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It should be no surprise to learn that the weather around the world is as changeable as ever – few places still seem to have a steady spell of climate, either cold or hot, at any season of the year. Instead, we see broad swings from cool, through freezing, to hot with wildfires in many areas. All adding to the difficulties encountered by the natural world – perhaps our gardens will indeed become the last refuges for many plants - though I doubt we can say the same for all flora and fauna. While the corona virus pandemic continues, along with other viral outbreaks around the world, the chances of being able to return to the free movement of people and the opportunities to meet face to face with other plantlovers are still vanishingly distant. Technology in the form of webinars, Zoom meetings and the like are a welcome distraction for many – and at least provide a small measure of “togetherness” and I am sure that now the benefits of regular online publications like IRG are being truly appreciated.

Of course, without the efforts and generosity of our contributors the IRG would be a poor creature – and we are, more than ever, grateful to those authors who believe in our work and wish to be involved in this project to bring articles freely to the internet.

This month we welcome Jānis Rukšāns from Latvia with the description of a new *Leopoldia* species. Jānis has suffered loss and illness from Covid19 in his close family – there are few countries which are not suffering still from this viral attack.

Next, from Chile, Anita and John Watson give us an awareness of how the virus and their subsequent recovery from the infection, has affected them and how much comfort they have found in their garden.

Finally this month, [Connor Smith](#) gives his views on the potential for some smaller *Rubus* species in the rock garden. In the midst of this unbelievable year of uproar in all our lives, Connor has moved from Scotland to the Netherlands, to take up a position at the prestigious Utrecht botanic Garden – De Botanische Tuinen Universiteit Utrecht. He is studying Dutch, working hard and seems to be enjoying this new challenge greatly! We’ve yet to see photos of him skating on a frozen river – but there’s time enough for that another year!

Cover image: *Convolvulus arvensis*, Anita R. Flores.



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--- Species Description ---

Leopoldia archibaldii sp. nova (Asparagaceae): a new species of genus. Leopoldia Parl. from Eastern Anatolia, Turkey

Jānis Rukšāns, Dr. biol.

Email: janis.bulb@hawk.lv

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Abstract

Leopoldia archibaldii is described as a new species from Erzincan Province, East Anatolia, Turkey. A description and photographs of the new species are provided. The morphological differences between the new species and the related taxa (*Muscari massayanum* Grunert and *M. elmasii* Yildirim – both still are not validly updated as belonging to genus *Leopoldia*) are also presented.

Key words: *Leopoldia*, *Muscari*, Erzincan, taxonomy, Turkey.

The genus *Leopoldia* Parl. (1845) includes 20 taxa (WCSP, 2021) and its members mostly occur over the entire Mediterranean basin as far as the Caucasus, temperate Europe, the north of Africa and the south west of Asia. In “The Flora of Turkey and the East Aegean Islands” it is included into genus *Muscari* Mill. with three subgenera: subgen. *Muscari*, subgen. *Leopoldia* (Parl.) Rouy and subgen. *Botryanthus* (Kunth.) Rouy. Status of former subgen. *Pseudomuscari* Stuart. (in Flora of Turkey incorporated into subgen. *Botryanthus*) now is raised to separate genus *Pseudomuscari* Garbari & Greuter. *Muscari macrocarpum* Sweet from subgen. *Muscari* are sometimes regarded as belonging to the genus *Muscarimia* Kostel ex Losinsk.

According to the last approach subgenera *Leopoldia* and *Pseudomuscari* are regarded as separate genera (WCSP, 2021). The genus *Muscari* s.l. was revised by Davis & Stuart (1984) for ‘The Flora of Turkey and the East Aegean Islands’ (vol. 8), in which 19 species as growing in Turkey were recognized. After this study, 6 new species were included in supplement volumes 10 and 11 of the same Flora (1988, 2000),



Henrik Zetterlund and Arnis Seisums picturing *Leopoldia archibaldii* (BATM-282).

and 19 new species have been described from Turkey after 2000 (IPNI, 2021). Thus, the total number of *Muscari* s.l. species recognised in Turkey have increased to 44 (or 47 according Eker I. & al., 2020). Most of them are endemic and 13 of them belong to the genus *Leopoldia*.

In 2004 during the Turkish expedition organized by the Gothenburg Botanic Garden, our team (H. Zetterlund, A. Seisums, J. Rukšāns) after passing the Pülümür valley along the road from Tunceli to Erzincan made a stop when we spotted by the roadside a very pretty *Leopoldia* sp. in seed. Later it was labelled as *Muscari* cf. *massayanum*, originally found earlier at this place by Jim Archibald and Norman Stevens – two keen explorers and plant and seed collectors from the UK. About this plant Jim Archibald wrote: “From the locality given for a Huber-Morath coll. made in the 1950's and identified as *M. massayanum*, this does not wholly match the description of this species”.

oder auf der Nordseite eines Alpinums. Die verschiedenen Sorten sind *Allenii*, großblumig, zartblau; *cornubiensis*, blau mit purpurnem Schein; *Robinsoniana*, lieblich lavendelblau, sehr großblumig; und die reinen Gartenformen: *Blue Beauty*, lichtblau mit silbriger Rückseite auf hohem, steifem Stengel, Laub glänzend bronzegrün; *Blue Bonnet*, breite, lichtblaue Blumen, spätblühend; *Celestial*, klar himmelblau; *Royal Blue*, schönes leuchtendes Königsblau. Die Schönheit dieser Nebenformen kann aber durchaus noch vermehrt werden: die Blumen könnten größer, die Farben leuchtender und intensiver werden. Man hätte dabei die intensiver gefärbten *coronaria*- und *fulgens*-Sorten heranzuziehen.

Die Vermehrung der Sorten geschieht durch Aufzucht der Brutknöllchen und der mit Knospen besetzten Rhizomteile.

Neue Fritillaria Meleagris.

Seit einiger Zeit ist man in Holland und England bestrebt, aus der urwüchsigen *Fritillaria Meleagris* neue Farbenshattierungen durch Einkreuzungen herauszuholen. Gut gelungene, wertvolle Ergebnisse dieser Arbeit wurden in den Sorten *Aphrodite* und *Orion* festgelegt. *Aphrodite* ist die Auslese der vor einigen Jahren entstandenen *F. Meleagris alba*. Sie ist reinweiß, selbst die grünen Schattierungen von *alba* sind bei dieser Neuheit beinahe aufgehoben. *Orion* (s. Bild auf der Titelseite) dagegen ist eine Steigerung des Farbtones der *Meleagris*. Die Zeichnung der Blüten ist scharf karoartig begrenzt. Der Grundton ist kastanienbraun, innen etwas heller, außen durch eine matte purpurrote Bereifung noch mehr ins Dunkle gesteigert. Beide Sorten erreichen nicht ganz die Höhe von *F. Meleagris*, sie werden etwa 25 cm hoch und sind eine begrüßenswerte Bereicherung des Fritillarien-Sortiments.

Muscari Massayanum.

Dieses vor zwei Jahren eingeführte *Muscari* wird sicher veranlassen, daß man sich in den nächsten Jahren mit dieser Gattung mehr beschäftigt. Was die Firma Tubergen-Haerlem an neuen Arten zur Aufnahme im Sortiment bestimmt hat, wird diese Gattung vollkommen neu beleben. Heute sei nur *Muscari Massayanum* davon herausgegriffen, deren Farbzusammensetzung ganz neuzeitlicher Geschmacksrichtung entspricht. Im Knospenzustande ist Lichtgrün mit Karmoisin vorherrschend. Bei der geöffneten Blüte tritt das Lichtgrün bis auf die Halskrause zurück. Das Karmoisin tritt dann um so stärker hervor. Wenn die Blüte ganz entfaltet ist, erscheint ein liches Violett. Die Rispe wird etwa 8 cm lang, die Höhe beträgt etwa 15 cm. Merkwürdig ist das Laub, das an junge Porreepflanzen erinnert.



Muscari Massayanum, karmoisinfarbig, in Lichtviolett übergehend, interessante Neueinführung der Firma Tubergen.
Aufnahme für die „Gartenwelt“.

