International Rock Gardener

ISSN 2053-7557

Number 59 The Scottish Rock Garden Club November 2014

---International Rock Gardener---

November 2014

This month the IRG has articles on plant naming, trough planting and a charming oriental orchid. If you have a favourite plant genus you'd like to discuss, innovative ideas in cultivation, or some other idea about the world of plants and gardens that is important to you, you are most welcome to contact the IRG Team about it. You can make contact via Editor@internationalrockgardner.net – we look forward to hearing from you. If you enjoy reading the IRG each month – and the other resources provided by the Scottish Rock Garden Club on www.srgc.net – we will be most grateful if you choose to show that appreciation of our efforts by making a donation to the work of the SRGC via the "donate" button on any page of the website.

IRG Index: A link to a regularly updated index to the IRG can be found **here** in the SRGC Forum.

Cover picture: *Crocus vaclavii*, photo by Jānis Rukšāns

---Plant Portrait---

Ponerorchis graminifolia **text and photos by Grahame Ware, Canada**

This hardy to Zone 7/8 member of the Orchid family is native to S. Korea and Japan (Honshu, Shikoku and Kyushu). It was authored and named in 1852 by the German botanist Henrich Gustav Reichenbach (1824-1889). It has been officially classed in the past as *Orchis* as well as *Gymnadenia*. But ever since Maekawa in 1971 with the publication of his beautifully illustrated *Wild Orchids of Japan in Colour*, the name *Ponerorchis* has held sway and continues to do so to this day.

The *poneros* part of its name is a Greek word meaning "useless'. And while it may have been viewed as having no economic importance, on an aesthetic level there is no denying that this little terrestrial orchid is useful especially in a woodland planting where it can be treated much like the hardier *Calanthe* such as *discolor, striata* and *tricarinata*.

Thus, a woodland or rock garden situation with a gritty yet rich mix of leafmould and other organic components such as composted needles and humus seems to be *de rigeur*. They should have little direct sunlight (except benign morning sun to vaporize the dew, etc.) but rather filtered light. This context leads to good or better flowering.

My plant came from Jason Nearing and was purchased from him at the AGCBC Spring sale in West Van in 2010. I'm not sure if it was part of his recent plant/seed collection in Kyushu. I had it a shady woodland garden but it was too shady. I then moved it to a morning sun section of the woodland garden where it thrived before I dug it up and repotted it. It has done very well in the pot (5 1/2" Kord – 14cm) and in this context has the added benefit of being able to better see and appreciate the flowers. It is worth noting that it was in flower for 3-4 weeks during the mid-summer and seemed to thrive in the heat.

Many people recommend an unheated alpine house. There is every reason that this should

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work really well if significant ventilation (large windows on either side of the house for cross-circulation) is provided.

In Japan there has been a lot of hybridizing work done with the variety *suzukiana.* This has resulted in a number of hybrids including the very showy cultivar, 'Yumechidori'.
Paul Cumbleton in his Wisley Log (which is sadly no more) Log 16, July 31, 2008 had a great long piece on UTYOURAN, the Japanese name for *Ponerorchis graminifolia.* It can accessed online with **this link**.

Cumbleton includes some good propagation photos as well as a fine précis of a long article on the Japanese varieties by Gunther Kleinhans in the now defunct *Pleione Review*. For those wanting to delve deeper, Joyce Stewart's fine article in the *New Plantsman* (now once more called the *Plantsman*), 1994 Volume 1, Part 1, March 1994 is a must read.
She unravels all the history of nomenclatural changes as well as providing some terrific cultivation instructions from the All Japan Orchid Society. Between these two long articles you should be fully up-to-speed on things *Ponerorchis graminifolia*.

Ponerorchis graminifolia synonyms after Karasawa 1987: *Gymnadenia rupestris; Gymnadenia graminifolia; Orchis rupestris; Orchis graminifolia*

There also appear to be three infraspecific entities:
1) var. *kurokamiana*
2) var. *suzukiana* (not to be confused with the *P. x suzukiana* of horticulture which is a cross with *P. chidori*) and,
3) var. *micropunctata*

[There is an exceptionally beautiful painting by Christabel King on p. 31 of the *New Plantsman* article that clearly shows the differences with var. *micropunctata* being much taller than the other two varieties.]

Ponerorchis graminifolia (in all its forms and varieties) is a delightful and precious thing and one that fits nicely into the sensibilities of an alpine woodland gardener. I have the feeling that this is not the last one that I will cultivate – though preferably without aphids! G.W.

Ed.: This is a version of an article by G.W. first published on the website of the Alpine Garden Club of British Columbia. Tom Velardi has an article on *Ponerorchis graminifolia,* on his Botany Boy website.

