Reaching the lower *levada* from near the coast could be tricky, therefore I recommend to head, first to Santa Quiteria, and from there to climb down to the lower *levada*. This way, you should reach it shortly before the bend where I spotted the first specimens of *Sedum*. *fusiforme*.

Lowe (1868: 325) reports that he saw *Sedum fusiforme* "W. of Funchal, on the Pico do Rancho above Camera de Lobos, and at the further or W. end of the top of the Cabo Girao; also E. of Funchal a little on the Funchal side of the Brazen Head [= Ponta do Garajau]". Following this information, I explored Ponta do Garajau, which hosts another observation point, called Miradouro do Cristo Rei because there is a statue of Christ similar to (but much smaller than) that of Rio de Janeiro. I searched carefully on both the ridge itself and the Funchal side of the peninsula, which is crossed by a road leading to a

beach, but I only found Aeonium glutinosum, together with a host of invasive succulents including opuntias, carpobrotus and Kalanchoe aloes. ×houghtonii. I cannot rule out that S. fusiforme still survives on inaccessible cliffs in this area. checking may prove challenging for succulentophiles or botanists who are not skilled mountain climbers [I drew a blank in this area too thinking at the time heavy footfall was causing severe erosion - [Ed].

On the whole, I was surprised by how many specimens I saw, especially in the Nuns' Valley. My overall impression is that *Sedum fusiforme* might be more widespread in southern Madeira than usually thought. Several beaches at the foot of coastal cliffs are now reached by cable-cars, therefore it is possible that other populations will be spotted in the future.

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Bondegården – largest collection of *Sedum* ever?

Andrej Slávik & Ray Stephenson

Was one of the most significant *Sedum* collections at the beginning of the 20th century – perhaps even ever – to be found in a private garden in a small village outside of the provincial capital of

Gothenburg, Sweden? Recent historical scholarship seems to indicate as much.

The garden in question was called Bondegården after a former owner, the author and amateur ethnographer August

Bondeson, but also as a pun on the Swedish word for farmstead (bondgård). In 1909, it was acquired by Erik L. (1884-1969),Magnus a voung industrialist from Gothenburg whose name betrayed his Jewish ancestry: Magnus is indeed an ordinary Swedish name, but not as a surname. The Magnus family had originally been called Monasch but adapted their name to the linguistic circumstances, either when they still resided in northern Germany or when they first arrived in Sweden in the late 18th century. Among the first Jews to settle in the country after king Gustav III had loosened restrictions on immigration to encourage trade and industry, they came to play a pivotal role in Gothenburg's substantial Jewish community as well as in the city's cultural and economic life more generally. For example, Göthilda Magnus (1837-1901), Erik's first cousin once removed, and her husband Pontus Fürstenberg (1827–1902) were among the important patrons of a new generation of local artists, including such quintessentially "Swedish" painters as Carl Larsson and Anders Zorn. As a child, Erik and his family lived next door to the Fürstenbergs in their sumptuous residence - known colloquially as simply "the Palace" – in the very centre Gothenburg's old town; at the age of seven, he had his portrait painted by Carl Larsson in feathery pastels.

As a young adult, Magnus pursued a degree in engineering and tried his luck in the nascent Swedish automobile industry before taking up a position as first general manager and eventually managing director of a local specialty chemicals company producing various hygiene and household

products. Around the same time, he purchased the small cottage Bondegården as a summer residence, but also – perhaps especially – as a rural getaway for his wife Märta, née Liliencrants (1884-1986). Born into nobility yet of no large means, Liljencrants had studied both fine and applied arts and was just embarking on an independent career in graphic design when she fell in love with Magnus; although their marriage was not unhappy, she apparently felt restricted in her role as wife and mother as well as increasingly alienated from the polite society kept by her urbane husband. A great lover of nature, Bondegården became her veritable paradise – one that she would have to forsake after the couple remarried. divorced Magnus and Nevertheless, the four years that she spent must have made a lasting impression: not only did Liljencrants eventually find a vocation in horticulture. she also made herself more than one new garden during her remarkably long life.