Balkon verwenden kann. Man vermehrt die *Datura* am besten im Juni bis Juli. In diesem Falle erhält man noch im Herbst genügend kräftige Pflanzen, die man leicht überwintern kann. Die Pflanzen lieben kräftige, nährstoffreiche, nicht zu leichte Erde. Die Ueberwinterung erfolgt in einem temperierten Hause, und es ist darauf zu achten, daß so wenig wie möglich gegossen wird. — *Bougainvillea glabra* gehört zu den schönsten und interessantesten Dekorationspflanzen. Sie bedarf zu ihrer

Original publication of *M. massayanum* in Die Gartenwelt.

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Typical *Muscari massayanum* was published by C. Grunert in magazine Die Gartenwelt (35: 205, 1931), provided with a photo, used for the type and a very short description mentioning one of the main features separating the true *M. massayanum* from the plants found by us and before that by Archibald and Stevens. The plant described by Grunert was of unknown provenance and was cultivated in the famous bulb nursery Van Tubergen in Holland. Grunert characterised it as “Im Knospenzustande ist Lichtgrün mit Karmoisin vorherrschend.” [In the bud state, light green with carmine predominates]. “Carmine” is regarded as the various shades of reddish colour from pink (“wild watermelon”) to brownish red (“Japanese carmine”), with no blue shades [see [Wikipedia entry](#) – showing zero cyan in CMYK colour system]. Plants matching this characteristic were collected by Jim Archibald in Niğde Province, near Çiftehan which is located around 500 km SW of Erzincan. One of the localities mentioned in the Flora of Turkey (1984) is another 130 km further SW (Huber-Morath, 10355) and this sample was found to be identical with the plants from the Çiftehan population by Archibald. The locality near Pozanti (listed in the Flora of Turkey – Mathew & Tomlinson 4468) is only ~15 km from Çiftehan, so must be identical, as well as the plant from Niğde mislabelled as *M. macrocarpum* Sweet (because it was collected in fruits) by Balansa in 1855. They all constitute a quite well isolated area in S Anatolia (according to the grid system of the Turkish Flora – C4 and C5).

Another outlying group of superficially similar plants is located in E Anatolia, in Erzincan Province (according to the grid system of the Turkish Flora – B7), that is listed in the Flora of Turkey as gatherings of E. Pasche 78/18 (the same as our BATM-282) and T. Baytop (ISTE 31877). The latter was collected in fruit, so to check its identity a year later (2005) our team researched the region W of Erzincan (the exact locality of sample ISTE 31877 – Kemah to Tanközü – was impossible to identify) where we found identical plants at 5 other localities in 50-100 km distance NW from the previous finding in 2004 (BATM-282). All these localities are restricted within Erzincan Province, only BATM-282 lies near the border with Tunceli Province, and they all make up a well-isolated group. Not collected but registered in expedition notes as very abundant were 2 populations on Ağziacik gec. and 5 km from it (A8 - altitudes 2100-2350 m). Both localities are in ~100 km distance NE from the type locality of BATM-282 in Erzurum province but due to the lack of material for comparison (no plants, no pictures, no herbarium), at present I'm cautious to regard them as identical with *Leopoldia archibaldii*.

When the plants from both groups were compared in cultivation, we immediately noted the differences between them. The easiest to observe was the colouring of the upper part (coma) of the inflorescence with sterile flowers. In all the plants from the Erzincan group (E Anatolia) it was

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distinctly blue without any shades of pink or red that is so characteristic of the plants from Çiftehane (S Anatolia). A more detailed observation of the flowers revealed other differences. The fertile flowers of a typical *M. massayanum* are oblong cylindrical, **slightly waisted**, whereas in the new species from E Anatolia they are cylindrical to **slightly barrel-shaped**, with no waist. In a dissected flower one can see that in *Muscari massayanum* the ovary is rounded (globose), the style and stigma are positioned deep in the throat and end below the base of the anthers (fig. 12-3a in the Flora of Turkey, 1984), while in the herein described *Leopoldia archibaldii* the ovary is distinctly elongated, the stigma is positioned at the top of the lower anthers or even higher than the upper anthers.

In 2016 from the Muğla Province in W Turkey *M. elmasii* Yildirim was published, which somewhat resembles *M. massayanum* sensu lato, but is easily distinguishable by the yellow segment lobes of the fertile flowers, whilst in both species from S and E Anatolia they are dark brown, blackish.

To confirm the belief about two different species I planted both stocks side by side without isolating them, and collected seeds from both. Seedlings again were planted alongside with no protection against cross-pollination between the two. This was repeated three generations long and no signs of cross-pollination or splitting of the characteristic features were observed. This allows me to conclude that these two species do not cross, what confirms their status as sufficiently different taxa.

Four images follow of *Leopoldia archibaldii* at population BATM-282 (these accessions sometimes shown as BATMAN) used for type (locus classicus):



Leopoldia archibaldii BATM-282 -01



Leopoldia archibaldii BATM-282 -02

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Leopoldia archibaldii BATM-282 -03

Leopoldia archibaldii –
BATM-282.



Leopoldia archibaldii Rukšāns species nova

Type: Turkey, Erzincan Province, roadside after the Pülümür valley along the road from Tunceli to Erzincan, 2004, BATM-282, 39°35.970'N 39°51.949'E, alt. 1300 m. Holo: GB – ex culturae in horto Jānis Rukšāns.

Habitat and distribution: known only from several localities in Erzincan Province (and Erzurum Province ?), E Anatolia, where it grows on gritty more or less unstable slopes with sparse vegetation at altitudes of 1100-1800(-2350?) m.

Description. Bulb up to 20 mm in diameter, without bulblets. Leaves (1)2-3(4), patent, 15-23 cm long and 15-25 mm wide, thick, canaliculate, glaucous, apex mucronate (in *M. massayanum* – cucullate). Scape up to 25 cm long, stout, light green, at the base mauvish shaded, at the apex blue (in *M. massayanum* – pinkish lilac). Raceme dense, cylindrical, many-flowered. Pedicels of the fertile flowers short – only 2-3(4) mm long. Fertile flowers in bud deep dirty violet (in *M. massayanum* – dirty pinkish), at anthesis becoming light greenish, lighter at the tip with blackish lobes, 8-10 mm long and 5-6 mm wide, oblong-cylindrical, slightly barrel-shaped (in *M. massayanum* – smaller and slightly albeit distinctly waisted). Ovary elongated, slightly ovate, almost oblong, sometimes pear-shaped (*pyriformis*), 4 mm long and 2.5 mm wide, style slightly shorter with the stigma positioned at the top of the lower anthers or even higher than the upper anthers (in *M. massayanum* – ovary smaller, rounded, globose, style and stigma positioned deeper in the throat ending below the base of the anthers). Sterile flowers closed, at the base deep blue turning violet towards the mouth (in *M. massayanum* – bright carmine-pink, at the mouth dirty pink), smaller and with distinctly longer pedicels. Capsule deeply trilobed, seeds round, dull black (in *M. massayanum* – shiny black).

Etymology: Named after Jim Archibald who was the first to surmise their difference.

Identification key for Turkish species of genus *Leopoldia* (adapted from Davis & al., 1984; Demirci & al. 2013; Doğu S. & al., 2019; Eroğlu H., 2019; Yildirim H., 2016 – not all *Leopoldia* species included in key at present are validly updated accordingly with new approach)

- 1 Lobes of perigone cream, pale, beige or yellow; bulb tunics pinkish or brown to reddish
 - 2 Perigone lobes greenish yellow to bright yellow; bulb tunics deep brown to reddish
 - 3 Raceme lax, elongate in fruit, fertile flowers slightly waisted,
 - 5-9 mm long *Leopoldia weissii*
 - 3 Raceme dense, not elongating in fruit, fertile flowers not waisted,
 - 9-12 mm long *Leopoldia elmasii*

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2 Perigone lobes cream or pale beige; bulb tunics pinkish

4 Sterile flowers shorter than fertile flowers, on long ascending

pedicels; leaves gradually tapering above*Leopoldia comosum*

4 Sterile flowers longer than pedicels, as long as fertile flowers; leaves

abruptly tapered above *Leopoldia caucasicum*

1 Lobes of perigone blackish or very dark brown; bulb tunics greyish or ivory

5 Raceme dense or lax and stout; fertile flowers short pedicellate; capsule

large, winged and deciduous

6 Scape 12 cm; raceme 5–12 cm and many flowered; leaves only one,
margin scabrid, 8-13(–21) cm long; pedicels of fertile flowers only 1 mm

