

ARENDS STAUDENGÄRTNEREI-

Visit to Georg Arends Perennial Nursery run today by
the renowned plantswomen Anja Maubach



James M Miller

Merlin 823

11th to 14th July
2023

Dedication

This report is dedicated to Grandma, the plantswomen who continues to inspire me.

“As gardeners, the older we grow, the more we realize how limited is our knowledge, and our experience, and how we each have to discover what is aesthetically pleasing to our contrived associations, without losing sight altogether of the simple harmonies of Nature”

Beth Chatto 2002!

Delphinium depauperatum at Arends Staudengärtnerei

Acknowledgements

Firstly, I would like to thank Anja Maubach for the time and hospitality she gave me when visiting Arends Staudengärtnerei. All the detailed information she shared about the working of the nursery and gardens, historical documents on Georg Arends and her present management of the nursery were invaluable.

I would also like to thank Markus Radscheit the Technischer Leiter (Garden Manager) at Botanische Gärten der Friedrich-Wilhelms-Universität Bonn (Bonn Botanical Garden), for supporting the visit to Bonn and providing me with a reference. From Sheffield Botanical Gardens, thanks go to the Head Gardener, Andrea Jones for accommodating this trip around Plant Records work and Curator Ian Turner, for providing me with a reference.

I am grateful to the Hardy Plant Society, who awarded me a small contribution, the Kenneth Black Bursary and the Merlin Trust for the majority of the grant, which funded this project. Finally, thanks go to my Family and friends, who have been very supportive throughout my horticultural career.

I am very grateful and thankful for all of your help with this project at different stages. Thank you.

James M Miller
October 2023

The Merlin Trust
Grants for Young Horticulturists



Coreopsis verticillata
'Grandiflora' at Arends
Staudengärtnerei

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Introduction

I hope that this report will not only describe my trip to Arends Staudengärtnerei (Arend's Perennial Nursery) and Bonn Botanical Gardens, it will also prove a useful guide to the important Horticultural legacy, started by Georg Arends. The legacy has been continued and is now in its fourth generation. The nursery and gardens are still living and evolving, under Anja Maubach's stewardship, Georg Arends great-grand daughter.

Anja has brought her own style to the nursery and Gardens, whilst maintaining the important historical plant collections bred by Georg Arends and fabric of the nursery. The significance of this historic nursery is perhaps not appreciated in the UK, as it deserves to be. This could be due to historical factors.

I have decided to write this report in the first person because I feel it is the way to convey this very personal visit and experience. This style will allow me to express thoughts and experiences from the trip. I have chosen to use the Modern Humanities Research Association referencing style, when appropriate, to give credit to the work of others when it is due, but to not disrupt the flow of the report.

The main focus of this Merlin Trust 823, was to document the living legacy of Georg Arends plant breeding and present-day continuation by the renowned plantswomen Anja Maubach, at Arends Staudengärtnerei. The perennial nursery is now 135 years old. The visit was broken halfway, with a trip to Bonn Botanical Gardens (Botanische Gärten der Friedrich-Wilhelms-Universität Bonn), one of the leading Botanical Gardens in Europe. This visit was important for my work, as Plants Records Officer at Sheffield Botanical Gardens.

This visit had been a long-held dream of mine; when I was working as a Horticulturist at RHS Wisley, I helped with the Team and Plant Heritage, to gain national connection status for the Arends Astilbe Cultivars collection, at the bottom of the Rock Garden and Oakwood. This was part of my Horticultural Award.



I feel that this trip was an important part of my Horticultural development, allowing me to increase and refresh this area of special interest. This report aims to be a useful reference guide, of an important German nursery and gardens. A plant breeding legacy which has been highly influential in horticulture, in many other countries. I hope that this report strengthens horticultural friendships between the UK and Germany.

Left: Charcoal sketch of Arends Staudengärtnerei by the author. All photos, drawing and figures are by the Author, unless stated otherwise



Context and Itinerary

The Itinerary for the trip is as follows.

Sunday 11th of July Flight to Düsseldorf Train from Düsseldorf to Wuppertal (Base for the trip).

Orientation around local area. Monday 10th July Train to Bonn Day at Bonn Botanical Gardens (Botanische Gärten der Friedrich-Wilhelms-Universität Bonn). Meet Markus Radscheit for a tour of the collections at Bonn Botanical Gardens.

Tuesday 12th July walk to Georg Arends Garden & Perennial Nursery (Arends Staudengärtnerei) Tour of the Nursery and Gardens with Anja Maubach. Day focused on the plant propagation and the Nursery.

Wednesday 13th July walk to Georg Arends Garden & Perennial Nursery (Arends Staudengärtnerei). Day spent exploring Georg Arends Garden in detail with particular attention to cultivars which he developed.

Thursday 14th July Morning spent at Arends Staudengärtnerei, before taking a Train to Düsseldorf Airport. Flight back to Manchester

Left: old potting shed now a small shop area at Arends Staudengärtnerei

Orientation

July 11th

I left the house at just gone 3:30 in the morning and caught the 4 o'clock train from Sheffield to Manchester Airport.

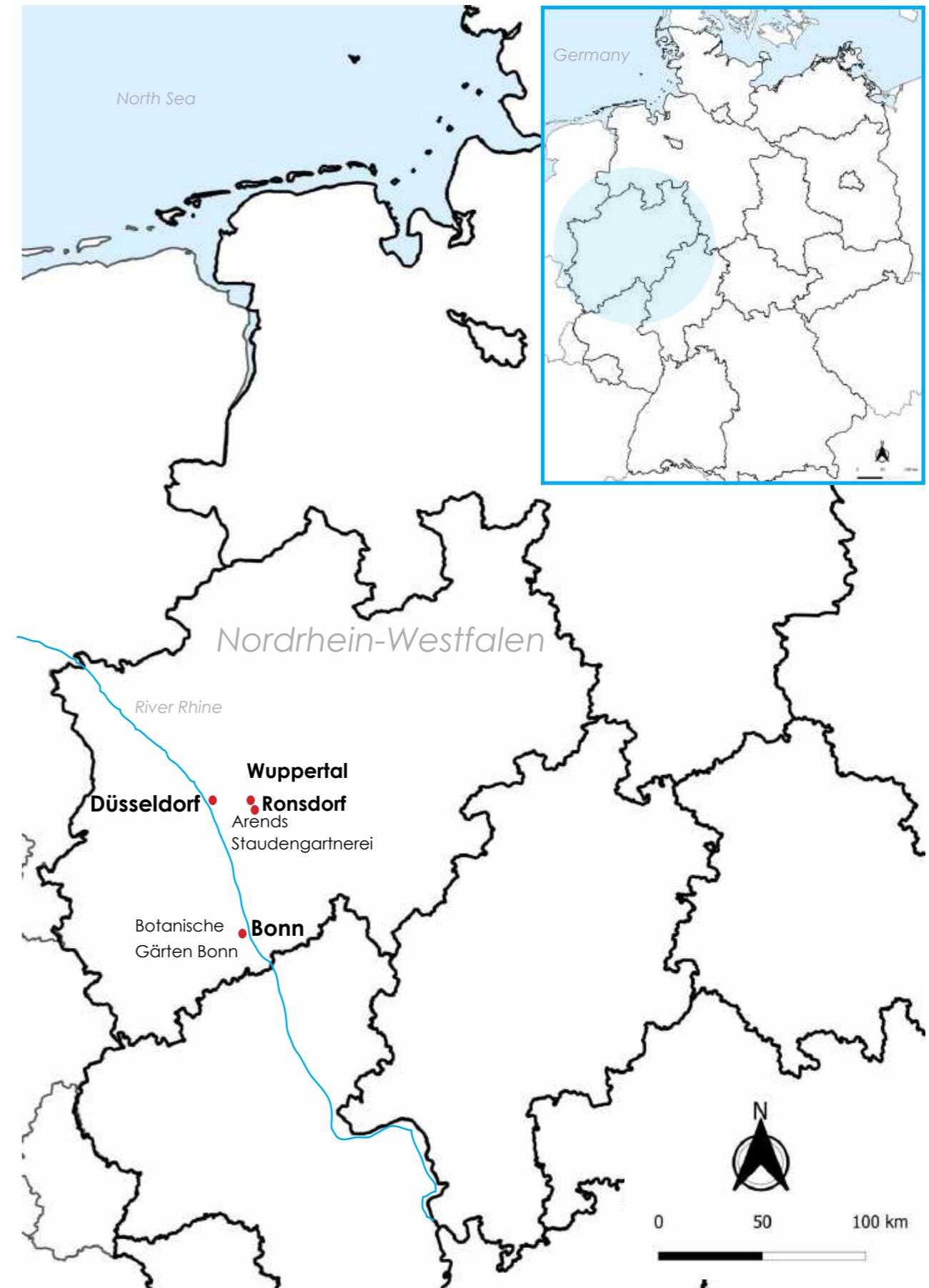
The flight to Düsseldorf was uneventful, but arriving at the Düsseldorf Haupt Bahnhof, part of the journey from Wuppatal to Ronsdorf had to be by bus. I Arrived at the accommodation at 4:30pm. After a rest, grocery shopping and dinner, I went out for a long walk to orientate myself with the local area.