Despite his rather mundane line of work – or, indeed, just because of it – Magnus was equally engrossed horticulture, but his interest took a different and quite particular direction. From the very beginning, he seems to have been drawn to collecting in general and showy exotics in particular; among the plants depicted in a set of charming watercolours painted by Louise Stiernstedt (1878–1940), a relative and close friend of Liljencrants, during a stay at Bondegården in the summer of 1910 is a specimen of Gymnocalycium paraguayense in flower. With time, the same impulse extended to other species among the Cactaceae among them the old man's cactus

(Cephalocereus senilis) and the fabled queen of the night (Selenicereus grandiflorus) – as well as to entirely other provinces within the vastness of the plant kingdom. That he eventually came to concentrate his efforts on Sedum. admittedly not the showiest of genera, was probably more of a coincidence: in a retrospective account published Lustgården, the journal of the Swedish Society for Dendrology and Park Culture, he laconically observed that this particular genus simply seemed to thrive in the garden's light, sandy soil.

Now then, which particular species of *Sedum* were grown at Bondegården? We do not know how the plantings started out, nor how they developed over time: while Magnus owned the property for over four decades, our main source of information about the collection pertains to no more than two consecutive years in the mid-1920s. At that time, however, the following species were reportedly in cultivation:

Name received by garden (as written)

- S. acre L.
- S. acre L. var. majus Mast.
- S. adenotrichum Wall.
- S. Adolphi Hamet
- S. Aizoon L.
- S. Aizoon × kamtschaticum Praeger
- S. alboroseum Bak.
- S. album L.
- S. allantoides Rose
- S. alsinefolium All.
- S. altissimum Poir.
- S. amecamecanum Praeger
- S. amplexicaule DC.
- S. Anacampseros L.
- S. anglicum Huds.
- S. annuum L.
- S. anopetalum DC.
- S. Aoikon Ulbrich
- S. balticum Hartman
- S. bellum Rose
- S. Bourgaei Hemsl.
- S. brevifolium DC.
- S. bupleroides Wall.
- S. cauticolum Praeger
- S. Cepaea L.
- S. Chaneti Léveillé
- S. Chauveaudi Hamet
- S. coeruleum Vahl
- S. compactum Rose
- S. compressum Rose

Current name

Sedum acre

Sedum acre diploid

Rosularia adenotricha

Sedum adolphi

Phedimus aizoon

Phedimus aizoon \times P. kamtschaticus

Hylotelephium erthyrostictum

Sedum album

Sedum allantoides

Sedum alsinefolium (more likely S. fragrans)

Petrosedum sediforme

Sedum ×amecamecanum

Petrosedum amplexicaule

Hylotelephium anacampseros

Sedum anglicum

Sedum annuum

Petrosedum ochroleucum

Sedum aoikon*

Sedum album (micranthum)

Sedum bellum

Sedum bourgaei

Sedum brevifolium

Rhodiola bupleuroides

Hylotelephium cauticola

Sedum cepaea

Orostachys chanetii

Sedum chauveaudii

Sedum caeruleum

Sedum compactum

Sedum palmeri

- S. confusum Hemsl.
- S. crassipes Wall.
- S. crassipes Wall. var. cholaense Praeger
- S. cupressoides Hemsl.
- S. dasyphyllum L.
- S. dasyphyllum L.var. glanduliferum Moris
- S. dasyphyllum L. var. macrophyllum Rouy & Cam.
- S. dendroideum Moc. & Sess.
- S. divergens S. Wats.
- S. diversifolium Rose
- S. Douglasii Hook.
- S. drymarioides Hance
- S. drymarioides Hance var. stellariefolium
- S. dumulosum Franch.
- S. ebracteatum Moc. & Sessé
- S. Ellacombianum Praeger
- S. Ewersii Ledeb.
- S. Ewersii var. homophyllum Praeger
- S. Fabaria Koch
- S. Fabaria Koch var. Borderi Rouy & Camus
- S. floriferum Praeger
- S. fusiforme Lowe
- S. gracile C. A. Meyer
- S. griseum Praeger
- S. gypsicolum Boiss. & Reut.
- S. hirsutum All.
- S. hirsutum All. var. baeticum Rouy
- S. hispanicum L.
- S. humifusum Rose
- S. hybridum L.
- S. indicum Hamet
- S. indicum Hamet var. yunnanense Hamet
- S. kamtschaticum Fish. & Mey.
- S. Kirilowii Regel
- S. Kirilowii Regel var. Rubrum Praeger
- S. lancerottense R. P. Murray
- S. Leblancae Hamet
- S. leucocarpum Franch.
- S. Liebmannianum Hemsl.
- S. lineare Thunb.
- S. lineare Thunb. fol. variegatum
- S. lineare Thunb. var. robustum Praeger
- S. longipes Rose
- S. Lydium Boiss.
- S. magellense Ten.
- S. maximum Suter
- S. maximum Suter var. atropurpureum hort.
- S. melanantherum DC.
- S. mexicanum Britton