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---International Rock Gardener---
---Gardens in the Mountains---

Crocuses from "The Holy Mountain" of Athos, Greece

Jānis Rukšāns, Dr. biol., Latvia

Athos Peninsula seen from Mt. Athos, photo by D.Bachmann

Abstract. Five Crocus species from Greece and Athos peninsula observed, status of one Greek species – *Crocus laevigatus* subsp. *pumilus* raised to *C. pumilus*.
Key words. *Crocus athous, Crocus hellenicus, Crocus macedonicus, Crocus pumilus, Crocus vaclavii.*

In life many things happen by accident. At the end of 2011 I was contacted by Professor Arne Strid, the former director of the Göteborg Botanical Garden, who invited me to take part in the mapping of the Greek flora, focusing on crocus. I accepted this offer. Almost at the same time my Turkish friend Ibrahim Sözen sent me pictures published on the Treknature website, of a very interesting crocus taken on the Athos peninsula in northern Greece. On the website it was named as *Crocus pallasii* which it certainly was not. However it was not easy to determine which species it was. So only one option was left - I had to go to Athos.

Below: Athos border sign at Ouranoupolis, including the prohibition for women, photo ChristarasA

Firstly, I wanted to find out where this Athos was located. Fortunately we now have the Internet and such wonderful handbooks as Lonely Planet. I learned that this was not a place that was simple to reach. It is a peninsula in Greece, which is separated by a real border from the rest of Greece, and this part, for more than 1000 years, has been governed by the Eastern Orthodox Church with its own very special rules. There are many monasteries there (at present only 20 are open) and a number of smaller *sketae* and refuges. (A skete is a settlement of monks inhabiting a group of small cottages around a church and dependent upon a

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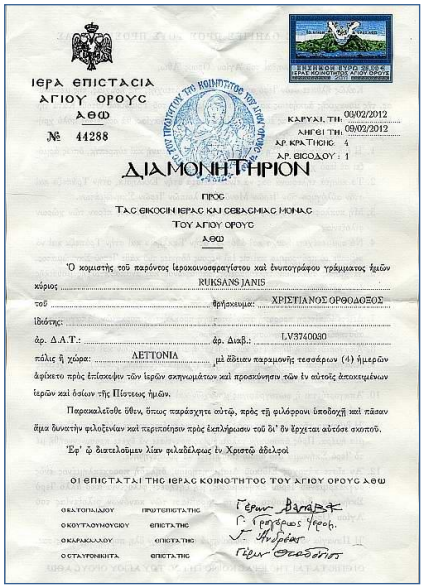
parent monastery.) The whole peninsula is a territory forbidden to females. Legend has it that Mount Athos, at the southern end of the peninsula, had once been visited by the Virgin Mary. She liked the place so much that it became known as "The Garden of the Virgin", and since then no women can tread on this land. The EU regarded this prohibition as discriminatory, but the church defended its position on the grounds of a privilege engraved on a Golden Bull (chrysobull) given to it in 885 A.D. by the Byzantine Emperor Basil the First and later by the Emperor Constantine Monomahos.

Even domestic animals can only be males. The only exception is hens, because monks like to eat eggs. Earlier all the visitors had to have beards! Only 10 non-Orthodox visitors are allowed each day and you can access the Athos state only by ferry after a two-hour journey. You must plan the visit at least two months ahead sending a plea indicating the desired time of the arrival and in which monastery you intend to stay. Usually only a 4-day stay is allowed, but it can be prolonged for another 4 days when *in situ*. While staying at a monastery, you have meals together with the monks and this is free of cost. It is recommended that each night you choose another monastery. The price of an entry permit is 30 Euros.



ΙΕΡΑ ΕΠΙΣΤΑΣΙΑ
ΑΓΙΟΥ ΟΡΟΥΣ
ΑΘΩ

№ 44288

ΔΙΑΜΟΝΗΤΗΡΙΟΝ

ΠΡΟΣ
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ΤΟΥ ΑΓΙΟΥ ΟΡΟΥΣ
ΑΘΩ

Ὁ κομιστὴς τοῦ παρόντος ἱεροκοινοσφραγίστου καὶ ἐνυπογράφου γράμματος ἡμῶν

κύριος RUKSANS JANIS

τοῦ θρήσκευμα: ΧΡΙΣΤΙΑΝΟΣ ΟΡΘΟΔΟΞΟΣ

ἰδιότης:

ἀρ. Δ.Α.Τ.: ἀρ. Διαβ.: LV3740030

πόλις ἢ χώρα: ΛΕΤΤΟΝΙΑ μὲ θεῖαν παραμονὴν τεσσάρων (4) ἡμερῶν

ἀφίκετο πρὸς ἐπίσκεψιν τῶν ἱερῶν σκηνωμάτων καὶ προσκύνησιν τῶν ἐν αὐτοῖς ἀποκειμένων ἱερῶν καὶ θείων τῆς Πίστεως ἡμῶν.

Παρακαλοῦμεν ὅθεν, ὅπως παράσχητε αὐτῷ, πρὸς τῇ φιλόξενοι ὑποδοχῇ καὶ πᾶσαν ἄμα δυνατὴν φιλοξενίαν καὶ περιποίησιν πρὸς ἐκπλήρωσιν τοῦ δι' ὃν ἔρχεται αὐτόσε σκοποῦ.