The following records my first thoughts and feelings on Arends Staudengärtnerei, on July 11th

I took a long stroll into rolling countryside, just outside the Ronsdorf. It was a glorious Midsummer evening. A perfect way to start my second Merlin Trust bursary. The golden waning sun, was gradually sinking into the west, leaving behind hedges in fields, basked in a Twilight glow. Meandering back down to the town, I finally came to the closed gates of Georg Arends Garden and Nursery. It was a beautiful moment and I drank in my surroundings.

The rich colours blended softly into the foreground. Yellow Verbascum, Cephalaria, Miscanthus and pale purple Origanum danced in the amber evening light took in the moment for around 20 minutes. It was really quite emotional. As I walked back, the summer evening was heady with the rich floral honey fragrance of lime, Linden tree, Tilia. I admired a large Street elm and impressive Mature fastigate Oaks in the streets of Ronsdorf.

Several Streets are named in honour of Arends Staudengärtnerei in Ronsdorf. Some examples include; Georg-Arends-Weg, Gärtnerstraße and Astilbenstraße.



Right: itinerary map with Germany context, created by the author¹



Above: photo created by a German Professional Gardeners Society for Arends birthday. As a surprise for him, Arends photo was added in the centre, pre-Photoshop



Above: Georg Arends

Georg Arends, a Horticultural Pioneer

Born in Essen, Georg Arends trained as a gardener, in Geisenhiem, Southern Germany, Studying horticulture at the University of Geisenhiem. He started his Horticultural career at the Botanical Gardens in Breslau, modern day Wrocław, Poland². Arends then took the path of the journeyman gardener, going abroad to work at Th. S. Ware's plant nursery in Tottenham, London. This nursery is now closed. Here, Arends learnt about *Primula obconica* hybridisation. These skills particularly helped later in crossing *Astilbe*. Th. S. Ware's plant nursery in Tottenham was one of the first perennial

plant specialist nurseries in England. Whilst he was working in the nursery industry, in the UK, he visited RHS exhibitions, and Kew Gardens. It was particularly the Kew Rock Garden, which ignited his passion for Alpines. Following this, Georg Arends went to work in Italy as Head Gardener at a nursery near Trieste, owned by Guilio Perotti³. This nursery closed many years ago. Anja Maubach considers that this would have been a challenging experience for him. Arends was put in-charge of a long serving team of gardens, in his early twenties. By the time, he was ready to move back to



Astilbe stock-bed at Arends Staudengärtnerei

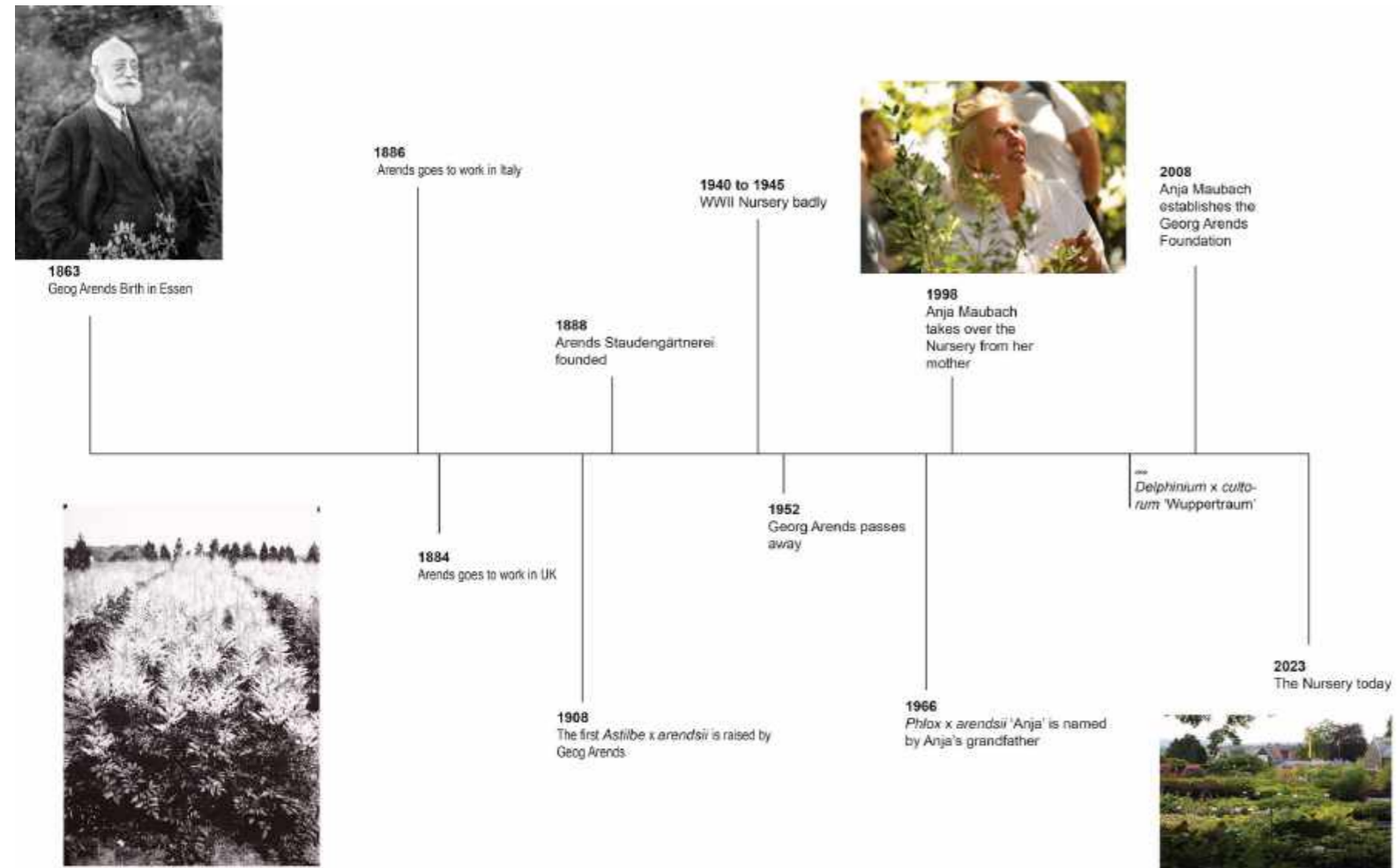
Germany, Georg Arends had the nursery in Treiste running in good order, despite challenges with its location. He then travelled around Italy before his return.

In 1888 he founded the present-day nursery. He chose the small German town of Ronsdorf, in the Ruhr area, now included in metropolitan Wuppertal. He selected the site because of the mild conditions which were perfect at

the time, for growing a wide range of hardy perennial plants. Arends bred many highly regarded plant hybrids and won many prizes at international competitions. Over 350 plant cultivars are credited to Arends⁴ (see appendix A for the full list). I personally believe he deserves to be hailed as a 'horticultural pioneer' for the excellent and at the time unique, hybrids and cultivars, he brought to gardens and the nursery industry.

Below: Aquilegien 12th June 1927³. Right: *Aster amellus* at Arends³





Georg Arends Timeline

This time line shows selected key dates in Georg Arends horticultural career and the history of the nursery 'Arends Staudengärtnerei' founded in 1888.

It is a little-known fact that Georg Arends was also a very accomplished botanical artist, as the example on the right demonstrates



Right: *Dodecatheon*, now *Primula*, painted by Goerg Arends. Below: Saxifragen at a show in 1912³



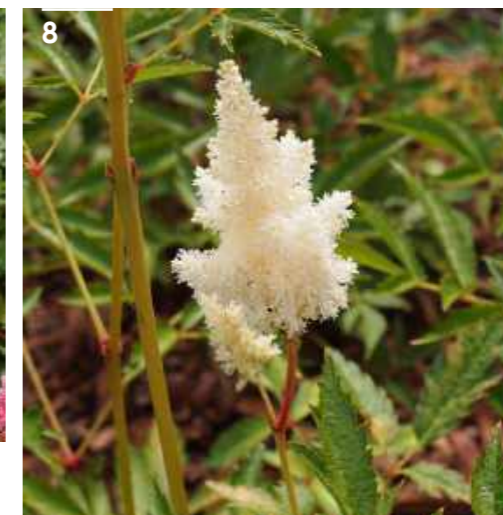
ASTILBE BRED BY GEORG ARENDS

Arguably, the most important cultivars, which Georg Arends bred were Astilbe. The genus *Astilbe*, currently includes 28 accepted species of mainly hardy herbaceous perennials. The genus has what could be described as a disjunct distribution with species found from the Himalaya to Temperate East Asia, Jawa, New Guinea and the East Coast of the U.S.A.⁵ *Astilbe* are included in the saxifrage plant family, Saxifragaceae. Arends was the first plant breeder to cross *Astilbe* species, creating colourful hybrids known as *x arendsii*. The cultivars known as *x arendsii*, included *Astilbe japonica* and *A. davidii* early on. Later crosses included *Astilbe chinensis* and *A. thunbergia*. Some cultivars such as *Astilbe* 'Opalare' (*x arendsii*) are considered threatened in cultivation, today. Others, such as *Astilbe* 'Fanal' (*x arendsii*) are widely grown in the commercial nursery industry at least across much of Northern Europe, including the UK.