Sedum confusum (could be S. kimnachii)

Rhodiola wallichiana

Rhodiola wallichiana

Likely to be *S. muscoideum*

Sedum dasyphyllum

Sedum dasyphyllum var. Glanduliferum

Sedum dasyphyllum var. macrophyllum

Sedum dendroideum

Sedum divergens

Sedum greggii

Sedum stenopetalum subsp. stenopetalum

Sedum drymarioides

Sedum stellariifolium

Rhodiola dumulosa

Sedum ebracteatum

Phedimus ellacombeanus

Hylotelephium ewersii

Hylotelephium ewersii var. homophyllum

Hylotelephium telephium subsp. telephium

Hylotelephium telephium subsp. telephium

Phedimus florifer

Sedum fusiforme

Sedum gracile

Sedum griseum

Sedum gypsicola (S. album)

Sedum hirsutum

Sedum hirsutum var. baeticum

Sedum hispanicum

Sedum humifusum

Phedimus hybridus

Sinocrassula indica

Sinocrassula yunnanensis

Phedimus kamtschaticus

Rhodiola kirilowii

Rhodiola kirilowii

Sedum lancerottense

Sedum leblanciae

Sedum leucocarpum

Sedum leibmannianum

Sedum lineare

Sedum lineare fa. variegatum

Sedum lineare (var. robustum)

Sedum longipes Sedum lydium

Sedum magellense

Hylotelephium telephium subsp. *maximum Hylotelephium telephium* subsp. *maximum*

Sedum melananthrum

Sedum mexicanum

- S. Middendorffianum Maxim
- S. Middendorffianum Maxim var. diffusum Praeger
- S. monregalense Balb.
- S. moranense H. B. & K.
- S. moranense H. B. & K. var. arboreum Praeger
- S. multicaule Wall.
- S. multiceps Coss. & Dur.
- S. Nevii A. Grav
- S. Nevii A. Gray var. Beyrichianum Praeger
- S. nicænse All.
- S. nudum Aiton
- S. oaxacanum Rose
- S. obtusatum Gray
- S. oreganum Nutt.
- S. oxypetalum H. B. & K.
- S. pachyphyllum Rose
- S. Palmeri Wats.
- S. Palmeri Wats. × confusum Hemsl.
- S. pilosum M. Bieb.
- S. polyrhizum Praeger
- S. populifolium Pall.
- S. potosinum Rose
- S. praealtum DC.
- S. Praegerianum W. W. Smith
- S. primuloides Franch.
- S. pruinatum Brot.
- S. pseudospectabile Praeger
- S. pulchellum Mich.
- S. purpureum Link.
- S. reflexum L.
- S. retusum Hemsl.
- S. rhodanthum A. Gray
- S. rhodocarpum Rose
- S. roseum Scop.
- S. roseum Scop. var. atropurpureum Turc.
- S. rubens L.
- S. rupestre L.
- S. sarmentosum Bunge
- S. Selskianum Reg. & Maack.
- S. Semenovii Mast.
- S. sempervivoides Fish.
- S. sexangulare L.
- S. Sieboldii Sweet.
- S. Someni Hamet
- S. spathulifolium Hook.
- S. spathulifolium Hook. var. majus Praeger
- S. spathulifolium Hook. var. purpureum Praeger
- S. spectabile Boreau. (fl. rose., purp.)

Phedimus middendorffianus

Phedimus middendorffianus

Sedum monregalense

Sedum moranense

Sedum moranense fm

Sedum multicaule

Sedum multiceps

Sedum nevii but more likely = *S.glaucophyllum*

Sedum nevii but more likely = *S.glaucophyllum*

 $\times Petrosedum\ luteolum\ (more\ likely = P.$

sediforme)

Sedum nudum

Sedum oaxacanum (or possibly = S. australe)