Ἐρ' ᾧ διατελοῦμεν λίαν φιλαδέλφως ἐν Χριστῷ ἀδελφοί

ΟΙ ΕΠΙΣΤΑΤΑΙ ΤΗΣ ΙΕΡΑΣ ΚΟΙΝΟΤΗΤΟΣ ΤΟΥ ΑΓΙΟΥ ΟΡΟΥΣ ΑΘΩ

ΘΕΑΤΟΠΑΙΔΟΥ ΠΡΩΤΕΠΙΣΤΑΤΗΣ
ΟΚΟΥΤΛΟΥΜΟΥΣΙΟΥ ΕΠΙΣΤΑΤΗΣ
ΚΑΡΑΚΑΛΛΟΥ ΕΠΙΣΤΑΤΗΣ
ΣΤΑΥΡΟΝΙΚΗΤΑ ΕΠΙΣΤΑΤΗΣ

ΚΑΡΥΑΙ ΤΗ 03/02/2012
ΑΦΙΞΙ ΤΗ 09/02/2012
ΑΡ. ΚΡΑΤΗΣΕΩΣ 4
ΑΡ. ΕΙΣΟΔΟΥ : 1

Jānis' Diamonētērion (permit) for 2012

My first attempt to reach Athos was made in 2012. On the day of our arrival a heavy storm broke and the ferry connection with Athos was cancelled. The sea remained unsettled during my stay in Greece so I used the time to check the "open part" of the peninsula, Chalkidiki region and Greek Macedonia, which was very rewarding – I found a new crocus species that I later named ***Crocus macedonicus***.
It resembles *C. pallasii* but is very distant from it genetically, having fewer leaves and corm tunics which have a very long bristly neck. I found it along Vertisko ridge in Greek Macedonia, but recently pictures from Dr. George Papapolymerou pictured it west of Larissa in Thesalia. Pictures of corms and flowers showed that is typical *C. macedonicus*. Greek scientists found that it has different chromosome number 2n = 16 (regarding it as *C. pallasii* subsp. *pallasii*), whilst type *C. pallasii* has 2n = 14 (Karamplianis et al., 2013).The search for *C. stridii* was unsuccessful - the known localities were under new buildings or inside a military camp. Mt. Falakro was under deep snow, so we couldn't reach the crocuses growing there and returned to Athens, nearly the entire time driving through heavy snow.

Crocus macedonicus forms

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Dafni Monastery on a Greek postage stamp from 1972

The following spring I tried again to get to Athos, this time together with my Czech friend Vaclav Jošt. Once more I needed to acquire a **Diamonētērion (permit) for Athos**. The weather was wonderful but the spring had been early and I was afraid that the crocus leaves would not be noticeable in the deep grass. The sea was calm and we reached Daphni (Dafni) without problems. We found a small hotel in the administrative centre of the peninsula, Karyes. Our room was clean but more than modest compared with the price of 30 Euros per night per person. An eastern-style toilet and washing facilities were in the corridor. The so-called “Restaurant” on the ground floor offered only a cabbage salad and pasta topped with elderly cheese from local goats. All this was for “only” 30 Euros per person. Water was free. Fortunately, on the other side of the street, there was a shop where for another 30 Euros we bought food for all the remaining days. We had the greatest surprise when we found in this shop canned fish, chocolate, and sparkling wine – all of which were produced in Latvia.

Border to the Monastery state on Athos peninsula

The crocus we searched for seemed most likely to resemble the species of the *Crocus biflorus* group. In the materials from the Greek Flora given to me by Prof. Strid, it was reported that crocuses from this group had been found in 1914 near Karyes and again in 1944 near Karakallou Monastery. The pictures on Treknature were made near the Iviron Monastery. In the intervening century everything had changed: instead of the hazelnut orchard where the crocus was spotted for the first time, now there were impenetrable jungles. Near Iviron all the open areas were covered in long grass. So it was that the

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only remaining place where we could try to find anything was near Karakallou where the target crocus had been seen on seaboard rocks in 1944. We went there on the third day of our stay. A local taxi brought us to the Karakallou Monastery and thereafter we followed a long winding road on foot to the coast. Everywhere were only impassable jungles made of branches of a climbing spiny blackberry. Such jungles covered the seaside rocks, too and although there were some small meadows very close to the sea, it was impossible to climb down.