Many other plant breeders, such as Arends peer, Theoboldt who bred *Astilbe* 'Irrlicht' (*x arendsii*). In England, the widely available *Astilbe* 'Bressingham Beauty' (*x arendsii*), raised by Alan Bloom, is a good example of a modern *x arendsii* cultivar. Georg Arends often named plants after gardeners and nursery staff who were dear to him, such as; *Astilbe* 'Grete Püngel' (*x arendsii*). Arends also bred other hybrid astilbe, including the species cultivar; *Astilbe simplicifolia* 'Dunkellachs' and *Astilbe japonica* 'Bonn' and the miniature habit hybrids; *Astilbe x crispa* 'Perkeo' and *Astilbe x crispa* 'Liliput'.

The esteemed Head Gardener Malcolm Pharoah who is custodian of the Astilbe

National Collection at Marwood Hill said "Arends nursery but it was a long time ago, I met Anja Maubach and it was lovely to see Georg's nursery and potting sheds" from a personal communication with him. Since this visit, Anja Maubach has increased the cultivar range held by the nursery.

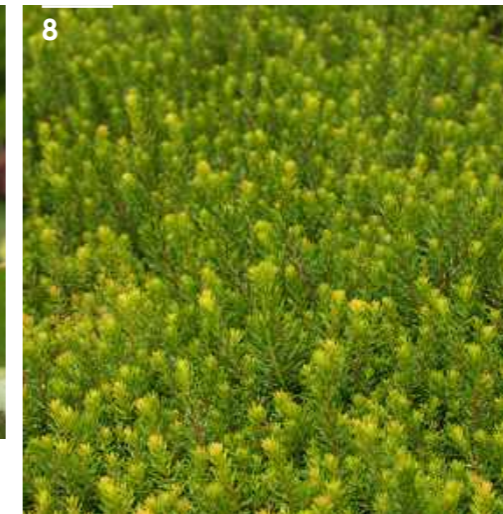


Astilbe Bred by Georg Arends: **1** *Astilbe* 'Gloria' (*x arendsii*), **2** *Astilbe x crispa* 'Liliput', **3** *Astilbe* 'Glut' (*x arendsii*), **4** *Astilbe* 'Grete Püngel' (*x arendsii*), **5** *Astilbe* 'Fanal' (*x arendsii*), **6** *Astilbe x crispa* 'Perkeo', **7** *Astilbe* 'Spinell' (*x arendsii*), **8** *Astilbe* 'Weiße Gloria' (*x arendsii*), **9** *Astilbe simplicifolia* 'Dunkellachs'

OTHER CULTIVARS BRED BY ARENDS

Georg Arends raised a wide range of other plant hybrids. This included; alpine plants, such as *Saxifraga x arendsii* 'Schwefelblüte', shrubs such as *Rhododendron praecox* 'Splendens' and even a fern, *Polystichum x arendsii*. Anja is currently working with a fern grower to breed-back *P. x arendsii*, as it is believed to have been lost to cultivation.

One of the most important introductions was *Hylotelephium x mottramianum* 'Herbstfreude' which is widely known by the synonym, sedum Autumn Joy⁶. It is possible that trade names could have been anglicised, for the British market because of anti-German sentiment after the World Wars^{7,8}, although I found little evidence of this in the literature. Georg Arends plant breeding legacy has been continued at Arends Staudengärtnerei after he passed away in 1952. For example, *Hydrangea x acuminata*. 'Preciosa' came to market in 1961. The most recent addition was *Delphinium x cultorum* 'Wuppertraum', raised in 2002 under Anja Maubach's custodianship (see appendix A). The focus of the nursery has evolved from plant breeding, which is explained later in this report.



1 *Veronica prostrata* 'Alba', 2 *Phlox x arendsii* 'Hilda', 3 *Saxifraga x arendsii* 'Schwefelblüte', 4 *Symphyotrichum novae-angliae* 'Violetta', 5 *Ligularia dentata* 'Othello', 6 *Sempervivum hybridum* 'Gamma', 7 *Bergenia* 'Morgenröte', 8 *Erica* 'Silberschmelze', 9 *Hydrangea x acuminata* 'Preciosa' (1961)



INTERMEZZO: VISIT TO BONN BOTANICAL GARDENS

Botanische Gärten der Friedrich-Wilhelms-Universität Bonn

Left: 'Victoria House'. Below: standard botanical label at Bonn. Right: *Banksia serrata*



This section's name 'Intermezzo' meaning a short connecting section, classical music, was inspired by *Astilbe chinensis* 'Intermezzo' bred at Arends Staudengärtnerei in 1958 and also the fact that Bonn was home to Ludwig van Beethoven. The widely cultivated

Bergenia 'Beethoven', named after Ludwig van Beethoven, was not bred by Arends, but Eric Smith, a British plant breeder. The horticultural link between Bonn and Arends Maubach is highlighted by the astilbe cultivar named after the city. *Astilbe japonica*



Astilbe japonica 'Bonn' spent flower



Controlled pollination, Agave

'Bonn' is an example of a cultivar George Arends named after the city.

It was interesting to see cost effective, aluminium plant label stands being used at Bonn. The cost of label stands is currently something we are trying to address at Sheffield Botanical Gardens and other botanical gardens?

Botanische Gärten der Friedrich-Wilhelms-Universität Bonn or simply referred to as Bonn Botanical Garden, dates back to 1847. It holds approximately 10,000 taxa. Here, I recall the visit from notes made on the day:

12 July Bonn Botanical Gardens

Arrived in Bonn just after 2 o'clock. That afternoon and early evening to around 6 o'clock was spent taking in Bonn' Botanical Garden's impressive collections. These include the glasshouse complex; an



Above: *Eurybia radula*. Right: *Gentiana gracilipes*



Poppelsdorfer schloss (palace) and Order Beds

BONN BOTANICAL GARDENS

impressive tropical section called the 'Rainforest House'. Subtropical section called a 'Monsoon House', cultivating half Hardy *Aresimea* and the 'Victoria House', an aquatic pool for tropical water lilies including *Victoria amazonica*. At the edge of the glasshouse complex there is an excellent 'Desert House', which was divided into American cacti and old world mainly African succulents.

Outside the glasshouse, included an extensive Australasian collection, including many pot grown, large trees, and shrubs in the protea family, Proteaceae. The *Banksia* specimens were extraordinary. The Woody collections include a large, North American section and traditional order beds in front of the palace. It was interesting to see the Lotus being grown outside, a speciality of Bonn Botanical Gardens, which Markus Radscheit takes particular pride in. It was interesting to see controlled pollination happening on their Agave.



1 'Desert House' 2, *Aristolochia salvadorensis* 3, Carniveros Plant Beds, 4 *Nelumbo nucifera*, 5 *Nymphaea gigantea*, 6 Engaging *Amorphophallus titanum* interpretation, 7 *Arbutus canariensis*, 8 *Espeletia schultzei*, 9 *Erythrina crista-galli*,



PRESENT NURSERY : A LIVING LEGACY

Arends Staudengärtnerei

Plant Area Manager Connie at work in the Perennial Plant Area order beds.



Perennial stock beds and small public showcase glasshouse.



Plant Area and the old potting shed now a small shop with one of the gardeners.

The present-day nursery is run by Anja Maubach and Connie, the Plant Area Manager. Connie's horticultural training included a spell at Beth Chatto Gardens, in the early 1990s, where she made friends with Great Dixter's Fergus Garret, who was also a student gardener at the time³.

The nursery is divided into the following areas:

1 Perennials Plant Area

2 Modern Production, glasshouses and poly tunnel

3 The old packing shed, now a small shop and self-service café (a nice spot to contemplate your garden at home)

4 Georg Arends Heritage cultivars stock beds (this is where, historically important cultivars, which are not currently on sale because of similarity are preserved)