.....*Leopoldia mirum*

6 Scape 15–25 cm; raceme 5–8 cm and 9–36 flowered; leaves

(1)2–3(4), to 23 cm long; pedicels of fertile flowers 2-5(–6) mm long

7 Coma of sterile flowers pink*Leopoldia massayanum*

7 Coma of sterile flowers blue to bluish-violet

.....*Leopoldia archibaldii*

5 Raceme lax, stout or not; fertile flowers long pedicellate, coma of sterile flowers
blue-violet or whitish; capsule lobed and persistent

8 Ratio pedicel/fertile flower length above 2; elongated after

fertilisation; capsule ovate-acute*Leopoldia longipes*

8 Ratio pedicel/fertile flower less than 2; not elongated after

fertilisation; capsule obovate-orbicular or ovate-triangular

9 Scape very short – only 3-6(8) cm long, fertile flowers 8-20,

3-3.5(-4) mm long..... *Leopoldia savranii*

9 Scape short (15–20 cm), shorter than leaves or rarely

equalling them; leaf margin distinctly scabrid; sterile flowers

whitish-pale violaceous with brownish-black apical lobes,

3–9 mm; fertile flowers at anthesis glaucous greenish ivory

with blackish lobes.....*Leopoldia erdalii*

9 Scape long (20–70-110 cm), longer than leaves; leaves

margin smooth; sterile flowers ice blue, pinkish or bright

violet, 3–16 mm; fertile flowers at anthesis ivory, beige or

reddish brown with brown or black lobes

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10 Bulbs 2.5 – 5.5 cm in diameter, pedicels after anthesis 5-8 cm long, slightly deflexed

11 Sterile flowers bright violet, 3.5–16 mm; fertile

flowers ivory to pale beige, 5–9 mm; capsule 12–16 mm

..... ..*Leopoldia tenuiflorum*

11 Sterile flowers ice blue to pinkish-white with brownish black lobes,

3–7 mm; distal part of fertile flowers ivory green, proximal part reddish brown,

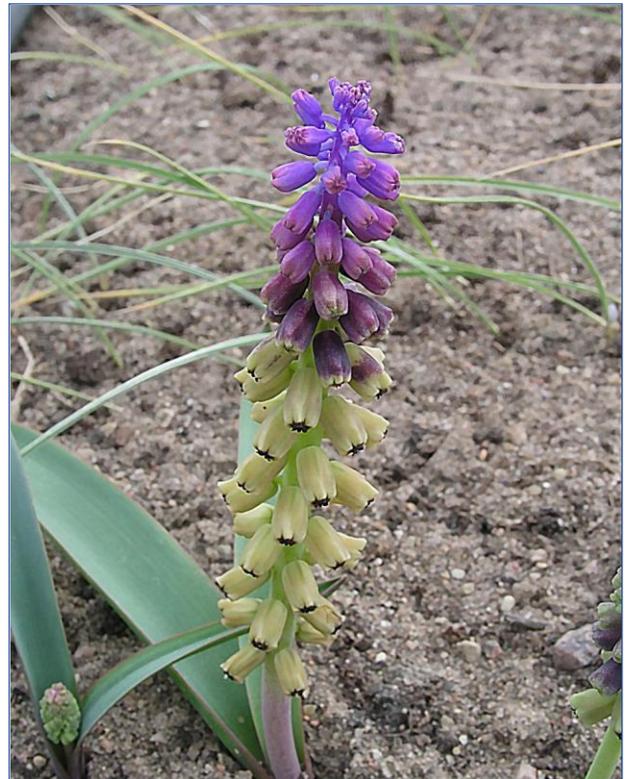
4–13 mm; capsule 6–11mm *Leopoldia babachii*

10 Bulbs 4.5 – 13 cm in diameter, pedicels after anthesis 2-3 cm long, horizontally spreading *Leopoldia haradjianii*



Left: *Leopoldia archibaldii* LST-172

Below: *Leopoldia archibaldii* LST-179



Left: *Leopoldia archibaldii* LST-206

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Left: *Leopoldia archibaldii* LST-212