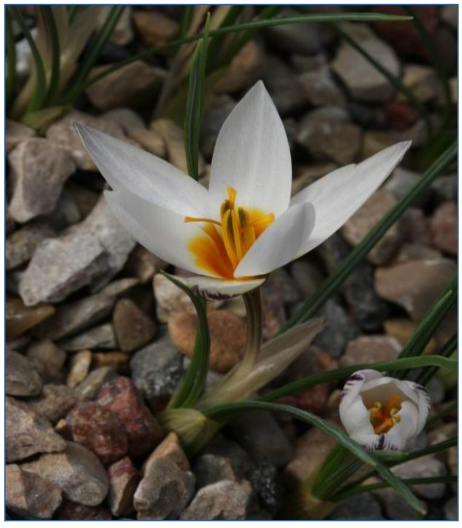
Then we came upon a real wonder – on one spot the usually very meticulous monks (though it was more likely the guest workers employed for the road building and restoration of monasteries) had dumped garbage from the building works and thus had made a “bridge” down over the blackberries. We climbed down and… there it was – our target crocus in full bloom only some 5-6 metres above sea level. The cooling effect of the sea had delayed its blooming. The first look confirmed that it was a new, previously unknown crocus species, erroneously regarded by previous researchers as *Crocus biflorus* or *C. alexandri*, and sufficiently different from *C. stridii*, described much later from a not very distant locality (Mt. Chortiatis, Central Macedonia and Greece). Most surprising was its habitat – being so close to the sea it certainly received a lot of salt water during storms.

Below and right: *Crocus vaclavii*

Now it was time for camera work, preparing the herbarium sheets and collecting of a good number of flowers for morphological research later at the hotel. In honour of my long-time friend, Vaclav Jošt, who accompanied me on this trip, I decided to name this crocus as ***Crocus vaclavii*.** It was published together with 6 other new taxa in The Alpine Gardener, June 2013**

With the black colour in the anthers and its leaves without ribs, this new species mostly resembles *Crocus stridii* which grows in the same region of Greece (near Thessaloniki), although both are separated geographically, but *C. stridii* is much leafier, having 5-8 leaves, and its throat is papillose. The ground colour of the flowers in all the specimens of *C. stridii* seen by me was white, but in *C. vaclavii* it is bluish violet.

Left: *Crocus vaclavii* corm



Right: *Crocus stridii*

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It is more difficult to separate it from another species that does not have ribs in the leaf grooves - the Italian *C. biflorus* (type), but the latter has narrower leaves (only 0.5 to 2.0mm wide), its anthers are invariably yellow, shorter (5-11mm long) and it grows on limestone-based formations. I found *C. vaclavii* on decomposed granites. Comparing it with *C. bifloriformis* from the opposite side of the sea (Turkey): the new crocus is less leafy, its flowers are blue coloured outside and inside and the filaments are longer.

Crocus vaclavii locality

Crocus athous

One other crocus species which comes from Athos was described in 1944 as ***Crocus athous*** but later regarded by Brian Mathew as identical with *C. sublimis* and included in its synonyms. A few years ago Arne Strid collected it at the southern end of the peninsula on the slopes of Mt. Athos. In the pictures sent to me by the professor it looked quite special, in any case worth of a closer examination, and Arne Strid promised to send me some corms. Sadly the harsh winter of 2012/13 intervened. Many crocus collections in western and central Europe were severely damaged or even destroyed. And the corms of *C. athous* collected by Prof. Strid were killed, too. There was nothing to do other than to again send a plea for a “visa”. Arne Strid advised us to make contact with a local biologist, Stylianos Charalampidis, from Thessaloniki and he proved our greatest asset. Without his help and knowledge we would never have reached the place we sought.

When we landed, it was raining cats and dogs. The sky was heavily overcast and the weather seemed not at all favourable for mountain climbing. We picked up