5 Rock Garden for Arends alpines

6 Astilbe Stock beds

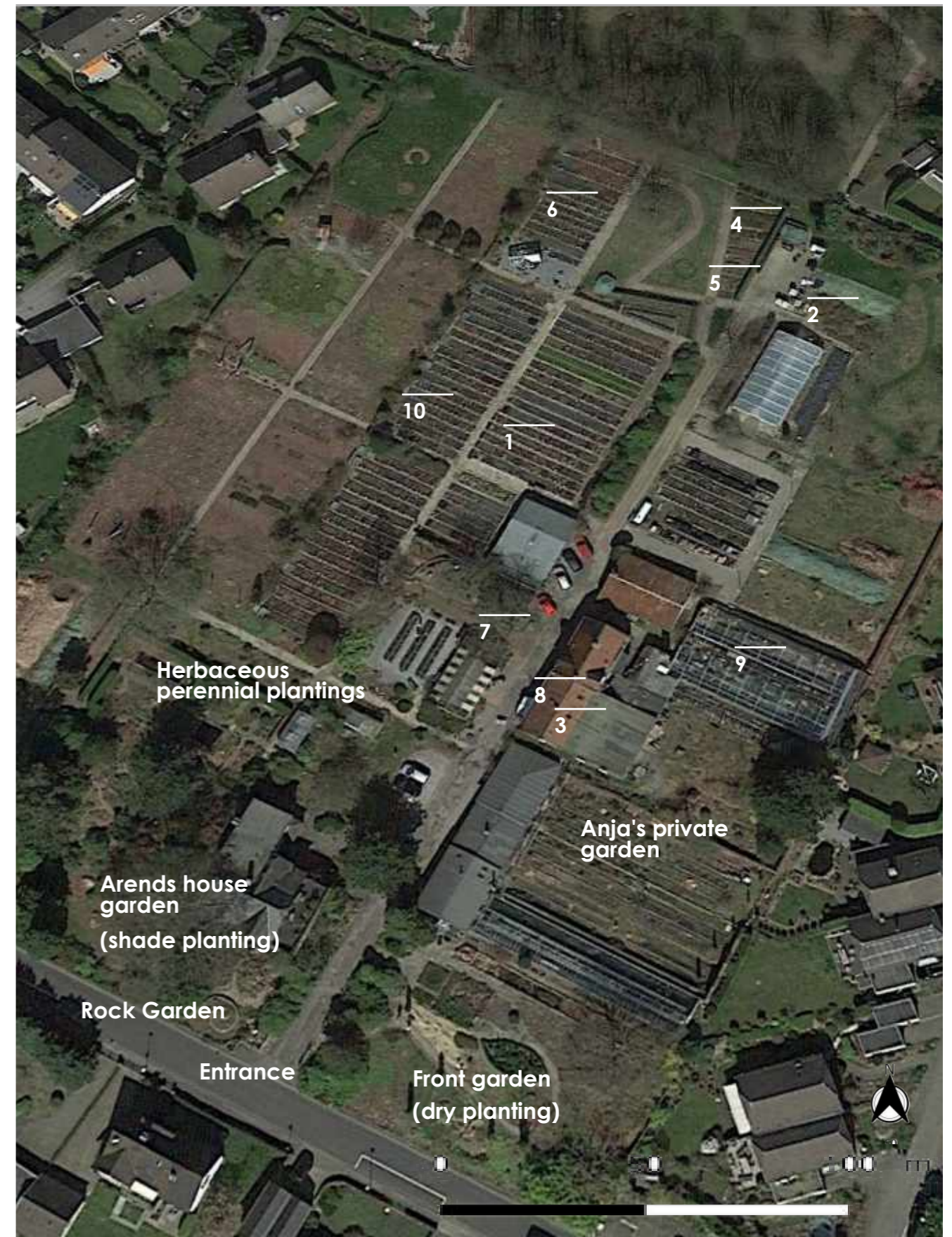
7 Outdoor potting shed area

8 Small shop area

9 George Arends old propagation glasshouses

10 Stock beds

Right: Map of Arends Staudengärtnerei by the Author⁴



Living Legacy

Following a British second world war bombing raid, the nursery was left in tatters. This must have been heartbreaking for Arends, who had a deep affection for England and its gardens and many friends there. Following WWII, Arends rebuilt the nursery, but it couldn't regain its former glory. It must have been an extremely challenging environment in the postwar era, and tragically the close bond between British and German horticulture had been severely damaged.

After Georg Arends death, in 1952, the living legacy of his nursery has not always been an easy burden on its bearers. It passed to Georg's two sons, one of which, sold his half of the nursery for housing, which surrounds the modern-day nursery, now one third of its original size⁴. Anja's grandad, Werner took on

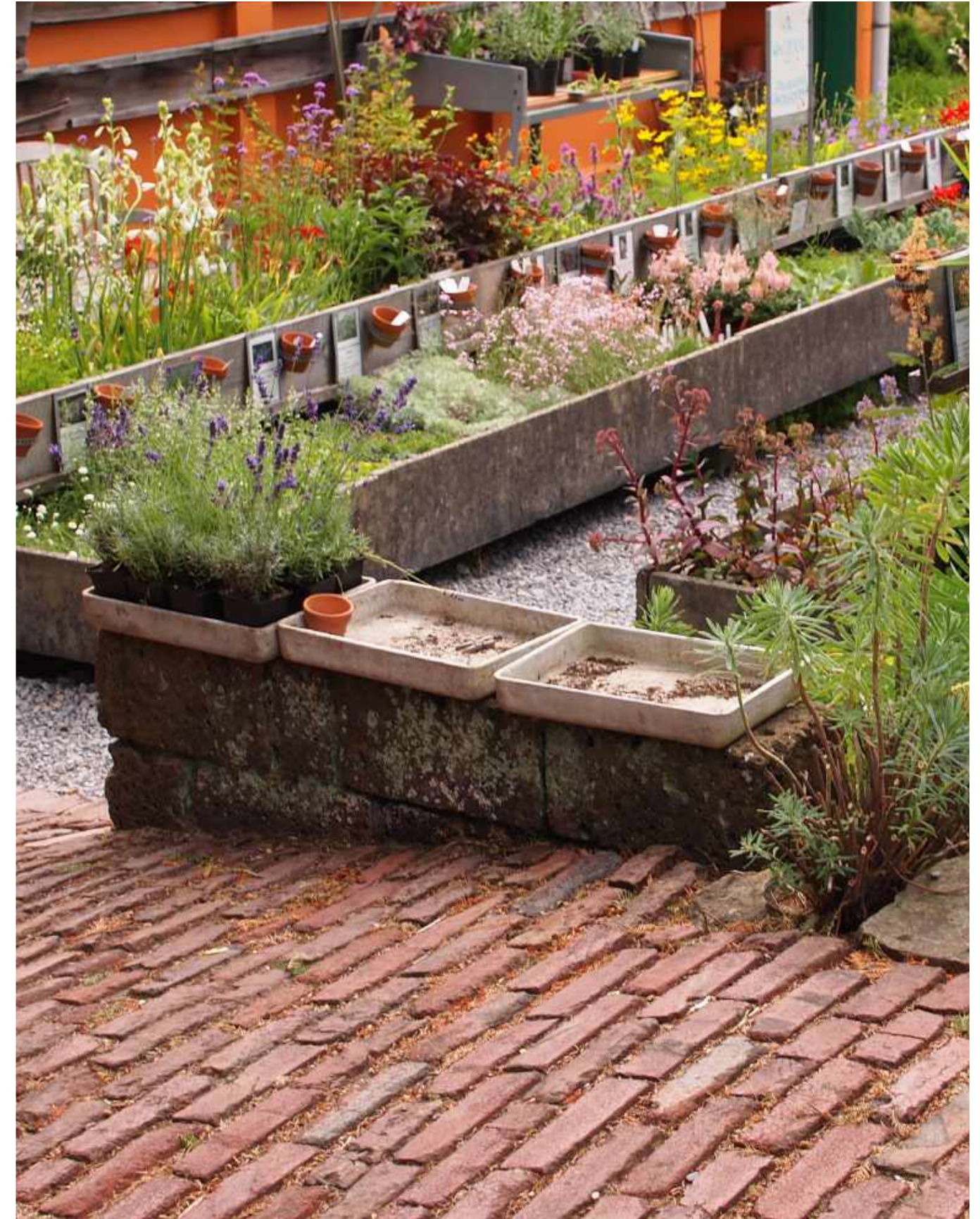
the responsibility of running the nursery.

Ursula, Anja's mother, then took on the responsibility, often finding it a heavy legacy to bear. After taking over the nursery in 1998, Anja has brought her own unique personality to the management of their family nursery. Unsurprisingly, she was met with resistance at the start, from older nursery workers, but they were won over in the end. She sees her role as growing people and plants, not houses (the land is situated on premium development land). She has brought a healing quality to the management of the legacy of the nursery. I personally found the nursery to have a very special energy about it.

KEY CHALLENGES AND THE IMPACT OF COVID-19

Anja describes a silver lining of the COVID-19 pandemic, from the Horticultural perspective, drawing attention to the importance and value of gardens to health and well-being^{10,11,12}. From a nursery point of view, it was the

best year, with the popularity of home gardening, rising as it did in the UK with people isolating at home. It was busy every day with customers Anja says.



THE GARDENS

Arends Staudengärtnerei



Above: Herbaceous perennial plantings with topiary and seating

Right: Front garden (dry planting) with Tibetan prayer flags

Anja's positive outlook on the management flows seamlessly into the gardens, which are dotted with Tibetan prayer flags. This was inspired by a trip to the Himalayas, she made with the International Hardy Plant Union. I found Anja's private garden particularly moving, which is on some of the site of the former glasshouses, destroyed in WW II, British bombing. The ruined glasshouse brickwork gives a deeply resonant back drop to informal, semi-spontaneous naturalistic perennial planting, punctuated by *Verbascum* flower spikes and prayer flags. The space had a tranquil, peaceful quality. She considers a garden which stays static in time, like a museum, to be its spiritual and creative death. A view also held by Vita Sackville-West¹³.

Garden biodiversity

The gardens appear to increase the biodiversity of the nursery, creating habitat in many areas. The diverse horticulture could be supporting a rich diversity of species as research by the RHS^{14,15} and the *Great Dixter Biodiversity Audit 2017-2019*¹⁶, found. It could be interesting to conduct a similar study at Arends Staudengärtnerei and compare them to a conventional commercial nursery. The gardens and nursery are mainly organic, using alternatives, such as *Equisetum* tea as a fungicide³.