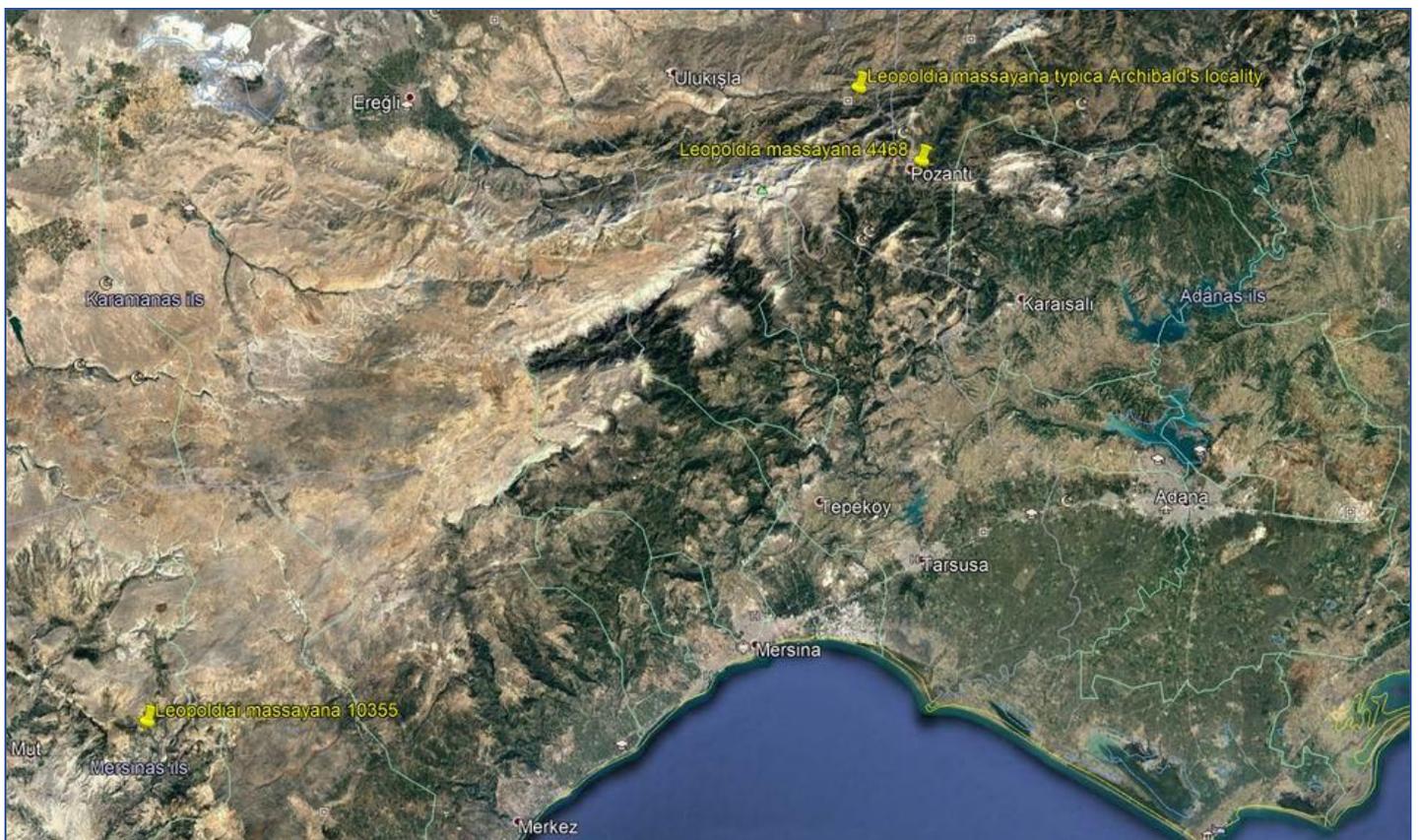


Leopoldia archibaldii LST-188

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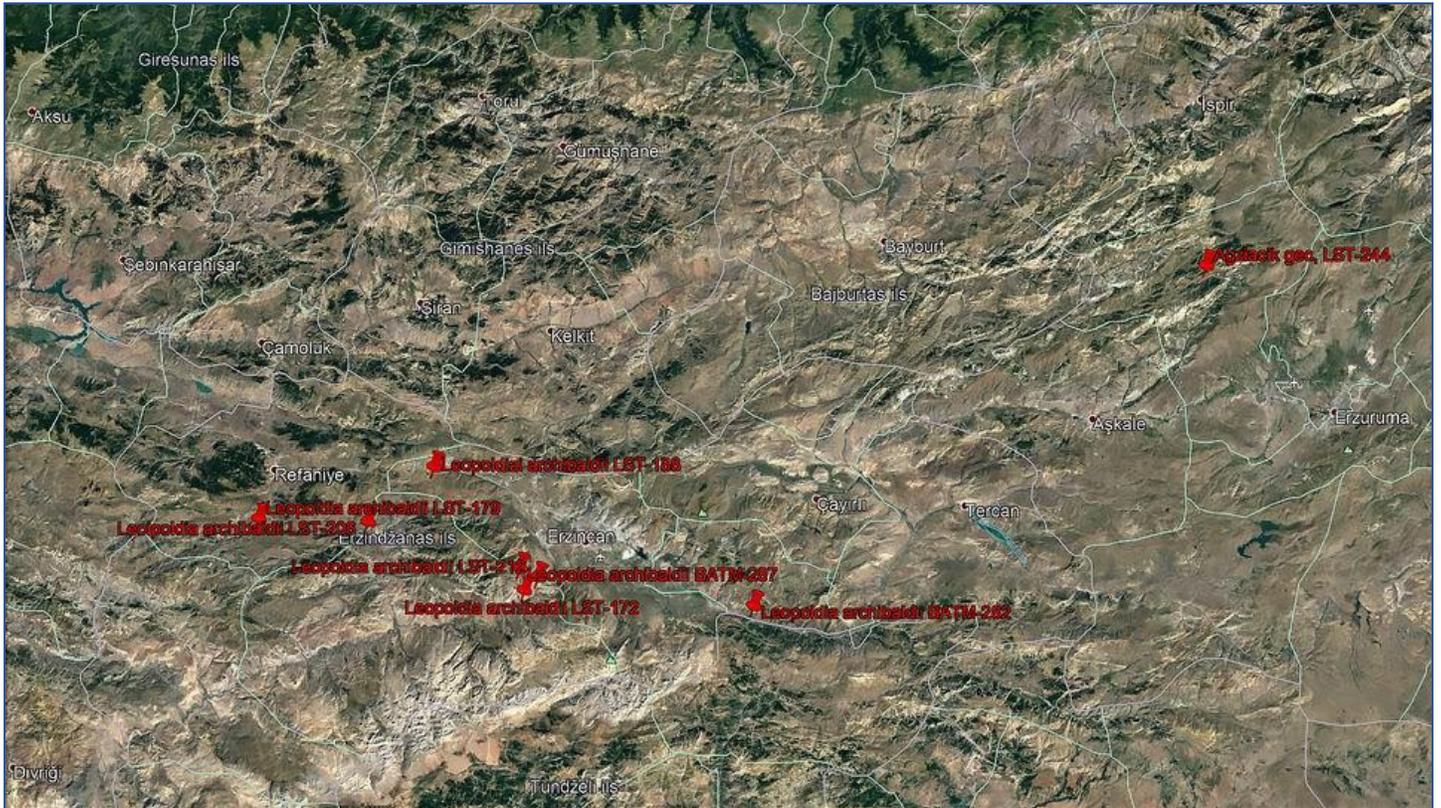


Map - Yellow marks - *Leopoldia massayanum*; red marks - *Leopoldia archibaldii*.



Map - *Leopoldia massayanum* localities according Flora of Turkey.

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Leopoldia archibaldii localities explored by our team (on right top corner - LST-244 - only registered).



Leopoldia massayanum from near Çiftehan, gathered by J. Archibald.



Leopoldia massayanum from near Çiftahan side by side with new *Leopoldia archibaldii* (on left) in author's collection.



Holotype herbarium of *Leopoldia archibaldii*

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Leopoldia massayanum racemes.



Leopoldia archibaldii racemes.

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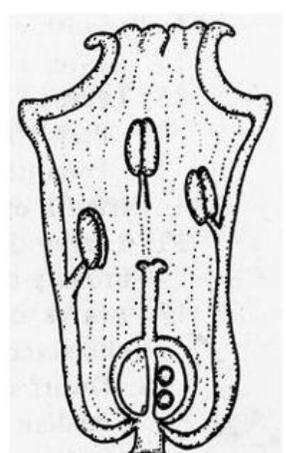
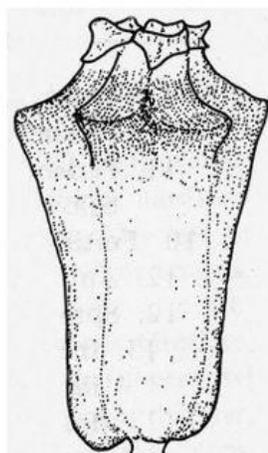
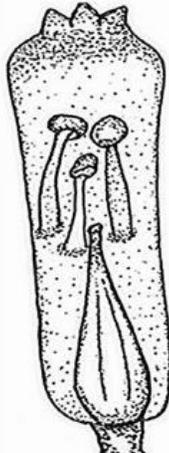
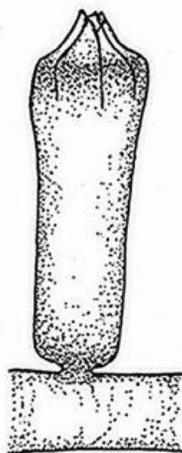
Shape of fertile flowers – waisted in *Leopoldia massayanum*, left, and barrel-shaped in *Leopoldia archibaldii*, right.



Cross-sections of flowers: *Leopoldia archibaldii* flower details.

Left pair:
Leopoldia elmasii
(Yildirim, 2016, as
Muscari) flower details.

Right pair:
Leopoldia massayanum
(Kit Tan, Flora of Turkey,
1984, as *Muscari*) flower details.



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Bibliography

Archibald J. Master List: Complete European, West Asian & North African Reference. 339 pages:

[SRGC Archibald Archive.](#)

Davis P.H., Stuart D.C., 1984. *Muscari* Mill. In: Davis P.H., editor. Flora of Turkey and the east Aegean Islands, Vol. 8. Edinburgh, UK: Edinburgh University Press, pp. 245-265.

Davis P.H., Mill R., Tan K., 1988. *Muscari* Miller. Flora of Turkey and the east Aegean Islands, vol. 10. Edinburgh, UK: Edinburgh University Press, pp. 225–226.

Demirci S., Özhatay N., Koçyğit M., 2013. *Muscari erdalii* (Asparagaceae, Scilloideae), a new species from Southern Turkey. Phytotaxa 154 (1): 38-46.

Dizkirici A., Yigit O., Pinar M., Eroglu H., 2019. Molecular phulogeny of *Muscari* (Asparagaceae) inferred from cpDNA sequences. [Biologia](#) 74: 205–214.

Doğu S., Uysal T., 2019. *Muscari savranii* (Asparagaceae), a new species from Central Anatolia, Turkey. Phytotaxa 402 (3): 155-164.

Eker I., Duman H., Yildirim H., 2020. *Muscari muglaensis* (Asparagaceae, Scilloideae), a new species from southwestern Anatolia. Phytotaxa 475 (4): 267-278.

Eroğlu H., Pinar M., 2019. The taxonomic resurrection of *Muscari haradjianii* (Asparagaceae, Scilloideae), and a new synonym in the genus *Muscari* in Turkey. Phytotaxa 418 (1): 97-106.

Govaerts R., 2021 onward (continuously updated). World checklist of selected plant families. Royal Botanic Gardens, Kew: <http://apps.kew.org/wcsp/> [accessed 22 January, 2021].

IPNI, 2021 onward (continuously updated). [The International Plant Names Index](#) [accessed 22 January, 2021].

Ozhatay N., 2000. *Muscari* Mill. Flora of Turkey and the east Aegean Islands, Vol. 11. Edinburgh, UK: Edinburgh University Press, pp. 237-240.

