.

*Globularia repens* ~ Carlos Sanchez
~ Espacio Natural (See article below)

**GLOBULAR BLUES!**
~ by Linda Verbeek, Burnaby, BC

Anyone who spends much time in the alpine areas of Europe will sooner or later come across some intriguing balls of blue flowers. They look a bit like small blue powder puffs on straight stalks. They are, however, not all of the same ilk. A lot of them will belong in the genus *Globularia*, long classified in its own family, *Globulariaceae*, but apparently now relegated to the plantain family (*Plantaginaceae*). Not that I can see why. The flowers on all of them are borne in dense heads, which gives the powder puff effect. Many of them, especially the alpine ones, are woody at the base, and for instance, *Globularia repens* will behave like a rock-hugger, flowing over and along rocks in a dense mat. When it has a looser substrate, as it does in my trough, the young shoots may
travel under the gravel and pop up some distance away. In early summer it covers itself with small, rather pale blue flowerheads on very short stems, maybe 3, 4 cm. The leaves are also very small, narrow ovals of less than a cm in length, and the whole plant has a very fine texture. Similar, but all around a little larger, is *G. cordifolia*, where the leaves are a little longer, and at least twice as wide. The flowerheads are also a little larger and sit a little higher above the leaves. In my garden it blooms a little earlier than *G. repens*.

Some of them are more like perennial cushions, I think they are all evergreen, and some of those will grow at lower elevations. I have seen *G. nudicaulis* halfway down the mountains in the Pyrenees. The leaves look somewhat like the English daisy (*Bellis perennis*), and the stems of the flowerheads can be 25 to 30 cm high. *G. stygia* is somewhere in between *G. nudicaulis* and *G. cordifolia*. It does have a woody stem, but it remains quite compact, and doesn’t send out creepers like *G. cordifolia* or *G. repens*. The flowers on *G. stygia* are darker than the average. In general the buds are darker than the flowers. As they are visible between the leaves for quite some time before they actually bloom, this is noticeable. For instance in *G. repens*, when the buds first appear, they seem to be nearly black!

The genus *Globularia* occurs in the southern half of Europe, Asia Minor and North Africa, in genera; around the Mediterranean. The next genus, which covers more or less the other half of the powder puffs, is almost or nearly a European endemic. Considering that Europe is not much more than an overgrown peninsula of Asia, and that there are no insuperable biological barriers between the two, it is somewhat surprising that there should be European endemics at all, especially at the generic level. I am talking about *Phyteuma*, an oddball member of the Campanulaceae. While in *Globularia*, if you look closely, the individual flowers are fairly normal-looking, in *Phyteuma* the individual flowers are very strange. The divisions of the corolla are very narrow, and when the flower opens, the slips separate at the bottom, but still hang
together at the top, so that each flower looks a bit like an old-fashioned lantern with a drawn-out top. Here, too, the buds are often darker than the flowers (or perhaps the outside of the petals is darker than the inside), and a half-open flower-head of Phyteuma looks like a blue puff with darker edges.

The genus has a wider range ecologically than Globularia, and can be found from the alpine meadows right down to the lowlands in a large part of Europe. Interestingly, all the alpine/subalpine ones I know of have round flowerheads, whereas the ones lower down often have more elongated spikes. They can also vary in colour more: P. nigrum, which grows in hedgerows and such-like places is very dark, and the buds do indeed look almost black.

(The three photos on pp.74/75 and below from Wikipedia ~ authors unknown)

I have found P. sieberi to be an easy garden plant, which occasionally self-sows. It makes a clump of leaves of maybe a 25 to 30 cm across, and 15 to 20 cm high, and the flowers sit above this on stems that are about 30 cm high. They bloom in June, and while they last they make a real show. It is clump-forming, with a fat white taproot, and does not spread. The seedlings are easy to weed out if you don’t want them. They also last well as a cut flower – I have never tried that with Globularia, because in most of them the stems are just too short, and G. nudicaulis, which would have long enough stalks, hasn’t bloomed well for me.

Phyteuma nigrum (not strictly a blue powder puff), also grows in the garden easily, but isn’t as showy, since it makes only one stem per plant with one flower head, and it does self-seed much more aggressively. I am in the process of trying some other alpine Phyteumas, but I must say that the ones I saw in the wild looked rather the same, and the differences were subtle. In some cases there are differences in the substrate – one that grows on lime and one that grows on acid rock, but which otherwise look nearly identical. I don’t think there would be that much gain in having a variety of them – I am just curious.

The famous Physoplexus comosus used to belong here, but it has been put in its own genus. Personally I find the Phyteumas more elegant, although of course they aren’t as compact as Physoplexus. I can’t think of any North American alpine that has the same habit. The only one that comes close would be Phacelia sericea, although the powder puff effect is produced in a different way – and it isn’t blue, either!
Growing alpines in the open garden is an exercise in experimentation and patience. We give a lot of thought to soil types, rock placement, mulch, and watering but, apart from avoiding overhanging trees, options are generally limited for siting a rock garden to optimize the light conditions. We purchased our treed and sloping one-acre lot about 20 years ago and excavated the slope to create a level area on the upslope side of the house. This resulted in the formation of a steep bank above the level area. A number of glacial boulders had emerged during the land clearing and excavation so the bulldozer pushed them over the bank to create what? A rock garden?