The garden areas informally mould around the nursery and can be categorised into the following areas (also see map on page 31):

Front garden (dry planting)

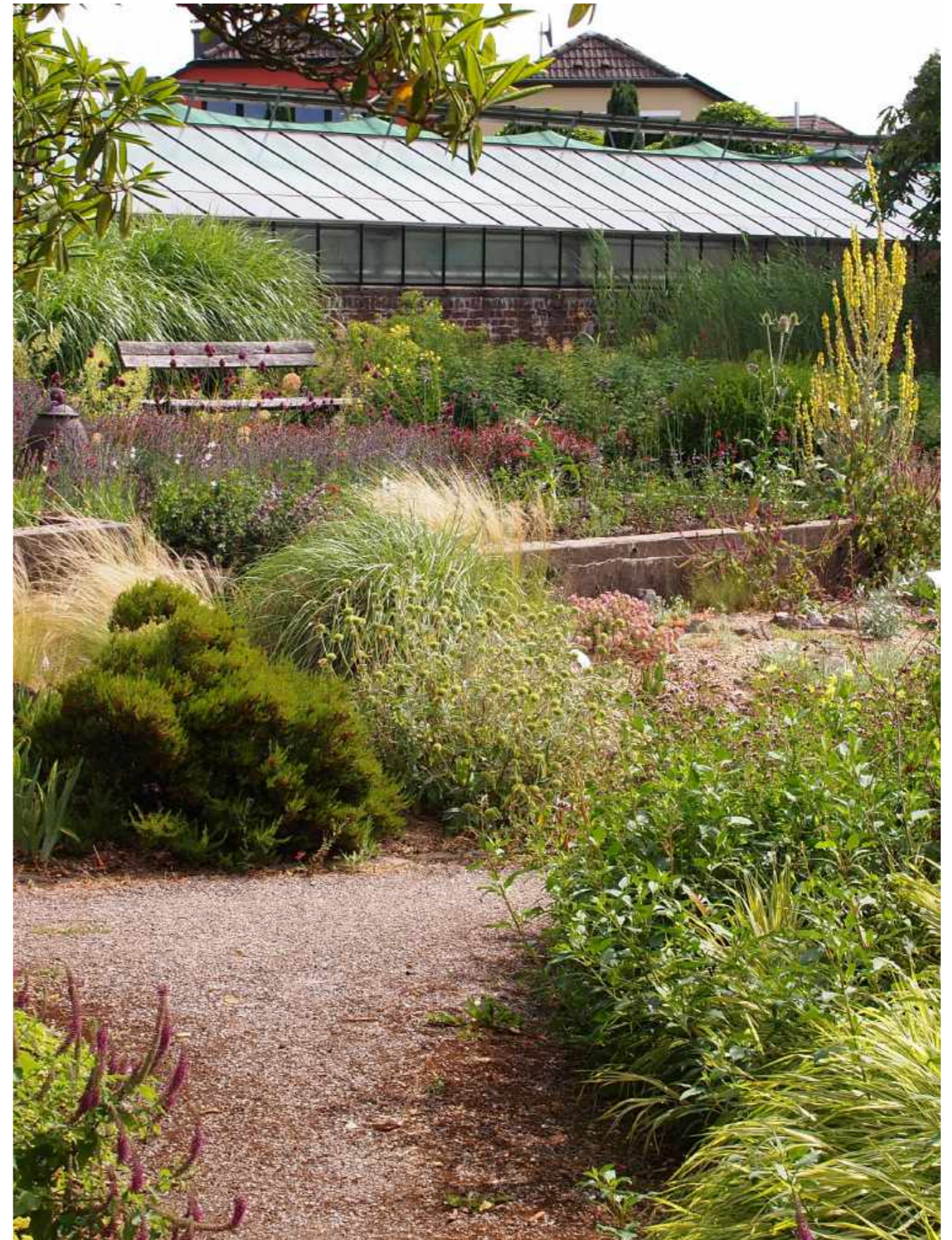
Arends house garden (includes extensive areas of shade planting)

Rock Garden (under construction)

Anja's private garden (former glasshouses, destroyed in WW II, British bombing)

Right: Front garden (dry planting)

Below: Herbaceous perennial plantings



ANJA MAUBACH'S GARDENING PHILOSOPHY

Anja shares her philosophy through garden coaching and garden design. She is a trained landscape architect as well as an accomplished plants woman and horticulturist. She has trained both in Germany and the UK.

She offers a different take on conventional garden design or gardening courses, such as traditional border designs or propagation. She encourages a student's "reconnect with your piece of land, connect with everything". She considers it to be much more about the process for the students, than the results. This is highlighted by her belief that character can come through gardening and it is important for people to express themselves

in their authentic style, which can include the clothes they wear, for example as a professional gardener.

For her landscape architecture thesis, she researched women in gardening, horticulture and landscape architecture. Influential women who have inspired her work, include; Gertrude Jekyll, Vita Sackville-West, Sylvia Crowe and Beth Chatto^{13,17}. Beth Chatto came to stay at the Nursery and they corresponded via letter for many years. She also notes the Merlin Trust's founder Valerie Finnis's contribution to horticulture¹⁸.

She describes her philosophy as more about the people and the plants connected together, building bridges. Anja considers



Anja Maubach²



Old Packing House
Anja restored it with paint
from England



Old Potting Shed

the humanity and living factors of the garden as essential; "If you can't make love in the garden, if you can't be intimate in it" what's a garden for? She gives Vita Sackville-West's Sissinghurst, as a positive example; with no division between personality and garden^{13,3}. She considers Delos, at Sissinghurst as a positive addition,

hailing his regard for sense of place as a particularly desirable attribute, one which she brings to her work.



Old Packing House

MENTAL HEALTH AND WELL-BEING



Left: a happy work place

Below: pausing points



The healing qualities of gardens and gardening considered by Anja, touched upon already, have perhaps never been more important. There is currently a mental health crisis in countries such as Germany and the UK, in the aftermath of the global pandemic. These benefits could potentially bring more people to professional horticulture in Germany, in the future? The potential benefits of gardening and gardens, on mental wellbeing, highlighted by Anja, is supported by recent research¹².

Anja considers that. "Reconnecting people with plants and gardening and the tradition of gardening could be one answer" could be part of the answer to the mental health crisis. It just takes one person to change a place, to just get started, she adds.



Intimate garden space



Left: Perennial stock beds

Below: Educational interpretation



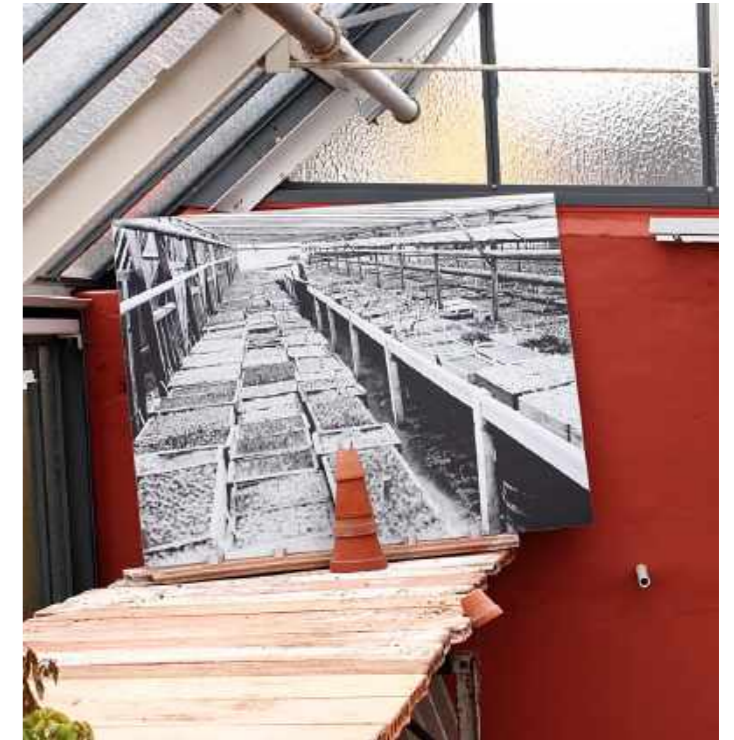
Standard engraved label at Arends Staudengärtnerei

CURATING THE NURSERY FOR THE FUTURE

The Georg Arends Foundation was created by Anja Maubach, with the aim of promoting traditional gardening and horticulture for the future, younger generation. Sadly, this is no mean feat, as horticulture and gardening, are currently not promoted as a serious profession in Germany. She draws attention to the fact that gardening is one of the oldest professions in the world. This situation was mirrored in the UK, but has seen positive progress in recent years^{19, 20}. Perhaps the same will be the case in Germany?