Yildirim H., 2016. *Muscari elmasii* sp. nova (Asparagaceae): a new species from western Anatolia, Turkey. Turk. J. Bot. 40: 380-387.

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--- Covid Tale ---

How plants helped us to bounce back from Covid bug infection: John Watson

Casilla 161, Los Andes, Aconcagua Province, Valparaiso Region, Chile.

Email: john.anita.watson@gmail.com

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Not according to plan

In the middle of last year we wrote 'Short sorties in times of a pandemic', covering our local explorations for the spring flora around our Chilean home after the sanitary restrictions had been imposed. It was published a few weeks later in the IRG (Watson & Flores 2020). That account rounded off with an exploration Anita and I made on the 24th August, even though we still continued those local forays regularly afterwards. Consequently, we anticipated and were preparing a follow up to be entitled 'More short sorties in time of a pandemic' once we'd accumulated enough material. Little could we have guessed that intention would be cut off in its prime due to us being added to the list of virus victims meanwhile.

With Covid: 19 September to 2 October 2020.

An unwelcome ambulance trip

We suspect it started with an endoscopic scan I underwent near the beginning of September at a fairly local clinic [fig.1]. A week and a half later I began to feel extremely weak and could only collapse on the living room sofa to sleep; much of the day as well as night [fig.2]. Late in the evening on the 19th of September it came to a head. I was feverish and not breathing easily, so Anita monitored my heart functions, which proved to be normal, and temperature. The latter was well up, so she phoned the hospital at Los Andes for an ambulance. It arrived at around midnight with two medical auxiliaries clad from head to toe in protective clothing and masks [fig.3]. A body temperature check for both of us showed Anita's to be high as well. They told her to remain indoors pending a medical visit the following day, which showed she had the virus as well, although much less severely.



She was ordered to recover at home, probably for a fortnight, with a similar period of quarantine to follow.

fig.1: That scan in the clinic where we believe we were infected by Covid. (4 Sep 2020. ARF)

fig.2: Early warning symptoms. (15 Sep 2020. ARF)



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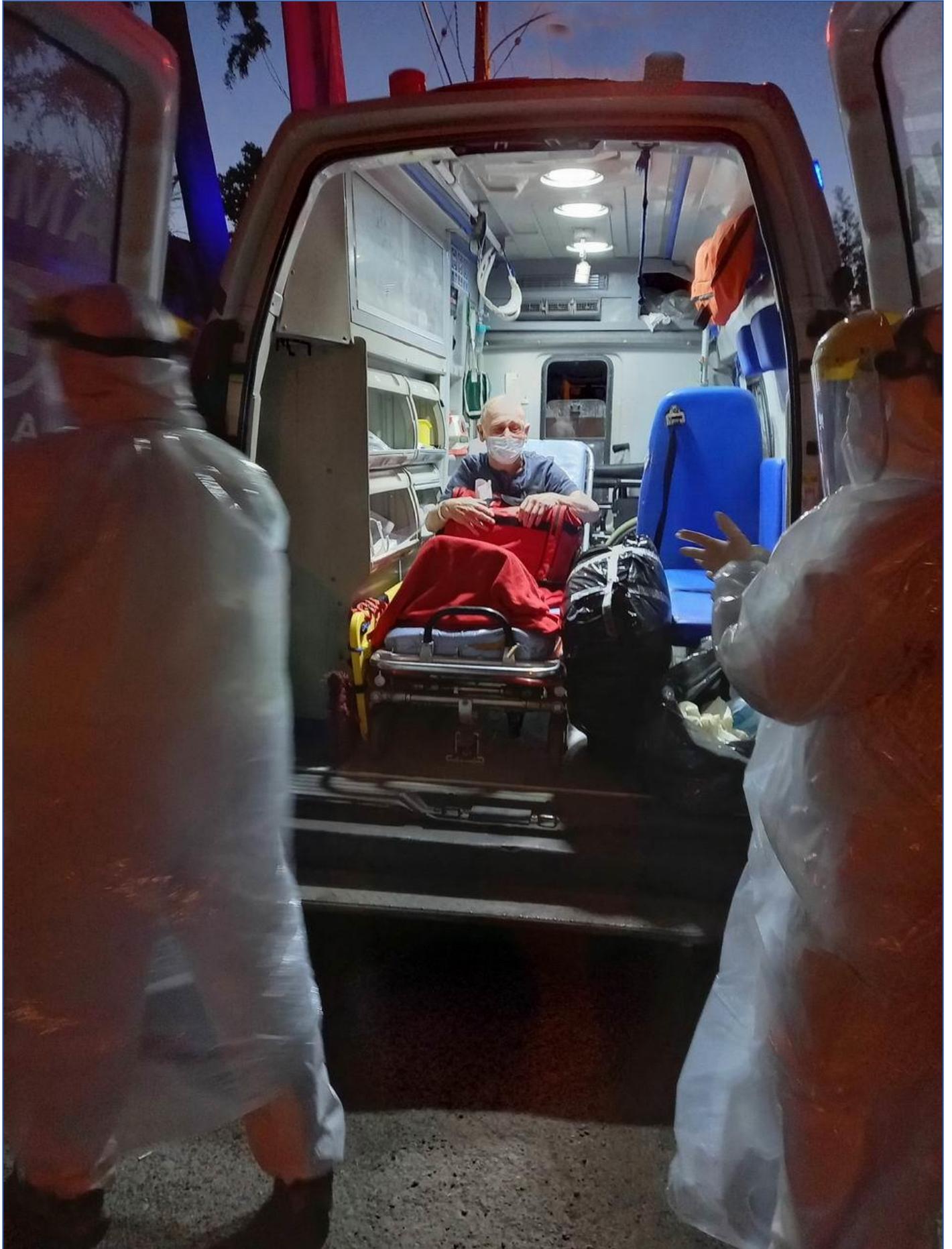


fig.3: All aboard the midnight hospital-bound ambulance. (19 Sep 2020. ARF)

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The pit of despair: then improbable salvation

Meanwhile, I'd been placed in a ward with five other Covid victims, although apart from one elderly man, there was little indication they were infected. I only fell asleep from sheer exhaustion a bit before dawn that first night. My mind was wide awake, dwelling miserably on nothing but this sudden depressing catastrophe away from Anita and the comforting familiarity of our home.

Next day was worse. The four other relatively unaffected women patients drove me mad, talking in rapid-fire Spanish across the ward to one another non-stop from dawn to dusk near the tops of their voices, or yattering on equally loudly into their i-phones. They seemed to be able to lie down and siesta at will too. I sank into despair, wondering whether I might be here for months, unable to be visited by Anita or move about anywhere. She had our only mobile. I'd seen too many people enslaved by them, bent over and thumbing away like mad, totally oblivious of all and everybody else, even when walking on the street, so one had to move out of their way. Despite recognising their uses, which we ourselves undeniably benefit from, I didn't want that. So I was totally isolated among complete strangers ... or so I thought ... and with nothing to occupy my feverish mind, not even to read as a distraction. My misery reached an acutely low pitch where I thought seriously about suicide for the first time in my life, and even counted the sleeping pills I'd brought with me to see whether there were enough to guarantee the job. The nightmarish scenario had overwhelmed me.

Then came a totally unexpected surprise. One of the nursing staff was a friend of Anita's whom I also knew slightly. Anita asked her to contact me, and she arrived in the ward that evening. I'm ashamed to say I broke down, which has only ever happened before when I was a boy and my beloved pet cat died, and blurted out my anguish. I'm ashamed I did because so many others, some of whom may even be reading this, have been or are far, far worse.



fig.4: Austral blackbird (*Curaeus curaesus*) picking insects off the flyscreen of one of our windows. (2 Nov 2010. JMW)

Nevertheless, I have to admit I'm also extremely glad, due to the consequences. Our physiotherapist acquaintance reported back to Anita, who contacted two other friends, one a doctor with influence in the hospital, the other with local political influence. A risky visit by Anita was arranged for the next day, when she told me she too was infected. You may imagine our feelings when we were united. I told her about my intention to do away with myself. She said she couldn't live without me and would have followed suit. Thank our lucky stars I

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didn't! Following that, books with titles I named came in, then my first mobile, which the staff instructed me how to use, and I was put in a quiet ward of my own. It had a tree just outside the window where austral blackbirds (*tordos*) [fig.4] perched and sang sweetly from time to time. Anita even sent along our TV, but unfortunately there was no aerial connection within reach, so we donated it to the hospital and have since purchased a cheap modern replacement.