Not knowing much about rock gardening we stuck a few plants in the bank, most of which promptly perished in the sticky clay soil. Our interests turned to developing a rhododendron landscape in other areas of the garden though we found a way to create terraces in the steep rocky bank and encourage a few dwarf rhododendrons and heathers to grow quite happily.

About eight years later I was still somewhat intrigued by the possibility of creating a rock garden on the slope because it would fit so well into the overall landscape concept. However, I was discouraged by books on rock garden design that recommended that a rock garden should be situated with a southwestern aspect to enjoy full sun. Our lot slopes to the north and the steep bank is quite shaded for much of the year. That was our lot, so the rock garden concept was again shelved.

Another five years passed and having filled our garden with rhododendrons and specimen trees, there was nothing left to do but turn the rocky bank into a real rock garden regardless of the unsuitable aspect. The rehabilitation procedure was straightforward but it took about seven years to reconstruct and plant the entire bank. I dumped sandy soil mix as a new layer on the clay bank and pried rocks out of the bank to form crevices and pockets in the sandy mix.

Alpine plants generally liked the conditions I had created and now we had a proper rock garden. As we got to know the plants better we came to realize that a number of our favourite alpines actually preferred the north slope conditions. For example *Saxifraga oppositifolia* needs to be shaded in the summer and seems quite happy to be on a moist north slope in the winter. We now have all our *Saxifraga oppositifolia* (about 30 plants) contentedly growing and flowering in carefully selected shaded crevices with very sharp drainage. We have had no losses except for some plants that we had placed earlier in sunnier locations. The hot, dry summer of 2003 was their undoing.

In the current edition of the Saxifrage Magazine (No. 15 Autumn 2007) there are a number of comments on the difficulties of coping with the recent hot summers in the UK particularly for growing saxifrages in the Kabschia subsection. Slat shading is recommended because some direct sunlight is important for growing saxifrages. Our north facing slope emulates slat shading to a degree because the sun’s rays are intercepted by trees with the relatively low angle of
the sun in the morning and evening. The hours of direct sun on the rock garden are thus limited and as a result *Saxifraga burseriana*, a species in the Kabschia subsection and our collection of Kabschia hybrids including Cranbourne, Allendale Charm, Allendale Grace, Ariel, and Pearl Rose have been quite content for years. I have also found other alpines benefit from good light conditions and not too much direct sunlight, such as Lewisia, Primula and Claytonia.

While searching for the original reference on the recommended southwestern aspect to quote for this article, I came across a perceptive observation in Lincoln Foster’s book “Rock Gardening”. Regarding sites suitable for the rock garden, Foster notes “A north facing slope in the open is ideal”. So maybe twelve years ago I had just read the wrong book. While some alpines need maximum sunlight, north slope rock gardening has advantages that should be more widely recognized. In the mountains, many interesting alpine plants are often found on north facing slopes where the snow lies longer, there is some shade during part of the day and the air is cooler. Nature is, once again, pointing the way.

**ACCORDING TO CODE**

~ by Ian Gillam, Vancouver, BC

Surely the most spectacular flowering tree of the Himalayas, growing in forests between 8,000-10,000 ft/2,400-3,000 m above sea level, is *Magnolia campbellii*. There the flowers, borne on the leafless branches high in the canopy, are best viewed with binoculars, perhaps looking down across a valley to the opposite hillside. It has long been cultivated but only succeeds in milder maritime climates and its swelling flower buds are very susceptible to damage by frost, not particularly late frosts as its flowering season is in early spring. It is just a hundred years since Peter Veitch, of the famous nursery family, crossed this species with *M. denudata*, raising five seedlings, of which only one had pink flowers. This is named for him as *M. X veitchii* ‘Peter Veitch’. (Only one white-flowered seedling, ‘Isca’, was considered worthy of retention.) Desirable as it is, *M. X veitchii* grows with even more vigour than *M. campbellii* and is suited to large landscapes.

Todd Gresham (1909-1969) of Santa Cruz, California was an enthusiastic breeder of magnolias and raised some 15,500 hybrid seedlings. One of his major objectives was to combine the large and showy flowers deriving from *M. campbellii* with the much more compact growth and hardiness of the widely cultivated *M. X soulangiana* (*M. denudata X M. liliiflora*) using *M. X veitchii* as his starting point. He also crossed the latter with *M. liliiflora* itself.

From these many seedlings a small number of outstanding individuals have so far been selected and named for distribution. They are widely classed as Gresham Hybrids or the Gresham Group. The International Code of Nomenclature for Cultivated Plants – Seventh Edition deals with the naming of such Groups under Article 3. Specifically Art. 3.5 establishes rules for dividing Groups, which must then be renamed. Example 14 deals with this one. The Gresham hybrids are better separated into two classes, each with its own distinct characteristics. These have previously been described as the Svelte Brunette Group and the Buxom Nordic Blonde Group and these names are confirmed by the Code.