Astilbe 'Cattleya Dunkel' (× arendsii)



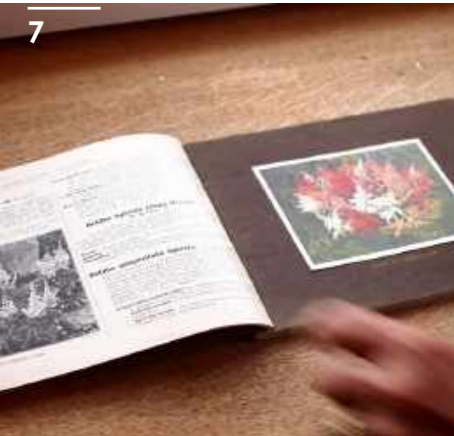
Above: Georg Arends with seedling in original glasshouse unique terracotta basal heating system at Arends Staudengärtnerei
 Right: the glasshouse today

PAST, PRESENT AND FUTURE

The ancient Jupiter symbol, which has long been used to denote herbaceous perennial plants in botany and plant Nursery catalogues, was adopted by Georg Arends as a nursery sign. This was an ingenious example of early marketing, creating a recognisable and attractive brand for the nursery. Today, Anja Maubach continues to celebrate its tradition, including Jupiter symbol in all modern publications of the nursery, on gift items in the shop and on the website as well.

PAST, PRESENT AND FUTURE- CONTINUED

1 *Campanula* 'Sarastro', 2 *Euphorbia x arendsii*,
3 *Phlox paniculata* 'Karminvorläufer', 4 *Sempervivum* pots in the nursery, 5 Jupiter symbol in fabric of then gardens, 6 outdoor potting shed, 7 Old astilbe nursery catalogue, 8 *Nepeta kubanica*, 9 Jupiter symbol paperweight



Above: Gardneers at at Arends Staudengärtnerei³

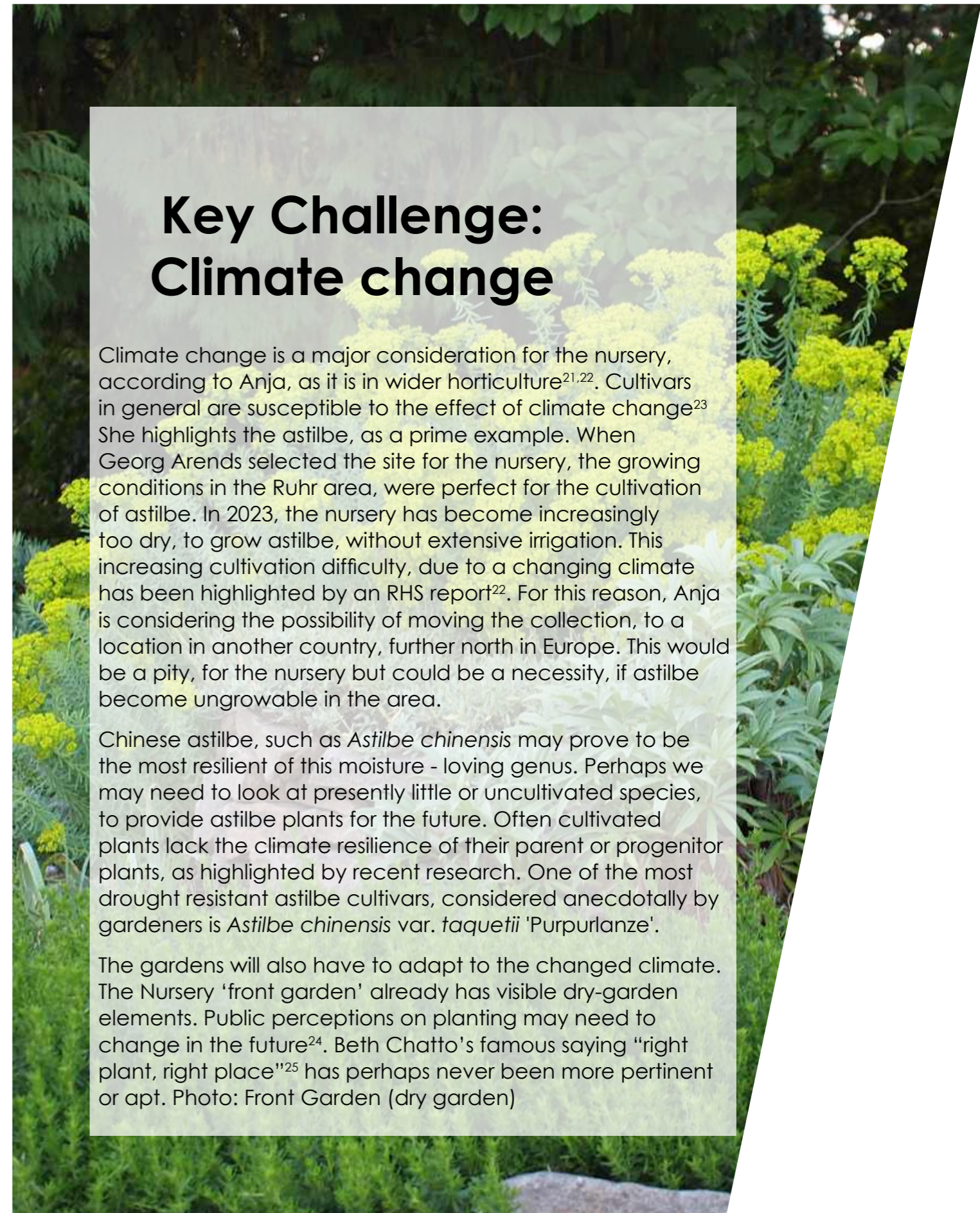


Above: Old Packing House. Below: unique terracotta basal heating system





Astilbe stock-bed at Arends Staudengärtnerei



Key Challenge: Climate change

Climate change is a major consideration for the nursery, according to Anja, as it is in wider horticulture^{21,22}. Cultivars in general are susceptible to the effect of climate change²³. She highlights the astilbe, as a prime example. When Georg Arends selected the site for the nursery, the growing conditions in the Ruhr area, were perfect for the cultivation of astilbe. In 2023, the nursery has become increasingly too dry, to grow astilbe, without extensive irrigation. This increasing cultivation difficulty, due to a changing climate has been highlighted by an RHS report²². For this reason, Anja is considering the possibility of moving the collection, to a location in another country, further north in Europe. This would be a pity, for the nursery but could be a necessity, if astilbe become ungrowable in the area.

Chinese astilbe, such as *Astilbe chinensis* may prove to be the most resilient of this moisture - loving genus. Perhaps we may need to look at presently little or uncultivated species, to provide astilbe plants for the future. Often cultivated plants lack the climate resilience of their parent or progenitor plants, as highlighted by recent research. One of the most drought resistant astilbe cultivars, considered anecdotally by gardeners is *Astilbe chinensis* var. *taquetii* 'Purpurlanze'.

The gardens will also have to adapt to the changed climate. The Nursery 'front garden' already has visible dry-garden elements. Public perceptions on planting may need to change in the future²⁴. Beth Chatto's famous saying "right plant, right place"²⁵ has perhaps never been more pertinent or apt. Photo: Front Garden (dry garden)

SOME CONCLUDING THOUGHTS

This report described the Context and Itinerary from a trip I made to Arends Staudengärtnerei (Arends Perennial Nursery) and Botanische Gärten der Friedrich-Wilhelms-Universität Bonn (Bonn Botanical Gardens) as Merlin 823. The report documents and celebrates the work of Georg Arends, a Horticultural Pioneer. *Astilbe* and other cultivars which were bred by Arends and subsequent generations at the nursery, were outlined. A visit to Bonn Botanical Gardens broke the visit.

The present-day nursery and the management of the living legacy of the Arends Staudengärtnerei, were discussed. Key challenge for the nursery and gardens such as the impact of Covid-19 and Climate change, were considered. Anja Maubach's inspiring gardening philosophy was touched upon. Her insights on the benefits gardening can have for mental health and wellbeing were captured. The healing qualities which gardening in a way true to one's self is

an important aspect of this. What has, at times heavy burden, of curating the nursery for the future, was discussed.

The perennial nursery, Arends Staudengärtnerei, in its 135 years, is a unique and special place. The story is being continued into the today and for the future, as a living, thriving legacy. The spirit of the place is being maintained and preserved, whilst it is not staying static in time, but embracing change in the present and for the future generations.

Right: *Astilbe* stock-bed at Arends Staudengärtnerei



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Images, Figures and Map Data

All photos, drawing and figures are by the Author, unless stated otherwise.