Sedum obtusatum

Sedum oreganum

Sedum oxypetalum

Sedum pachyphyllum

Sedum palmeri

Sedum palmeri

Prometheum pilosum

Sedum oaxacanum

Hylotelephium populifolium

Sedum potosinum

Sedum praealtum

Rhodiola hobsonii

Rhodiola primuloides

Petrosedum pruinatum

Hylotelephium spectabile

Sedum pulchellum

Hylotelephium pallescens

Petrosedum rupestre

Sedum retusum

Rhodiola rhodantha

Sedum rhodocarpum

Rhodiola rosea

Rhodiola integrifolia Subsp. integrifolia

Sedum rubens

Petrosedum forsterianum

Sedum sarmentosum

Phedimus selkskianus

Rhodiola semenovii

Prometheum sempervivoides

Sedum sexangulare

Hylotelephium sieboldii

Sedum somenii

Sedum spathulifolium

Sedum spathulifolium subsp. yosemitense

Sedum spathulifolium var. purpureum

Hylotelephium spectabile

S. spurium M. Bieb. (fl. alb., rose., purp.)

S. Stahlii Solms.

S. stellatum L.

S. stenopetalum Pursh.

S. Stephani Cham.

S. stoloniferum S. T. Gmel.

S. Stribrnyi Velen.

S. Tatarinowii Maxim.

S. Taquetii Praeger

S. Telephium L.

S. telephioides Michx.

S. ternatum Mich.

S. Treleasei Rose

S. trifidum Wall.

S. versadense C. H. Thomp.

S. villosum L.

S. Winkleri Wolley-Dod

S. viviparum Maxim.

S. yunnanense Franch. var. valerianoides Hamet

*not S. aoikon Clausen

Phedimus spurius all forms

Sedum stahlii

Phedimus stellatus

Sedum stenopetalum

Rhodiola stephanii

Phedimus stolonifer

Sedum urvillei

Hylotelephium tatarinowii

Hylotelephium viridescens

Hylotelephium telephium

Hylotelephium telephioides

Sedum ternatum

Sedum treleasei

Rhodiola chrysanthemifolia subsp.

chrysanthemifolia

Sedum versadense

Sedum villosum

Sedum hirsutum subsp. baeticum

Hylotelephium viviparum

Rhodiola yunnanensis subsp. yunnanensis

Black = native

Blue = probably hardy

Green = successful with protection

Red = likely to be ephemeral (does not take to cultivation)

An impressive list, to put it mildly: in our estimation, there was no more exhaustive collection in the world! Furthermore, by comparing the extant information for the two consecutive years, we can conclude that it was very much in development. From a total of 146 species, 112 were cultivated in 1924; out of these, 7 died at some point during the year while 106 survived into the following season, when 32 additional species were added for a sum of 138 species cultivated in 1925. All of which raises some obvious questions.

First and foremost, why the effort? Did the collection actually come about by sheer coincidence, as the comment cited above would seem to imply, or was there something more to it? Perhaps it really did start out that way, but Magnus seems to have been spurred on by the taxonomic confusion prevailing at the time. Here, a quote from his own account in Lustgården might prove both enlightening amusing: "I soon realised however, that the nomenclature for this genus was one big jumble. How could I get this straight? I turned to various botanists – professors and others – without result. They all shook their heads and said: 'We don't know Sedum, because there's no monograph.' One day, I came up to Professor Robert Fries in the Bergian Garden [the botanical garden of the Royal Swedish Academy of Sciences], and he told me that there was a physician in Stockholm who had been to visit him in the same 'Sedum-matter'. 'Seek him out, join forces with him and make a monograph about the genus.' I well-known marched up to the psychiatrist, Doctor Harald Fröderström – during his reception hours, mind you. Of course, he thought that I was a normal, slightly crazy person (maybe I was) who wanted to become his patient. Once I had stated my business, he looked funny to say the least. This was in August 1923. On that day I earned a friend and the collaboration with 'Phrödum', as I baptised him, lasted up to his passing in 1944."

Indeed, Fröderström – one among the "giants of the genus" (see the *Sedum Society Newsletter* 100:40–4 (2012) – partly based his great monograph on research conducted at Bondegården, and Magnus is also said to have supported his scholarship financially. His findings were published in four separate instalments during the first half of the 1930s, and a minute examination of his argument reveals that Magnus' collection was still in development: Fröderström cites a handful

of species (Sedum calcicola, S. filipes S. jaccardianum, var. *pseudostapfii*, S. linearifolium [Rhodiola kirilowii], S. populifolium×ewersii [Hylotelephium], S. Sanctae Monicae [Dudleya telephoides multicaulis], S. [Hylotelephium], tenuifolium S. [Petrosedum amplexicaule subsp. tenuifolium]) that had not been in cultivation five to ten years before. In his introduction to the last part of his monograph, the author gives his patron due credit: "Since more than 10 years my friend, Mr. E. L. Magnus in Göteborg [i.e., Gothenburg], has put himself at my disposal, supplying many hundreds of living Crassulaceae from his garden." Not only that, "Phrödum" also named a newly described species in his honour: Sedum erici-magnusii, still known by the same



Figure 17. View of the Sedum plantings at Bondegården in 1927. Photographer: Carl Skottsberg.

epithet, a subalpine to subarctic annual native to eastern Tibet and western Sichuan.