The corner turned, but keep the oxygen flowing, please

So that situation came as a marvellous volte face for me. Now with everything to live for I battled the vicious virus with all my mental strength. Not only could Anita and I chat over our phones and see each other on their screens daily, but our two daughters in England 'joined the party' too. Anita had another trick up her sleeve to boost my recovery. Daughter Sarah runs a foraging concern named Wild Feast and recently published an article on edible flowers and their varied uses. As part of the introduction she wrote: 'Modern research suggests some flowers may be useful to treat physical or mental illnesses. Even looking at them helps us to feel better. A study showed that patients in hospital rooms with flowers needed less medication and felt more positive than others in rooms without.' Anita hadn't read that, but divined it instinctively. So she frequently sent me shots of our garden ornamentals, which were still in full cry during the glorious green 2020 season [figs.5-18]. Added to that, I received several photos of her new raised, wooden vegetable beds, which had been constructed earlier [fig.19], and were now full of impressive crops - lettuce, tomatoes, beetroot, onions, spinach and more [fig.20]. Some were even ready for the pot [fig.21]. Well masked, including with a transparent face shield available [fig.22], she even sneaked out alone for a few very local drives when feeling back to normal, and sent pictures of plants seen then as well [figs.23-26].



fig.5: *Iris x hollandica*, white cultivar. (22 Sep 2020. ARF)

Needless to say, all those photos, together with an amazing cascade of over 100 well-wishing messages from friends, concerned people in the

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medical world, others in botanical circles, both Chilean and worldwide, and even people we didn't know who'd read of our plight, fuelled my fighting determination further still.

By now too, I had an ever-increasing number of friends among interested doctors and other staff at the hospital. They were fascinated by our career with plants, and about half a dozen times I had to repeat my relevant history. It started off with me as a child enthralled by nature, next becoming a plant hunter in Turkey and the Andes, and then gradually transforming to my present status as an independent, acting-unpaid taxonomist specializing in Andean violas, together with Anita since 1991.



fig.6: *Crataegus monogyna*. (24 Sep 2020. ARF)

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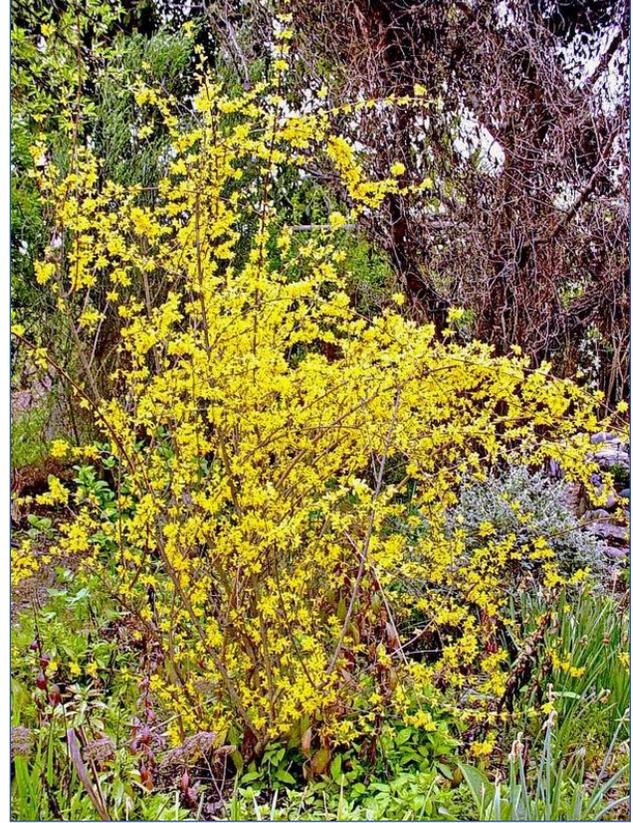


fig.7: *Euphorbia chacarias*. (23 Sep 2020. ARF) fig.8: *Forsythia intermedia*. (24 Sep 2020. ARF)



fig.9: *Bletilla striata*. (26 Sep 2020. ARF)



fig.10: *Ornithogalum umbellatum* with common forget-me-nots. (26 Sep 2020. ARF)

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fig.11: *Sparaxis tricolor*. (24 Sep 2020. ARF)



fig.12: *Alstroemeria ligtu*. (28 Sep 2020. ARF)



Above left - fig.13: *Iris x hollandica* 'Blue Magic'. (26 Sep 2020. ARF)

Above right - fig.14: *Iris* Pacific Coast hybrid. (23 Sep 2020. ARF)



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Above left - fig.15: *Iris x hollandica*, white cultivar. (28 Sep 2020. ARF)

Above right - fig.16: *Iris x hollandica* 'Lion King' (28 Sep 2020. ARF)



Above left - fig.17: *Camellia japonica* 'Alba Plena'. (22 Sep 2020. ARF)

Above right - fig.18: *Camellia japonica* 'Lavinia Maggi'. (22 September. ARF)

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figs.19, 20, 21: Anita's raised vegetable bed as just constructed. (5 July 2020. ARF) The same raised vegetable bed with its first healthy crop. (22 Sep 2020. ARF) Ready to eat, but by Anita alone, alas. (21 Sep 2020. ARF)



fig.22: A self-portrait by Anita of herself masked-up and ready to drive a short way looking at plants. (29 Sep 2020)

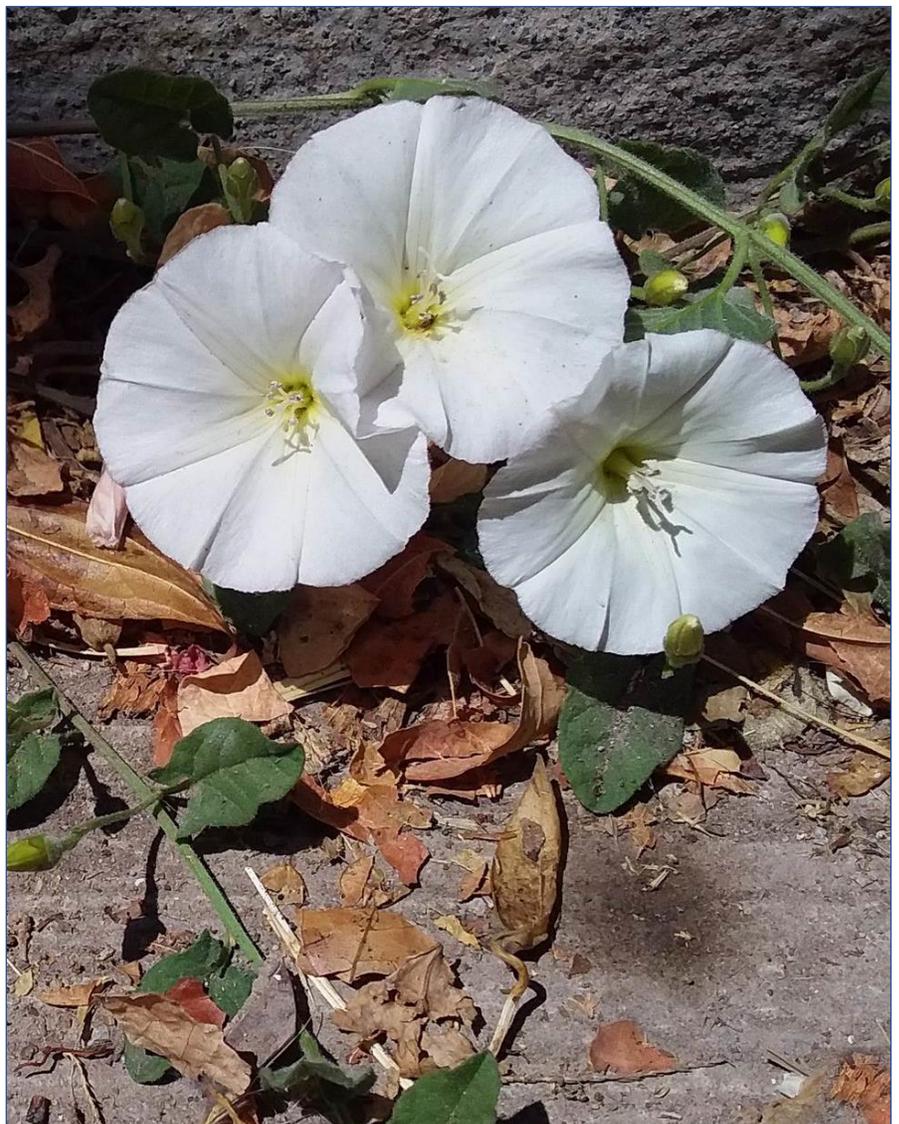


fig.23: *Convolvulus arvensis*. (29 Sep 2020. ARF)