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Appendices

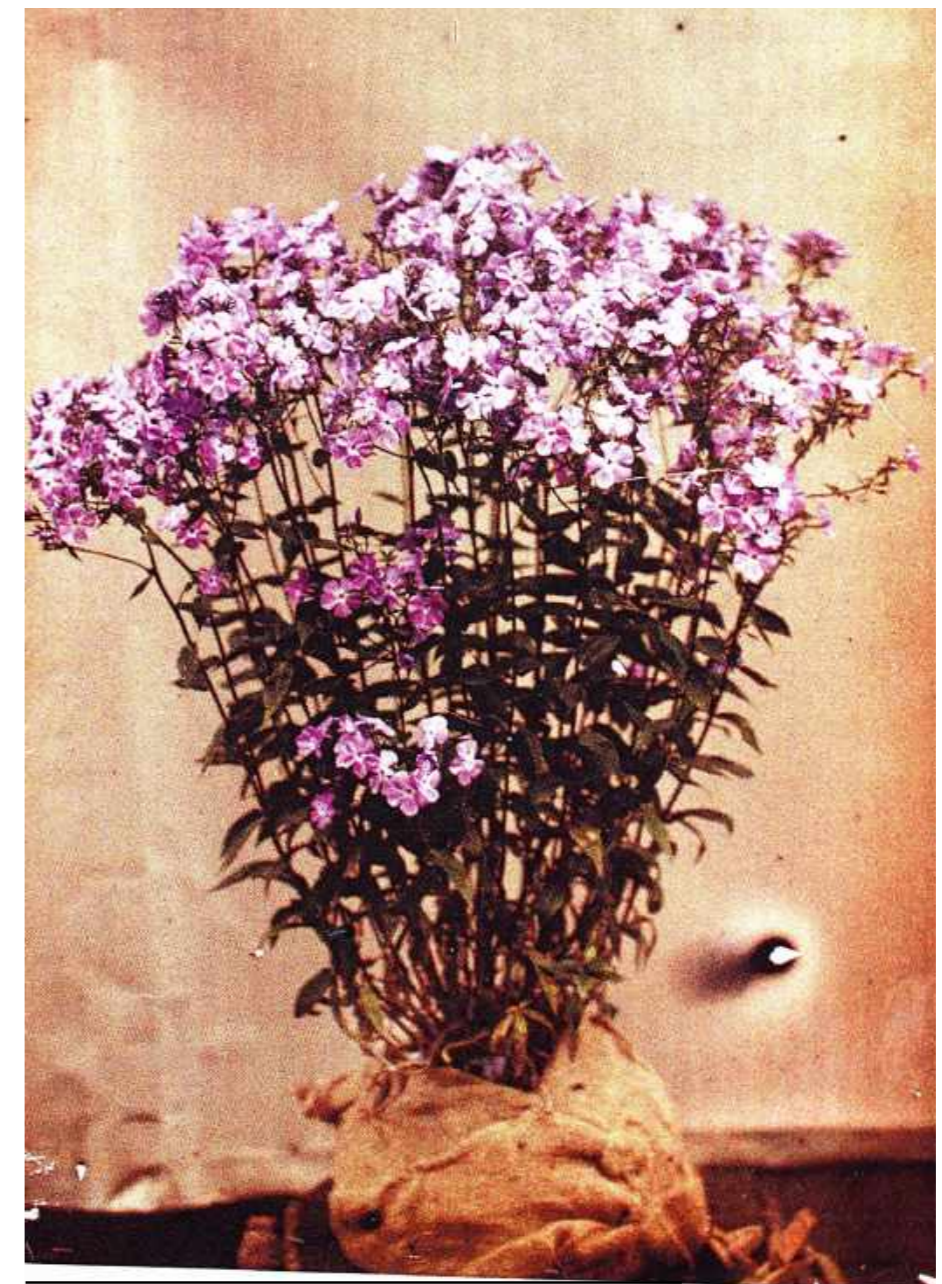


Ronsdorf, road to Arends
Staudengärtnerei

Appendix A: List of Plants Bred by Georg Arends and the Nursery

Liste der Züchtungen

Pflanzenzüchtungen der Staudengärtnerei Georg Arends
mit Angabe der Jahre, in denen sie in den Handel kamen



Phlox x arendsii 'Käthe Böcker'

1. 1892
 - *Fuchsia triphylla* hybrida
2. 1894
 - *Iberis sempervirens* Weißer Zwerg (= Little Gem)
3. 1895
 - *Bergenia hybrida*
 - *Chrysanthemum maximum* Triumph
4. 1896
 - *Aster sinensis* Einfache Ronsdorfer
 - *Polemonium himalayanum* Album
5. 1897
 - *Helianthus multiflorus*
 - *Papaver nudicaule* Sulphureum
6. 1899
 - *Polemonium coeruleum dissectum* Album
7. 1901
 - *Aquilegia helenae*
 - *Campanula carpatica* Coelestina
 - *Campanula persicifolia* Die Fee
 - *Primula arctotis* hybrida
8. 1902
 - *Aster* hybr. Feenkind
 - *Saxifraga rhei* Superba
9. 1902/04
 - *Astilbe* jap. hybr. Queen Alexandra und Peach Blossom
10. 1903
 - *Geum heldreichii* Magnificum
 - *Heuchera gracillima*
 - *Kniphofia* (*Tritoma*) hybr. Expreß
 - *Papaver nudicaule* Neue Farben
11. 1904
 - *Aster amellus* Preziosa und Triumph
 - *Dianthus plumarius* Cattleya
 - *Oenothera speciosa* hybrida
12. 1905
 - *Coreopsis lanceolata* Oculata
 - *Hosta* (*Funkia*) *fortunei* Robusta
 - *Mimulus luteus* x *cupreus*
 - *Primula auricula* Germania
 - *Primula denticulata* Grdfl. Ronsdorfer Hybriden
 - *Primula sieboldii*-Namensorten
13. 1907
 - *Aster* n. belg. Abendröte
14. 1908
 - *Aster* n. belg. Lavendel, Silberstern, Violetta
 - *Astilbe arendsii* (*japonica* und *Floribunda* x *davidii*)
15. 1909
 - *Astilbe arendsii* Ceres
 - *Paconia wittmanniana* hybr. Alpha und Maikönigin

16. 1910
 - *Astilbe arendsii* Lachskönigin, Juno, Rosa Perle, Venus, Vesta
 - *Campanula glomerata* Superba
 - *Dianthus plumarius*, Namensorten von geränderten Schottischen
17. 1911
 - *Aster amellus* Rubellus und Schöne von Ronsdorf
 - *Astilbe arendsii* Brunhilde, Gunther, Kriemhilde, Siegfried
 - *Campanula persicifolia* Coerulea Coronata
 - *Hosta* (*Funkia*) *tardiflora* hybrida
 - *Saxifraga caespitosa* hybr. Blütenesschicht und Purpurmantel
18. 1912
 - *Aster amellus* Emma Bedau, Gruppenkönigin, Otto Rudolf
 - *Astilbe arendsii* Walküre
 - *Astilbe thunbergii* Delicata
 - *Campanula persicifolia* Alba Coronata
 - *Phlox arendsii* Amanda, Charlotte, Grete, Helene, Käthe, Luise
 - *Phlox maculata* hybr. Alpha
 - *Phlox pilosa* Splendens
 - *Saxifraga caespitosa* hybr. Juwel, Rosea Superba, Schöne von Ronsdorf, Splendens, Magnifica
19. 1913
 - *Aster amellus* Rudolf Goethe
 - *Aster subcoeruleus* Floribundus
 - *Astilbe arendsii* Gloria und Opal
 - *Eryngium hybridum* Juwel und Violetta
 - *Monarda didyma* Salmonea
 - *Phlox arendsii* Hanna, Hilda, Lisbeth, Sophie
 - *Phlox glaberrima* hybrida
 - *Ranunculus arendsii*
 - *Saxifraga caespitosa* hybr. Alba und Teppichkönigin
20. 1914
 - *Achillea mongolica* hybrida und hybr. Nana
 - *Arabis albida* Rosea
 - *Aster amellus* Oktoberkind
 - *Aster alpinus* Rex
 - *Astilbe grandis* Delicata
 - *Astilbe thunbergii* Elegans, Elegans Carnea und Elegans Rosea
21. 1915
 - *Erigeron speciosus* Semiplenus
 - *Senecio clivorum* Othello
 - *Thalictrum aquilegifolium* hybridum
 - *Trollius hybridus* Goliath
22. 1916
 - *Aster alpinus* Dunkle Schöne
23. 1918
 - *Papaver* Orientale Orangekönig
 - *Phlox maculata* Rosalinde und Schneelawine
 - *Phlox paniculata* Deutschland, Feuerbrand, Imperator, Septemberglut, Sieger
24. 1920
 - *Astilbe arendsii* Amethyst, Bergkristall, Diamant, Hyacinth, Granat, Rubin
 - *Astilbe hybrida* Crispa