A second question, no less important: how was Magnus able to gather such a formidable number of species? Judging from the list above, there was a significant overlap between his collection and that of Robert Lloyd Praeger (1865–1953), which was being assembled in Dublin at roughly the same time and readily shared with other enthusiasts (see the Sedum Society Newsletter 100:36-37 (2012). Magnus may well have been in touch with him, just as he was evidently in contact - either directly or through Fröderström - with similar authorities in the field: a copy of a letter to Fröderström from a young Reid (1916-2010),the American Moran botanist who charted the closely related genus Dudleya, which has been preserved by chance in a private archive mentions several shipments of living specimens Bondegården, California to from S. pruinosum including S. radiatum, [S. spathulifolium pruinosum], var. S. anomalum [S. spathulifolium] S. niveum. He would also have obtained parts of the collection from specialist nurseries – on his own account, he bought plants "from all over the place" - as well as through personal connections, whether family or business.

Above all, Magnus was exceptionally well placed in local botanical and horticultural networks: for a full four decades, from its constitution in 1919 and all the way up to 1959, he served on the board of trustees for the Gothenburg Botanical Garden, inaugurated during the city's Tercentennial Jubilee Exposition in 1923 with the legendary botanist and

adventurer Carl Skottsberg (1880-1963) significant its first director. A undertaking largely funded by private donations, the plans for the garden had originally been drafted by Sigfrid Ericson (1879–1958), a local architect who was horticultural himself something a enthusiast, while its main buildings were designed by Arvid Bjerke (1880–1952), another local architect as well as a personal friend of Magnus; together, the also responsible for was architectural conception of the Jubilee Exposition, where Magnus participated with a spectacular display of carnivorous plants. On more than one occasion, both Bjerke and Ericson were also employed by Magnus to refurbish the cottage and gardens at Bondegården.

Over the years, many botanical specimens – whether plants, cuttings, or seeds – must have passed from the Botanical Garden to Bondegården and back again: to mention only the most spectacular example, Skottsberg received his first specimen of the South African orchid Disa uniflora as a gift from Magnus. For the garden's inauguration in 1923, plants from Bondegården were displayed in the newly constructed greenhouses; and when, more than two and a half decades later, Magnus decided to sell his private garden, he donated his most precious plants to the Botanical Garden. Obviously, his Sedum collection must have been greatly enriched by way of such connections: thanks to his position on the board of trustees, first as treasurer and later as vice chairman, he could and did benefit not only from contacts with the other botanical gardens in Sweden - his anecdote about Fries and Fröderström being a case in point – but also, no doubt, from occasional exchanges with similar

institutions abroad. It is quite telling that the inventories on which the list above is based were directly adapted from – indeed, virtual carbon copies of – the Botanical Garden's so-called *Index seminum*.

Last but not least, who should get credit for this botanical and horticultural feat? The answer might seem self-evident: without Magnus' position, resources, and tenacity – not to say obsession – the Sedum collection at Bondegården would never have come about. Still, although he was in no way averse to working in the garden, he even built his first glasshouse with his own two hands, his occupation and a host of other commitments would never have allowed him to provide the care and attention needed to maintain such a high number of plants in cultivation. Here, we must turn the spotlight on the head gardener at Bondegården, "master" Carl

Palmqvist (1883–1975), who came from a vastly different background than his employer: born into a family of tenant farmers in the rural province of Närke, he started working at the age of thirteen with the plantings on the local estate of Körtingsberg and was eventually admitted as an apprentice at the Bergian Gardens in Stockholm before arriving at Bondegården in the spring of 1912.

He could not have known it then, but he had come to stay. Nearly four decades later, in the fall of 1950, he told his employer that he was simply too old to carry on – and Magnus, who was less than a year younger, promptly decided to sell. Today, almost nothing remains of the garden, let alone of its spectacular *Sedum* collection. Except, of course, for a good story.



Figure 18. Bondegården's head gardener Carl Palmquist at work, probably in the 1920s. Photographer unknown.