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fig. 24: *Tropaeolum tricolor*.
(29 Sep 2020. ARF)

Of numerous potential symptoms Covid presents, damage to the heart and the respiratory system are among the most serious. The former never for a moment affected me, but apart from a slight trembling of the hand and difficulty of grasping with fingers, now long past, the latter was my only obvious physical indication, and demanded care and attention. As I received my oxygen boosts several times a day via a face mask, awareness of another and far more important aspect of the green world than the purely aesthetic arose in my mind. Photosynthesis results in oxygen being discharged as a waste product of plants. It fills our



atmosphere continuously, being the breath of life for all terrestrial organisms. Probably very few people are aware that we're totally dependent on plants, not only for the air we breathe, but directly or indirectly for all we eat and drink except water and certain chemicals. Furthermore, they provide numerous vital and other fabrications made from wood, such as building structures and furniture, or from more flexible parts that can be woven, cotton, for example, not mention paper. To those must be added all the fossil fuels and plastics derived from them that define our modern world.



fig.25: *Viola chamaedrys*. (29 Sep 2020. ARF)

Regular tests showed I was rapidly on the mend thanks to my boosted morale. Even so, when I was given the all-clear a mere 12 days after my admission, the docs were astonished. They couldn't believe a decrepit old crotch of 84 with a number of long-term health problems, albeit controlled by medication, could possibly have recovered so quickly. They'd reckoned I'd be in for at least a month.

By that time I was in a recuperation ward with several others again, although not worried in the slightest by company then. The order for my release came early on the 13th day after confinement, as it did for one of the young women who'd been in that first fateful ward with me. We packed and waited and waited, but nothing happened as we grew more and more frustrated and saw our chances of getting away that day evaporating. We discovered later that there were many new cases being brought in from far and wide, and only two ambulances in service. At nearly nine o'clock, when we'd given up, the two of us were collected and stretchered out to one of those vehicles. As we were driven along I could only see the tops of buildings and trees as well as a few high signs, all lit by street lamps, but knew exactly where we were at any given moment. My new friend was dropped off, the ambulance continued along the straight road to Calle Larga, turned off, and arrived at our front vehicle entrance a little before ten.

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fig.26: Easy does it. The unspeakable joy of arriving back home. (2 Oct 2020. ARF)

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Home sweet home

It was still the 2nd of October ... but only just. I was offloaded and helped to our front house door [fig.26]. Anita and I were ecstatic to be together again and neighbour Helga was there to share our joy. A delightful welcome back had been prepared for me [fig.27], together with a particularly comfortable bed loaned by Anita's mum and placed in our newly decorated office room [fig.28] with its view out to our farmer neighbour's walnut orchard [fig.29].



Next morning I looked up the garden from just outside the house door and could see it was still full of colour [figs.30, 31]. Never has our home and garden meant more to me.

fig.27: What a lovely surprise awaited on our print of Van Gogh's irises!
(3 Oct 2020. JMW)



fig.28: Ahhhh! How sweet, how touching. Together again at John's new bed.
(4 Oct 2020. Helga Petterson)



fig.29: Hey, you two! I can see you.
[20 Jan 2020. JMW]



fig.30: *Lonicera tatarica*. (10 Oct 2020. JMW)

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fig.31: *Rosa banksiae*. (10 Oct 2020. JMW)



fig.32: This is the life, folks.
(3 Oct 2020. ARF)

**Home recovery while in
quarantine: 3 to 16 October 2020.**

The two wheels of fortune

Even before Covid struck, a combination of slipped vertebral discs and diabetes in the lower legs had seriously affected my balance and ability to walk any distance. I needed a walking stick - sometimes two, except for very short distances on the level floor indoors. A fortnight almost static in hospital, and weakness due to the virus had further reduced my strength

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to the point of my needing a wheelchair [fig.32]. The worrying thought arose that often overtakes one when some new health problem arises: Is this it for life? Or will I recover?

But for the moment at least Anita could push me round the garden, and I could manipulate myself for short distances along relatively smooth, even surfaces there. It allowed me to sit back comfortably in the late spring sunshine and enjoy directly the flowers she'd been sending me from her i-phone [fig.33]. It was no less of a joy to see and hear our garden birds too [fig.34], which the austral blackbird outside the hospital window had reminded me of.

fig.33: *Callibrachoa* cultivar, one of the first to be admired after returning from hospital. (3 Oct 2020. JMW)

Ironically, I discovered that the chair actually provided an easier and more stable platform for photography where plants were within reach [figs.35-39]. I had no intention to stay wheelchair bound for the rest of my mortal days either, if I could do anything about it, and began a regime of regular exercise [fig.40]. So everything in the garden was rosy, and it just remained to wait out our fourteen days of obligatory post-Covid quarantine and see what might lie ahead for us and everyone else.



fig.34: One of our confiding little picui ground doves (*Columbina picui*) just outside the front door (6 June 2018. JMW)

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fig.35: Photographing Anita's flower bed from a supportive wheel chair. (5 Oct 2020. ARF)

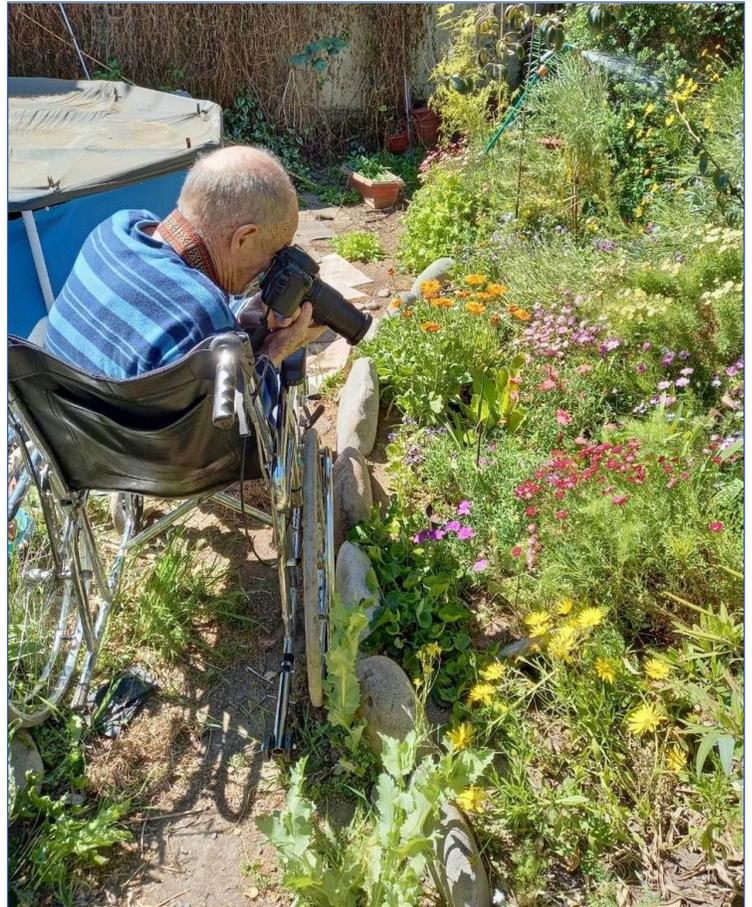


fig.36: *Scilla hyacinthoides*. (8 Oct 2020. JMW)



fig.37: *Zantedeschia aethiopica*. (5 Oct 2020. JMW)



fig.38: *Hyacinthoides non-scripta*, the British wild bluebell in Chile! (5 Oct 2020. JMW)



fig. 39: *Pelargonium* 'Vancouver Centennial', wondrously long-flowering. (11 Oct 2020. JMW)

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The good, the bad and the ugly

The following is not about plants. It describes how two of those devoted to them survive.