~ Ian Gillam, Vancouver, BC
At his nursery in Latvia Janis Ruksans\(^1\) grows a remarkable collection of bulbous and tuberous plants, mostly species and their forms, often collected personally from the wild. Latvia, like the rest of the Soviet Union, was hardly welcoming to outsiders and the whole was very definitely closed to those wishing to collect plants in the wilder areas. With the right permits, obtained by long and weary dances, Ruksans at least could travel to some areas of botanical interest. Indeed he was even permitted to visit the highly restricted border with Iran, though only when accompanied by two armed soldiers, this when his colleagues in the expedition were barred. With Latvian independence re-established in 1991, foreign contacts were easier and the nursery has become an important source of unusual bulbs. He was also able to visit other newly independent republics of the former U.S.S.R.

While we may mistakenly think of Latvia as being in the far north of Europe it shares similar latitude with good growing areas in Denmark, southern Sweden and the most populous part of Scotland. Hardiness zone maps assign Riga to Zone 6. North American zone ratings work fairly consistently here but don’t always translate precisely to European conditions and a recurring theme in the book is the loss of entire stocks of some bulbs due to extreme cold weather. Latvia is subject to very variable conditions in winter. Mild weather can be followed by a sudden freeze at any time and this is the main cause of loss of plants. Many of the bulbs described may be consistently hardy in Zone 6 regions with more stable climates and, of course, in milder zones.

The book begins with chapters on bulbs in the garden with details of methods of cultivation and propagation. The importance of collecting and raising plants from seed is stressed. Not only does this give more rapid increase, important commercially, but seed-raised plants may escape viral infections that can plague crops propagated asexually. For newly collected bulbs, raising large numbers of seedlings may tend to select for individuals or strains that are better suited to cultivation than the wild plants and there is always the possibility of finding improved forms or hybrids. In cases where severe weather wiped out the entire stock of some bulb Ruksans was sometimes fortunate to recover the material from seeds sown but not yet germinated. These considerations apply not only to bulbs but to many of the plant we grow, stressing the importance of our Seed Exchange and the seeds members collect responsibly in the wild.

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\(^1\) On the assumption that most readers are as ignorant of the Latvian language as the writer I omit diacritical marks from the author’s name.
Sowing seeds is the principal way to produce stock of bulbs that do not readily form divisions. One of the attributes Ruksans searches for in collecting material in the field is readiness to form offsets. Some bulbs typically grow as scattered individuals arising from seeds and remain as single plants. In such populations his focus is on finding plants that grow in clusters, deriving from vegetative division. These are likely to be far more productive in the nursery. (He does describe finding a considerable patch of a tulip species that had clearly arisen by such division through stolons. It consisted almost entirely of leaves and seemed to have abandoned flowering and sexual propagation, not of value to gardeners.)

Some species of plants are rather stable and constant across their whole geographic range. Such are not worth repeated collection. By contrast others are highly variable, plants from one mountain differing in flower colour, size or flowering period from those elsewhere. For these plants Ruksans collects material wherever it is found. In this way he has built a collection of special forms and found some that are more suited to cultivation than are existing stocks.

A major part of the book deals with collecting trips, to the Carpathians, Caucasus and Central Asian republics. These chapters mingle accounts of the trips with discussion of the identities of the plants found and their culture back in the nursery. A later chapter deals with plants from the Russian Far East, a region he hasn't visited but from which colleagues have sent him material. A further section covers expeditions to Turkey. Plants of greatest interest to the author are Corydalis, Crocus, Allium, Tulipa, Fritillaria, Iris (particularly Junos) and Arisaema. Many species and selected forms are discussed and illustrated.

There are 304 excellent colour photographic plates, four or so to a page. This is a large book (384 pages), perhaps too large to read from cover to cover but a valuable reference work on these less common bulbs, some of which will become more widely available. Individual chapters will be of interest for occasional reading and as guides to conditions and locations should it be feasible to plan to visit these regions. (Many of these republics have become unstable, indeed dangerous in some cases, since the breakup of the Soviet Union, one of the reasons for the author’s more recent visits to Turkey.)

The maps could perhaps have presented more detail. The text is well produced and almost faultless. It has been very successfully edited in several stages with a final fine tuning for American readers that has introduced the odd discordant note. All those botanical names commemorating Russian botanists and places so difficult for westerners to master are here accurately presented. Strangely the editors missed the use of “pass” in several places where “path” was meant. *Hyacinthus orientalis* ssp. *chionophyllus* should read *H. o. ssp. chionophilus* Wendelbo. All in all this is a valuable guide to many less common bulbs as well as an interesting biographical account, well produced at a moderate price.

**Note:** Janis Ruksans was a featured speaker at our last Winter Study Weekend in 2004. His friend and colleague, Henrik Zetterlund, from the Gothenburg Botanical Garden in Sweden (further north than Riga) is booked to speak at the coming WWSW in Richmond, B.C. (February 29th - March 2nd 2008).