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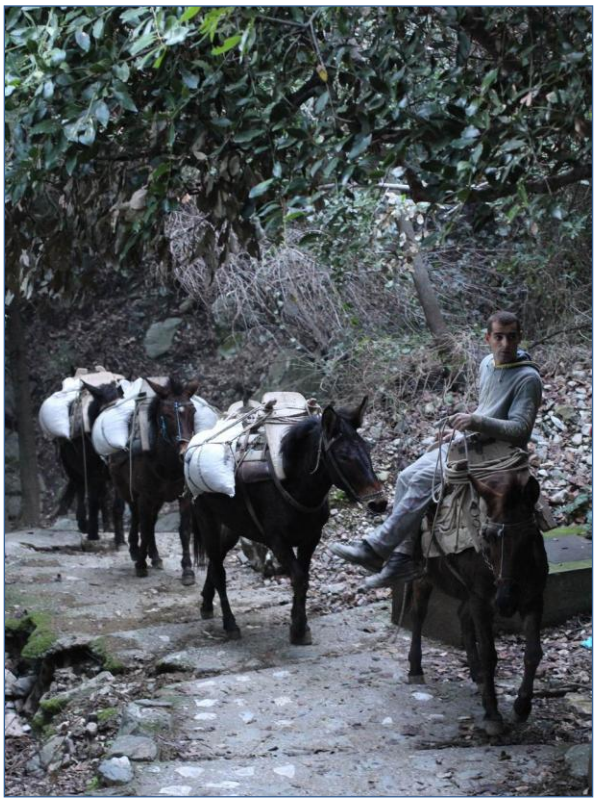
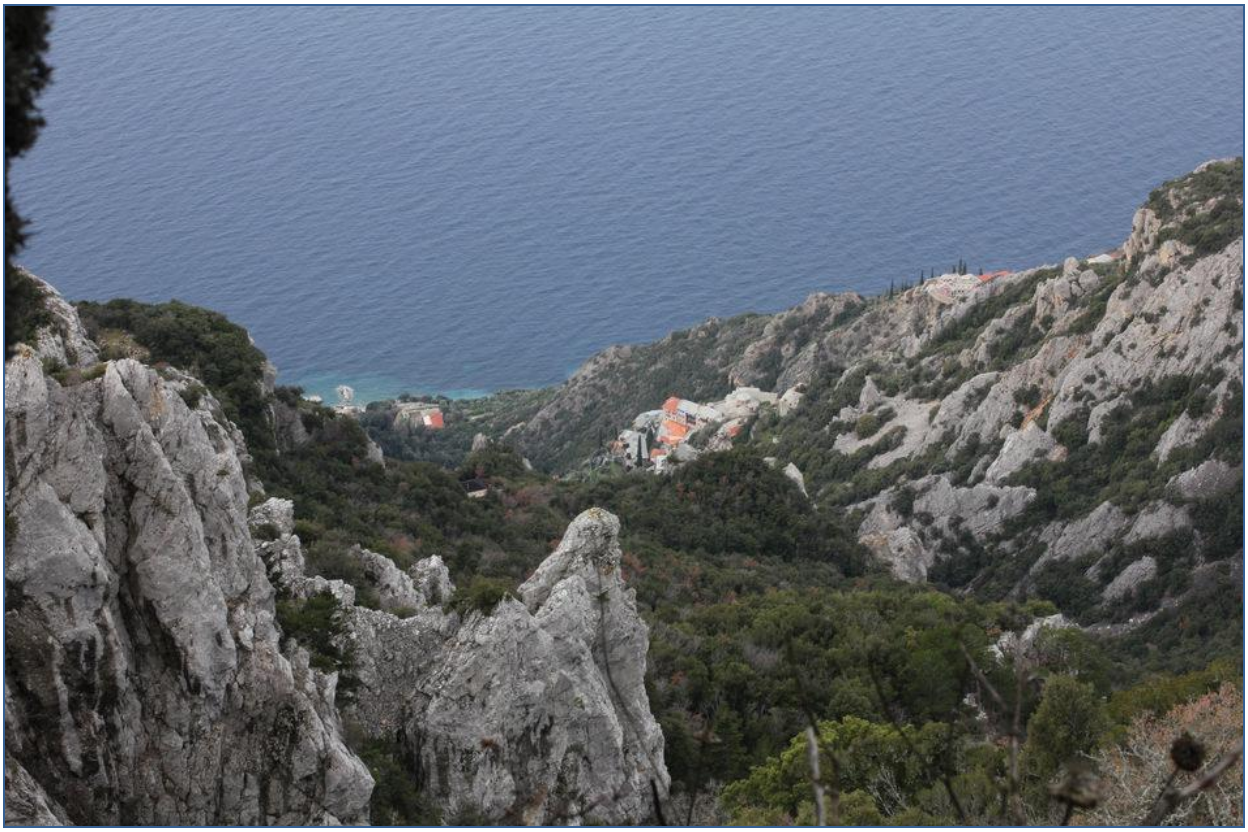
the rented car and late in the evening reached Ouranoupolis, where our “pilgrimage” was to start. It was still raining, but at least the weather was not windy and the sea was quiet. Fortunately this was also the case when the weather forecast proved correct and although there was some minor rain when we got up in the morning, later the clouds cleared and for the next few days it was beautiful weather. (When we left Athos the weather again turned to rain and heavy snow in the mountains, so we were forced to cancel a planned trip to search for a site of *Crocus orphei,* a very recently described new species.)



Steep pathway from Agias Annas

This is Greece, a country with fantastic nature, an enormous state debt, regular strikes, and special customs. If, at the consular office of the monastic state in Ouranoupolis port, it is written that work starts at half past seven, then no Latvian could fancy that it means around six o’clock. If the ticket office is to open at eight, who would imagine that the ferry would leave the port at “around seven” and the tickets would be sold on board? Tickets were sold only to Daphni, further was termed as “we’ll see”. In Daphni we bought tickets to Agias Annas, because the ferry was not going any further.

Fortunately from Agias Annas there was a pathway, though very steep and soaring upwards some 800 metres, clinging to an almost vertical rock, along which we were able to reach Kerasia – a small monastery where Stylianos had arranged our stay.