- *Astilbe japonica hybrida* Deutschland, Emden, Möve, Rheinland
- *Erica cinerea Atrorosea, Atropurpurea, Delicata, Splendens*
- *Primula helenae (juliae x acaulis)*
- *Trollius hybridus* Orankekönig
- 25. 1922
- *Eryngium hybridum* Robustum
- 26. 1923
- *Astilbe hybr. Crispa* Däumling, Gnom, Kobold
- *Astilbe simplicifolia hybr. Alba, Carnea, Rosea*
- *Phlox arendsii* Marianne
- *Phlox canadensis hybr. Küppelstein, Müngsten, Schloß Burg*
- *Phlox pilosa hybr. Altenberg, Glüder, Kohlfurt*
- *Primula helenae* Purpurkissen
- 27. 1924
- *Aster amellus* Rosa von Ronsdorf
- *Astilbe arendsii* Frieda Klapp, Grete Püngel, Hanna Stodt, Irene Rottsieper, Lydia Hagemann, Weiße Gloria
- 28. 1925
- *Begonia credneri*-Hybriden
- *Echeveria retusa hybrida*
- *Phlox paniculata* Albert Leo Schlageter, Paul Hoffmann
- *Primula denticulata* Grdfl. *Delicata, Rosea* und *Rosamunde*
- *Primula helenae* Edelstein und Juwel
- *Solidago hybr. Goldelfe, Goldschleier, Sonnenschein*
- *Veronica prostrata* *Alba, Coelestina, Coerulea, Pallida*
- 29. 1926
- *Azalea arendsii*
- 30. 1927
- *Astilbe hybr. Crispa* Liliput
- *Astilbe simplicifolia hybr. Delicata, Elegans, Erecta, Salmonea*
- *Phlox arendsii* Emmy und Inge
- *Phlox douglasii hybrida*
- *Phlox paniculata* Georg Olbrich
- *Phlox setacea* Maischnee
- *Sempervivum hybr. Alpha* und *Beta*
- *Solidago hybr. Mimosa, Perkeo, Spätgold*
- 31. 1928
- *Centaurea pulcherrima hybrida*
- *Chrysanthemum maximum* Juwel
- *Polemonium richardsonii* Pallidum
- *Primula denticulata* *Atrorosea* und *Violetta*
- *Saxifraga caespitosa hybr. Triumph*
- 32. 1929
- *Aster amellus* Blaustern
- *Astilbe arendsii* Brautschleier und Ilse Haack
- *Astilbe japonica hybr. Bremen*
- *Phlox paniculata* Oskar Beltzig
- *Polemonium richardsonii* Superbum
- *Sempervivum hybridum* Gamma
- 33. 1930
- *Allium cyaneum* *Coelestinum* und *Superbum*

- *Astilbe arendsii* Anita Pfeifer, Else Schluck, Erna Dick, Gertrud Brix, Grete Bücher, Lilli Goos
- *Astilbe hybr. Crispa* Perkeo
- *Astilbe japonica hybrida* Bonn, Europa, Köln
- *Geranium subcaulescens* Splendens
- *Iris germanica* Kanaria, Kupferhammer, Toelleturm
- *Phlox canadensis* Schaberg
- *Primula denticulata* Spätblühende Hybriden
- *Saxifraga caespitosa hybr. Rosakönigin, Schneeteppich, Schwefelblüte*
- 34. 1931
- *Pentstemon fruticosus hybridus*
- *Phlox setacea* Leuchtstern, Lilakönigin, Ronsdorfer Schöne
- *Primula helenae* Blaukissen und Schneekissen
- 35. 1932
- *Aconitum paniculatum* Nanum
- *Aster alpinus* Bergischland und Maximus
- *Astilbe taquetii* Superba
- *Erigeron speciosus hybr. Ronsdorf* und *Wuppertal*
- *Primula denticulata* Juno
- *Primula hybrida* Meteor
- *Rhododendron hybr. Ronsdorfer Frühblühender*
- 36. 1933
- *Astilbe hybr. Crispa* Elata
- *Astilbe arendsii* Fanal
- *Cimicifuga acerina* Compacta
- *Hosta (Funkia) ovata* Superba
- 37. 1934
- *Astilbe simplicifolia hybr. Atrorosea* und *Praecox*
- *Aubrietia deliridea hybr. Vesuv*
- *Echeveria metallica hybrida*
- *Houstonia coerulea* Superba
- *Potentilla hybrida* Sulphurea
- *Sedum spurium* *Roseum Superbum* und *Salmoneum*
- 38. 1935
- *Achillea hybrida* Schwefelblüte
- *Anemone japonica hupehensis* Praecox
- *Billbergia nutans*-Hybriden
- *Potentilla chrysocraspeda* Aurantiaca
- *Rhododendron praecox* Splendens
- *Rhododendron racemosum hybridum* *Delicatum* und *Roseum*
- *Sedum spurium* *Album Superbum* und *Splendidissimum*
- 39. 1936
- *Arabis albida* Atrorosea
- *Astilbe japonica hybr. Düsseldorf*
- *Helenium hybr. Braungold*
- *Phyllodoce empetriformis* Splendens
- *Solidago brachystachya* Robusta
- *Solidago hybr. Goldfeder*
- *Rhododendron hippophaeoides hybridum*
- 40. 1937
- *Cytisus praecox* Zitronenvogel

- *Erica mediterranea* Silberschmelze
- *Geranium subcaulescens* Purpureum
- *Saxifraga aizoon* Splendens
- 41. 1938
 - *Calluna vulgaris* alba Praecox und alportii Praecox
 - *Geum hybridum* Rubin
 - *Gypsophila repens* Rosenelfe
 - *Satureja pygmaea* Lilacina
 - *Silene schafta* Splendens
- 42. 1939
 - *Kalanchoë schumacheri*-Hybriden
 - *Primula elatior* Arends' Goldlackbraune
- 43. 1940
 - *Astilbe arendsii* Feuer
 - *Astilbe simplicifolia* hybr. Dunkellachs
 - *Rhododendron radistrotum*
 - *Veronica hendersonii* hybrida
- 44. 1949
 - *Aster n. belg.* Schneekuppe
 - *Campanula poscharskyana* hybrida
 - *Chrysanthemum maximum* Frühwunder
 - *Digitalis ambigua* (grandiflora) x ferruginea
 - *Erigeron* hybr. Violetta
 - *Primula helenae* Blütenkissen
 - *Rhododendron impeditum* x *hippophaeoides*
 - *Sedum spurium* Albo-Roseum
- 45. 1950
 - *Bergenia hybrida* Abendglut, Morgenröte, Silberlicht
 - *Eryngium alpinum* Amethyst und Opal
 - *Phlox setacea* Rotraud
- 46. 1952
 - *Astilbe arendsii* Glut
 - *Astilbe japonica* hybr. Mainz
 - *Astilbe simplicifolia* hybr. praecox alba
 - *Eryngium alpinum* Amethyst
 - *Rhododendron multiflora* hort.
 - *Trollius* hybr. Alabaster
 - *Chrysanthemum maximum* Gruppenkönig
- 47. 1953
 - *Aconitum arendsii*
 - *Astilbe arendsii* Cattleya und Finale
 - *Astilbe thunbergii* hybr. Straußenfeder (= Ostrich Plume)
 - *Azalea arendsii* Agger, Bever, Dhünn, Eder, Ennepe, Glör, Kerspe, Lister, Oester, Sorpe, Ülfe, Volme, Wipper
 - *Auberieta* delt. hybr. Rosenteppich
 - *Saxifraga arendsii* (caespitosa. hybr.) Purpurteppich
- 48. 1954
 - *Astilbe arendsii* Serenade
 - *Chrysanthemum koreanum* Citrus, Goldbronce, Sioux
 - *Phlox paniculata* Gnom
- 49. 1955

- *Astilbe arendsii* Spinell
- *Aubrietia* delt. hybr. Eos
- *Sedum telephium* Herbstfreude
- 50. 1956
 - *Astilbe simplicifolia* hybr. Bronze Elegans
 - *Campanula poscharskyana* hybr. Stella
- 51. 1958
 - *Astilbe arendsii* Intermezzo
 - *Chrysanthemum arcticum* Schwefelglanz
- 52. 1959
 - *Chrysanthemum roseum* Laurin und Regent
 - *Phlox arendsii* Susanne
 - *Saxifraga muscoides* Findling
 - *Rhododendron arendsii* Lingese
- 53. 1960
 - *Chrysanthemum roseum* Roter Zwerg
 - *Cytisus praecox* Goldspeer
 - *Sedum cauciculum* robustum
 - *Rhododendron Aronensis*
- 54. 1961
 - *Hydrangea acuminata* hybr. Preciosa
 - *Azalea Aronensis*
- 55. 1966
 - *Phlox arendsii* hort. Anja
 - *Nepeta* x *faassenii* Blauknirps
- 56. 1971
 - *Bergenia* Hybride Abendglocken und Purpurglocken
 - *Rhododendron Aronensis* (R)-Geisha-Hybriden
- 57. 1990
 - *Anemone hupehensis* Ouvertüre
- 58. 2002
 - *Hemerocallis* Hybride Bergische Sonne
 - *Delphinium* x *cultorum* Wuppertraum



Train at Wuppertal haupt-
bahnhof

Appendix B: Costs

Date	Expenditure	Cost
13/7/23	Travel insurance	£19.55
To	Flights (Manchester to Düsseldorf)	£259.58
16/7/23	Train (Sheffield to Manchester)	£37.40
	Accommodation	£245.73
	Food & Groceries (including eating-out)	£191.15
	Travel toiletries & sun cream	£52.06
	Bus fares x3 (Ronsdorf to Wuppertal)	£7.77
	Skytrain (Düsseldorf airport to Düsseldorf)	£5.49
	Bicycle hire £15 (x 2 days) (Ronsdorf)	£28.34
	Rail fares (Deutsche Bahn: Düsseldorf to Wuppertal, Wuppertal to Bonn return, Wuppertal to Düsseldorf)	£79.48
	Taxi Wuppertal to Ronsdorf (rail replacement)	£24.60
	Train (Manchester to Sheffield)	£32.20
Grants Received:		
Merlin Trust= £800		
Hardy Plant Society, Kenneth Black Bursary = £200		
Total grants received: £1000		Total costs= £983.35



ARENDS STAUDENGÄRTNEREI-

Visit to Georg Arends Perennial Nursery run today by
the renowned plantswomen Anja Maubach

James M Miller

Merlin 823

11th to 14th July 2023