Paradoxically, as opposed to our pre-Covid financial situation, we now consider ourselves relatively lucky compared with many others. We have a guaranteed income, however low, from our three combined pensions, so cannot become out of work on reduced or no earnings, as has happened to so many, above all the self-employed.

Anita's is miserably low, and my British government pittance (about which more anon) is even worse. We couldn't possibly manage on those. Now is the time then to reveal to the world how we actually subsist via a wonderful 'gift from heaven', that third pension.

It started a few years back with a Chilean friend and colleague, a botanical independent like us. She's the leading co-author of a number of field guides and other books, and has made additional important contributions to scientific knowledge. For this she received two major national academic prizes. She had just reached retirement age, four years after me, and her lawyer suggested she apply for an honorary pension in recognition of her work. Anita and I happened to be there at the time, and it was suggested that I apply too, not that we gave it much chance. We prepared a curriculum vitae containing all my publications on the Chilean flora and explorations in the country. Further to that, my several tours leading the AGS over ten years were listed, and it was pointed out that I'd pioneered and publicised those, resulting in other now regular ecotours and individual visits to Chile. To our surprise I was summoned for an interview at a government department near the parliament in Santiago. Time passed and we'd given up, when a communication arrived to tell me I'd been granted an honorary life pension! Unsurprisingly, our friend's application was rejected on the grounds that she was well enough off not to need it, which happens to be perfectly true.

What a magnificent surprise. It turned out to be more than double the amount of our two existing, inadequate pensions combined. The one regrettable aspect for us is that it doesn't continue over to Anita when I 'pop off', whereas she's due for a microscopic half of my frozen payment from Britain, for what it's worth.

Now compare that Chilean generosity with my U.K. pension as an expat resident of Chile. On reaching retirement age in 2001 I received the full U.K. equivalent ... but, and it's an appalling but ... frozen at that rate for the rest of my life. This is what tens of thousands like me all over the world suffer, in Canada, Australia, South Africa, and other countries with smaller numbers of us, as in South America.

Our feelings about the difference between my respective treatment by the British and Chilean governments must be so obvious as not to need further elaboration.

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Bibliography

Watson, J.M. & Flores, A.R. (2020) Short sorties in times of a pandemic. IRG. 129: 3-38.

<http://www.srgc.org.uk/logs/logdir/2020Sep241600957311IRG129.pdf>.



fig.40: Returning to fitness after the infection. (12 Oct 2020. ARF)

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--- In the garden ---

The Rubus of the Rock Garden by Connor Smith

Recommending *Rubus* for a garden will always carry a sizeable amount of caution. Particularly those who are not familiar with the wonders as the botanically minded individuals are. These are plants which gardeners spend a great deal of time removing, so why would you knowingly plant one?



Rubus nepalensis – Image Gerard Van Buiten

Like all groups of plants 'of course, there must be some beautiful ones' to change your mind. For me, this moment came while walking the British National Collection of *Rubus* with its guardian, Barry Clarke of the Hillier arboretum. The broadly versed plantsman has 5 national collections of his own on top of aiding the continued preservation of one of the finest tree collections in Britain. I knew that *Rubus* was found abundantly from North America to Asia but did not know the extent to which it is found in the southern hemisphere. Some truly remarkable species can be found in New Zealand/ Tasmania, Southern Africa, and South America. A few of which I believe could be well suited to our gardens.



Rubus taiwanicola – Image Gerard Van Buiten

The species most rock gardeners will be familiar with is *Rubus taiwanicola*, a small explosion of leaves no bigger than your hand, which marches to form colonies of evergreen tufts. This is an obedient species which will only grow to 10cm high. It does not spread as quickly as other species and is easier to maintain.

Rubus parvus – Image by Stephen Barstow

Few gardeners will know of *Rubus parvus*, a wonderful little species which hugs the ground as it grows. It is endemic to the South Island of New Zealand and is reportedly hardy. The foliage is shaped like a double-edged saw and during the colder months can turn bronze to purple coloured but



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only if in a sunny position. It is accommodating to most soils, situations, and conditions as are many *Rubus* species. It produces large flowers in relation to its diminutive stature, these later turn into large fruits which glow red. This is greatly attractive to the eye, of both gardeners and birds. A sterile hybrid called *Rubus x barkeri* is a great ground cover for challenging areas which are exposed and or get require regular weeding.



Rubus parvus – Image by Stephen Barstow. Stephen is the author of the book [“Around the world in 80 Plants”](#) *Rubus parvus* is also known as the ‘Creeping Lawyer’ bush!

Rubus geoides was introduced to me on Facebook thanks to Martin Sheader.

Rubus geoides

From Southern Chile, this little charming species produces temptingly attractive red fruit which is, like many (if not all) of the genus, tasty. As for many of the species of smaller ornamental *Rubus*, they are practically never found in gardens. So, the information on how well these



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species will adapt to growing in other countries is purely theoretical with minimal proven success. This is simply down to the fact these species aren't being tested in garden settings for reasons that are completely unknown to me.

Rubus geiodes,
showing it's
diminutive scale
– Image from
Facebook



Rubus geiodes in fruit - Image by Pellaea from [Wikipedia](#): CC BY 2.0

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Rubus gunnianus in fruit – Image from Facebook.

One I have high hopes for is the Tasmanian endemic, *Rubus gunnianus*. This is found abundantly in the alpine and subalpine areas of Tasmania. It is somewhat similar to *Rubus taiwanicola* in both habit and appearance but much smaller, with the flowers nestled within the foliage. Tasmanian species can be troublesome in gardens in the northern hemisphere, while others are more than accommodating. If collected from the higher parts of the country (1400m) I think it could easily find a home in British garden, in between rocks or in the corner of a trough.

Rubus gunnianus – Image by Alan Ayton on the SRGC Facebook page. Alan is an Australian SRGC member.

Alan writes: “*Rubus gunnianus*, the Alpine raspberry is a prostrate matting herb which spreads via underground runners. Leaves are normally trifoliate dark green and shiny. Single cream-white flowers during summer. Fruit is red, fleshy and sweet to taste. Widespread in moist open alpine vegetation. Another Tasmanian endemic species.”





Rubus gunnianus – Image by Alan Ayton on the SRGC Facebook page.



Rubus squarrosus fruits – Image by Jeremy R. Rolfe: [CC BY](https://creativecommons.org/licenses/by/4.0/) from [NZPCN.org](https://nzpcn.org)

By far the most bizarre and illuminating species is *Rubus squarrosus*. A small bundle of near leafless crisscrossing stems which had deceptively prickly spines, as I found out when trying, overenthusiastically, to make its acquaintance. As with many of these unconventional New Zealanders, I find myself oddly attached to them. It would be well placed on top of rock garden where kids should not venture past for fear of falling, or by rare plants to stop prying hands taking seeds without asking.

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Rubus squarrosus – Image Barry Clarke.

I would advise giving these species room to stretch their legs, as with all plants of their nature, they will be happy to explore a garden. On a shady part of the garden, woodland areas or an area you are happy for it to colonise you will soon find it a treasured guest rather than an unwanted weed like some of its less civilised relatives.

These are very accommodating plants to a range of soils and conditions - they seem to have a lull when initially planted for a few years before getting properly established and beginning to spread. It will be no surprise to anyone that they can really take off in small gardens or when happily settled into their new home.

Seed from fruits are straight forward but are often plucked by birds, kids, visitors, or simply knocked off. Some species are shy to bear fruit while others require both parents present in order to raise young. For the home gardener cuttings, divisions or simply lifting the already layering plant is the easiest for the busy or idle gardener like myself.

I am greatly in debt to the few treasured days I got to spend in the company of Barry Clarke, owner of all these wonderful plants. His knowledge and passion for this terribly overlooked genus has really enlightened my perspective on the variability of forms available for many a garden situation. It seems there is much more to the humble bramble that you think.

C. S.