Looking down to Agias Annas

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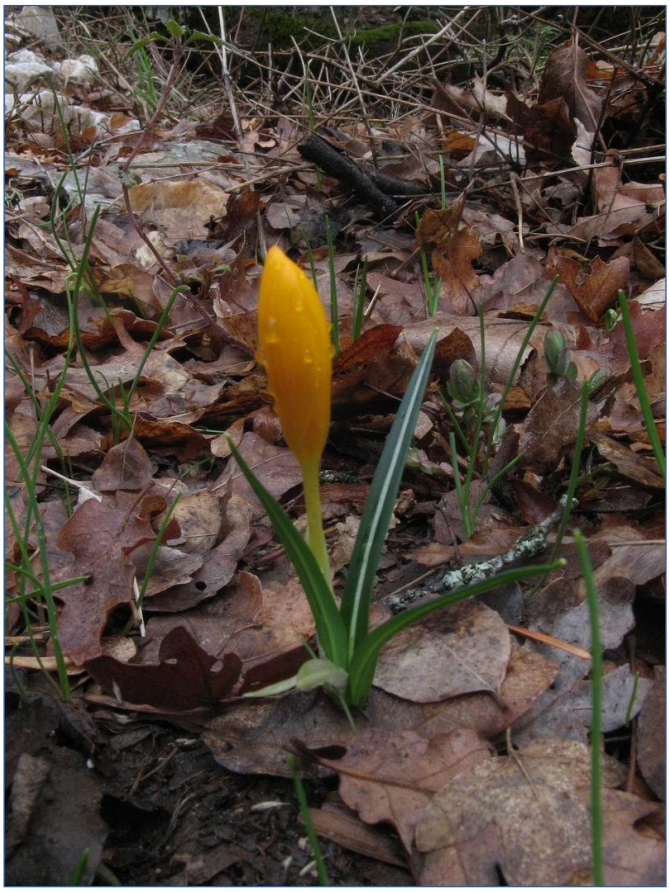

The ferry takes pilgrims, monks, the post, food and building materials to the southern end of the peninsula. From there they are transported further on mules (a sterile hybrid between a horse and donkey), which don't transgress the rules of the Holy Mount (2033m high). The pass we used had steps made of paving stones or concrete slabs and was winding upwards to the skete of Agias Annas at 280m in altitude. It took around an hour to reach it, but monks there greeted us with a glass of cold spring water, a cup of hot black coffee, a small glass of home-made brandy and Turkish sweets. All of this was gratis.

Crocus olivieri on Mt Athos

After a short rest we resumed our onward walk. The pass was very steep and it crawled along one side of an almost vertical cliff. I counted my steps. After 4000 I missed the count and not for the first time I chided myself – what the hell I was doing there; why I was not at home serenely spending my days but there going through all this torture? Climbing up took 5 hours. Stylianos cheered us up by saying that after we reached to top the pass would be much easier, but when I saw the first crocus leaves at the very top, all my exhaustion disappeared. Unfortunately they were not of the type for which we searched. Eventually some bright yellow flowers confirmed that it was ***Crocus olivieri*.**

Descending on the path to Kerasia – Jiri Bydjowsky and Stylianos Charalampidis

A little further on - another crocus was growing in rock crevices. Although the corm tunics resembled those of our goal species, it was the autumn-blooming *C. mazziaricus*. Then came one more - the autumn-blooming *C. pulchellus* and slightly further – the spring-bloomer *C. chrysanthus*.
Within a short distance we had seen signs of **four** species.

When my optimism again started to abate we came across our objective. Its flowering was already over but the leaves and corm tunics confirmed that it belonged to the *C. atticus* group. It looked quite special and probably could be regarded as a distinct species, but we needed to see flowers and it seemed that we were too late.
It was still a long way to go to the Kerasia skete, but it was no longer so steep. We had to walk downwards some 200 metres and descending in the mountains is usually more exhausting than climbing.

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Father Theologus with Yo, Stylianos and the author: in the background is the Kerasia skete

We were greeted by Father Theologus who showed us to a cell with three plank beds covered with thin mattresses and a pair of thin blankets. The night was cold: fortunately I had a warm sweater with me but nevertheless I spent the entire night turning from side to side trying to find a more comfortable position. The following night was much more restful.

There is no electricity, no Internet. On long dark evenings the light is provided by candles and oil lamps. It was even very romantic to write a diary and read some papers in such a setting. The food, regardless of the Lenten fast about to start, was delicious – tea, porridge, halva, salad, olives.

Really the only problem was the very hard bed, but that was compensated for by the fantastic scenery, silence and the absence of “civilization”. In the skete’s library there were not only religious books but we also found a lot of papers on local nature, flora and fauna.

Ornithogalum sp. on the pass to Kerasia

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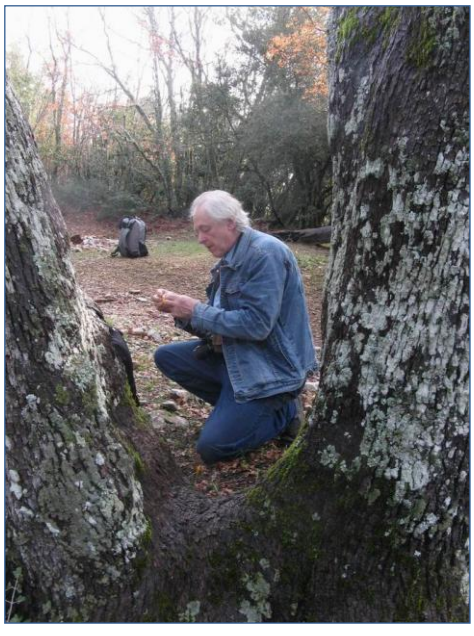
Narcissus tazetta

The next morning we started climbing up Mount Athos whose tops still were covered in deep snow. *Crocus athous* was found by Arne Strid much higher than we were, so I hoped to find some specimens still in bloom. The pass up was very narrow and stony. Time and again in the rock splits I spotted the leaves of *C. mazziaricus*. The small rest place was quite dirty – a lot of garbage was left by Russian pilgrims (we detected that by the language on the scattered paper and empty food cans, and even the request not to leave garbage behind on the Saint Mount was written only in Russian). Even so, nearby ***Narcissus tazetta*** bloomed marvellously. Probably it was a native plant, but it could have been planted there by some monk or pilgrim, too.

Our next rest stop was in a *Castanea* forest on a small plateau. And there it was – the object of our crocus search of the Holy Mount – *Crocus athous*. The first flower was flattened to the soil by the previous day's rain but it confirmed the identification as belonging to the *C. atticus* group.



Above: Notice requesting that no rubbish be left on Mt. Athos. Left: Jānis near the spot where *Crocus athous* was seen.

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Above: *Crocus athous* habitat Below: *Crocus athous* details

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After a long search we found 3 more plants with still perfect flowers. They were tightly closed because of the cold and wet air, but when brought down to the skete they opened nicely, allowing us to make good pictures and herbarium sheets and we could confirm the plant's status as a valid species. We continued our way up to an altitude of 1200m where we again saw *C. athous*, this time without flowers, the still-blooming *C. olivieri* and the autumn-blooming *C. pulchellus*. Arne Strid had observed *C. athous* at the Panagea refuge which is situated at the altitude of 1600m, but as we had found the material we searched for, we decided to turn back. The next morning we had to get up very early to reach in time the sea port at Agias Annas. The pass to the seaport at Kerasia was much shorter and more enjoyable, but no one was sure that the ferry would go that far. So it was much safer to go back.
In Kerasia the collected flowers had opened nicely, showing all the specific features and enabling the creation of a perfect herbarium specimen. *Crocus athous* is similar to *C. atticus* in its coarsely reticulated corm tunics, but they end abruptly without forming the prolonged neck so characteristic of *C. atticus*. The throat in *C. athous* is pure white, slightly tinted yellow only at the edges, and glabrous whereas in *C. atticus* it usually is bright yellow and sparsely pubescent. Both other relatives – *C. sublimis* and *C. nivalis* – have distinctly finer reticulated tunics and both have yellow throats. Only some specimens of *C. sublimis* that I observed from Mt. Parnassus had a pale yellow or even white throat, but then the corm tunics were distinctly different and the throat of the perianth of *C. sublimis* is pubescent.

Next morning it was not terribly surprising to sit on the terrace of Agias Annas before going down to port, to watch the ship continuing its way to Kerasia's sea-port. This is Greece…!

Crocus hellenicus

Crocus pumilus

Our three years of researches have added five new crocuses to the Flora of Greece. They are: the autumn-blooming ***Crocus hellenicus*** from *C. speciosus* group, another autumn-bloomer *C. macedonicus*, and three spring bloomers – the newly described *C. vaclavii*, a new status for the Cretan crocus earlier regarded only as a form of *C. laevigatus* and separated by me from the latter as subsp. *pumilus,* which was certainly not correct and it must be regarded as a distinct species: ***C. pumilus*** - see below. The new concept of subspecies status in genus *Crocus* regards all the former subspecies as species (Schneider, 2014). Finally our research allowed the restoration of species status for *C. athous*. One more new autumn-blooming crocus from Greece is still awaiting its description, but for that more research and data are needed and another new species from *biflorus* group growing on Greek Islands will be published in near future. According to the monograph of Brian Mathew (1982) there could be another new spring-blooming species in the Peloponnese, but lack of living material and field records at present do not allow a decision to be made about it.

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***Crocus pumilus* (Rukšāns) Rukšāns status nova**. Syn. *Crocus laevigatus* subsp. *pumilus* Rukšāns. The Alpine Gardener; 81: 193 (2013).

The Alpine Gardener**: The taxa (other than C. macedonicus *C. vaclavii*) named in this paper have since been raised to species status by J. R. The IRG issue #52 of April 2014 has Jānis' reiteration of his decision to re-classify some of his earlier naming, as published in The Alpine Gardener; 80(2012) and 81(2013) from **subspecies to species status.**

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 ISSN 2053-7557

Trough community on concrete rocks with *Saxifraga brunonis* and *Potentilla pulvinaris*

Concrete troughs: man-made mountains

text and photos by J. Ian Young, Aberdeen.

Many of us try to imitate the wonderful natural rock crevice planting that we see in the mountains but it is not always easy to get suitable rocks to make the landscape. A number of years ago I started experimenting with broken concrete blocks – it is the more open porous type of block that I use, not the dense ones – with great success.

The secret to making the concrete look natural is to make sure when you break up the blocks that there are none of the flat edges obvious.

Concrete “breeze” block with tools

ISSN 2053-7557

I break the block up with a hammer and chisel as hitting it with a sledge hammer tends to crumble it into small bits. I usually leave the “rocks” to sit in water for a while to wash way any harmful residue.

Soaking the pieces of broken concrete block

It is some years since I showed in my weekly Bulb Log my method of making cement troughs around a Styrofoam box base and now these “man-made” rocks seem a logical progression to use in conjunction with those troughs.

As can be seen from the picture below, the combination of cement trough and man-made rocks can prove a successful home to plants. This cement trough, planted with **silver saxifrages** around concrete rocks, is flowering well and is even being colonised by dactylorhiza seedlings.

ISSN 2053-7557

When I landscape a trough I always create height so that all the planting is above the top edges of the trough – to help achieve this and to anchor the design I have at least one large piece of rock and then cover all the rest of the surface with lumps of varying sizes. The gaps between the lumps become the planting spaces. There will always be some element of "settling" in the filling of a trough and troughs which have both been planted on the flat and with no account taken of this settling of the surface, will never look as impressive as a well-raised trough with attractive rock work.

Left: Un-planted trough with rocks built high and, right: planted and establishing well.

The same trough, with the plants colonising the "man-made" rocks and looking very much at home.

ISSN 2053-7557

I landscaped this trough with concrete - using rocks well raised up - and planted it out *Saxifragas* early last autumn. I take digital pictures at planting time of the labels beside the plants which will act as a permanent reminder of their names to avoid spoiling with labels the natural effect I am trying to achieve.

In this photo, we see the plants beginning to grow on.

ISSN 2053-7557

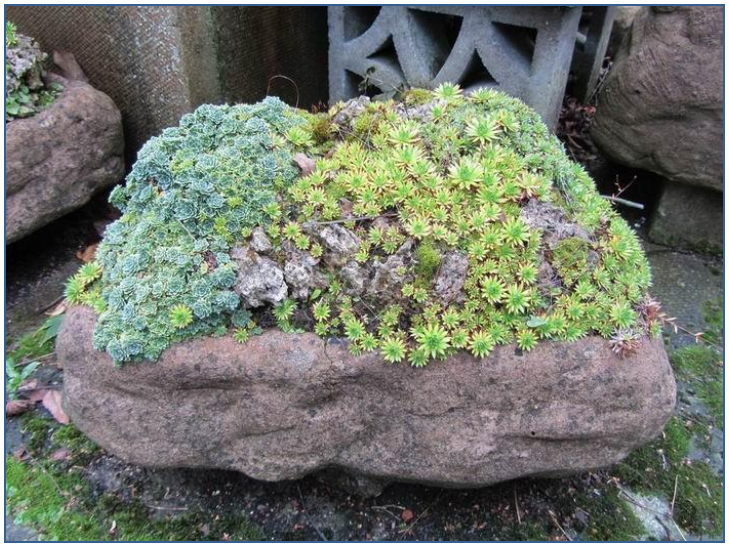
This spring, those same saxifrages flowered for the first time and now, after a full season of growth the *Saxifragas* are really settling in and their growth is following the contours of the rock.

ISSN 2053-7557

Right: *Androsace delavayi* amongst the “man-made” rocks and below: with *S. brunonis* in the moss.

Some people thought that I might encounter problems with harmful salts coming out of the concrete but after a year of two my problem is stopping the plants and mosses from covering the concrete completely. In fact the moss covered concrete is proving a perfect environment for a number of plants such as ***Androsace delavayi*** and the runners of ***Saxifraga brunonis*** to root into. I also scatter seeds directly on to the moss covered rocks.

ISSN 2053-7557



Saxifraga brunonis is one of my favourite plants, featuring in several troughs and looking good in winter.

Androsace sarmentosa and A. laevigata growing in the “man-made” rock

I have mostly used the broken concrete to create environments in small troughs as we have nowhere in our garden to build a bigger scale project but I would love to create a large scale version. Visitors are unable to tell the difference between our established concrete plantings and similar sized ones where I used natural limestone. I would say that broken concrete is my rock of choice for rock gardens – it is very effective, the plants enjoy it, it recycling waste material and prevents the need to take rocks from a natural environment.

J.I.Y.

ISSN 2053-7557