

ALSTERWORTHIA INTERNATIONAL

THE SUCCULENT ASPHODELACEAE JOURNAL



Patrick Didiot. *Haworthia maughanii* "Dragon"

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ARE YOU UP TO DATE WITH CHANGES IN THE WORLD OF OUR PLANTS?

The age of the current UK population ranges from the nineties/hundreds down to the those just borne. This range of ages will help to determine whether you are "up to date". You learnt current knowledge in your early days, which varied as time progressed. If you were borne before, during or a little after the Second World War you would be familiar with the then normal civil activities such as shorthand, typing, type-setting for commercial printing, horse power for farmers, tradesmen and coal mines which provided power for industry and warmth for homes etc.

The Second World War interceded, bringing about rapid changes. Civil activities were reduced to a minimum. and males found themselves in the Navy, Army, Air Force or Coal Mines, all the essentials of war. Females also replaced men in industry and joined the forces in none fighting roles to release men for fighting. Research was increased to improve all associated with war. New ships, aircraft, transport, weapons, treatments for war casualties etc were rapidly produced. Botany was not of prime interest unless it could produce a useful chemical.

With the ending of the war and demobilisation there was another rapid change, this time from production for war to civil production. Technical improvements brought about by war were modified for civil life. New and better commercial aircraft, railways, vehicles etc made travel faster and desirable. Cacti and other succulent collectors took the opportunity to fly to countries with these plants to see them in habitat - and to collect a few plants and seed. Countries began to complain. They were not making any money out of these plant and habitats were being destroyed. Eventually the export and import of plants required export and import certificates, which were only issued rarely for cacti and succulent.

Following the cessation of the war, interest in cacti and succulent flourished as did cactus and succulent societies. Many new plants we discovered and sold to nurseries and enthusiasts. Wild plants and their seed were desirable. Wild plants were difficult to re-root because of damaged when they were up-rooted and separated from their roots for export. But all this was brought to an end by the imposition of import and export permits.

Inevitably, younger people were developing new interests - older were dying; the total number of people interest in Cacti and Succulents slowly decrease. Some smaller societies had to close or be amalgamate, This was only to be expected. Time passes, generations change, interests change. Ballroom dancing, popular in the Second World War and for some year after, was superseded by a succession of more vigorous forms of dancing with different types of band. Post war, black and white television made an appearance. This was followed by colour, by improved colour and improved televisions. Computers were launched and improved. Devices promoting communication were invented and developed. Much more could cited, all of which was in

competition with the Cactus and Succulent hobby.

Genes and DNA have been know for a long time but not very much about them. For medical purposes, post war research has made rapid progress to the extent that many diseases etc have been brought under control and even a few new animals created scientifically. Plants are less important so have not received the same attention. For a brief review about plant DNA please see *Alsterworthia International* Vol 14, Issue 2 1717. You can read about the most resent DNA research which resulted in reduced *Haworthia* species and the division of *Aloe*. It is not likely that interest in plants will increase as a result but other developments certainly have.

When import and export permits were introduced, propagation filled the gap. People cross pollinated to get seed, vegetative propagation including the use of leaves (only in certain species) was adopted. The more startling method of tissue culture was also adopted which could produced much larger quantities. I cannot say there was a big increase in Cacti and Succulent clubs but interesting journals are still being produced. .

Tissue culture was adopted commercially in many countries, particularly Japan, China and adjacent countries. Cultivars were created in large numbers in addition to species. The internet was used to advertise and sell them. Groups of hobbyists also formed groups of one sort or another on line - some equal to a journal but irregular. The members of groups post photographs on Facebook to share them and these photos can be shared again with others. Examples are on the following pages. Photographs are excellent, but the comments brief. The addition of comments such as habitat and historical details would add a lot to interest.

As time passes, older people pass on, younger take their place. Notwithstanding the competition from other sources, it would be nice to think that more younger people support our hobby but the number doing so are certainly not as large as they were in post war years. Cacti and other succulent clubs still have their supporters and are a valuable source of information. The internet also plays a much greater part in the hobby .

You can join Facebook groups or set up your own. Just go to Facebook, select the items of interests, join and participate. Some Cacti and Succulent clubs also have postings on the internet. Examples of photographs published on Faces book follow with their sparse comments.

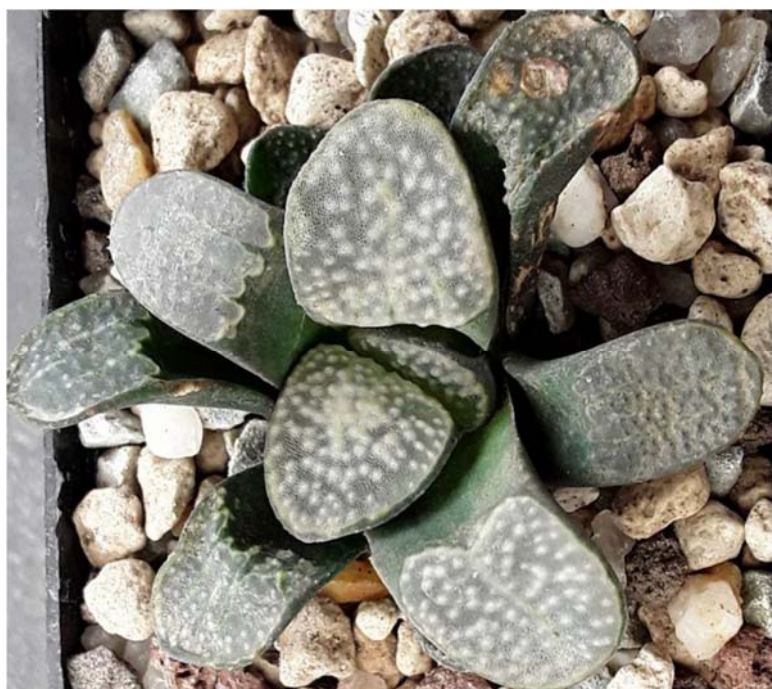
Photograph
Kris Tamayo.
Haworthia groenewaldii,
Buffeljagsriver



Bill Hildyard
10:08pm Jan 28
Looks like *Haworthia*
pygmaea 'Tiger Pyg'

Fernando José Fernández Hingking
March 29 at 3:02pm
Gasteria gracilis (normal).
Growing in a 7 cms pot.
EFcollection. Lisboa, Portugal.





Photographs.

Fernando Jose Fernandez

Hingking

Haworthia groenewaldii

3 different clones.

ex. Florent Grenier

& Kanouro Matsumoto.

EFcollection.Lisboa, Portugal.

Please see *Alsterworthia*
International

Vol. 17. Issue 3. 2017

For the description of
this new species.



Photographs.

Fernando Jose Fernandez

Hingking

Haworthia groenewaldii

3 different clones.

ex. Florent Grenier

& Kanouro Matsumoto.

EFcollection.Lisboa, Portugal.

Bill Hildyard
 January 31 at 10:07pm
truncata x *retusa*, the
 only TC variegate that I
 have had that has
 retained its variegation and is
 doing well



Fernando José Fernández Hingking

Haworthia truncata variegated.
 ex. Zong Li Huang. Taiwan. / EF-
 C2061.

Growing in a 7 cms pot.
 EFcollection. Lisboa, Portugal.



Fernando José Fernández Hingking

Haworthia EF15B93 (*maughanii*
 hybrid).

Growing in a 7 cms pot.

Ezequiel Coelho & Fernando
 Fernández Hingking's hybrid.
 EFcollection. Lisboa, Portugal.

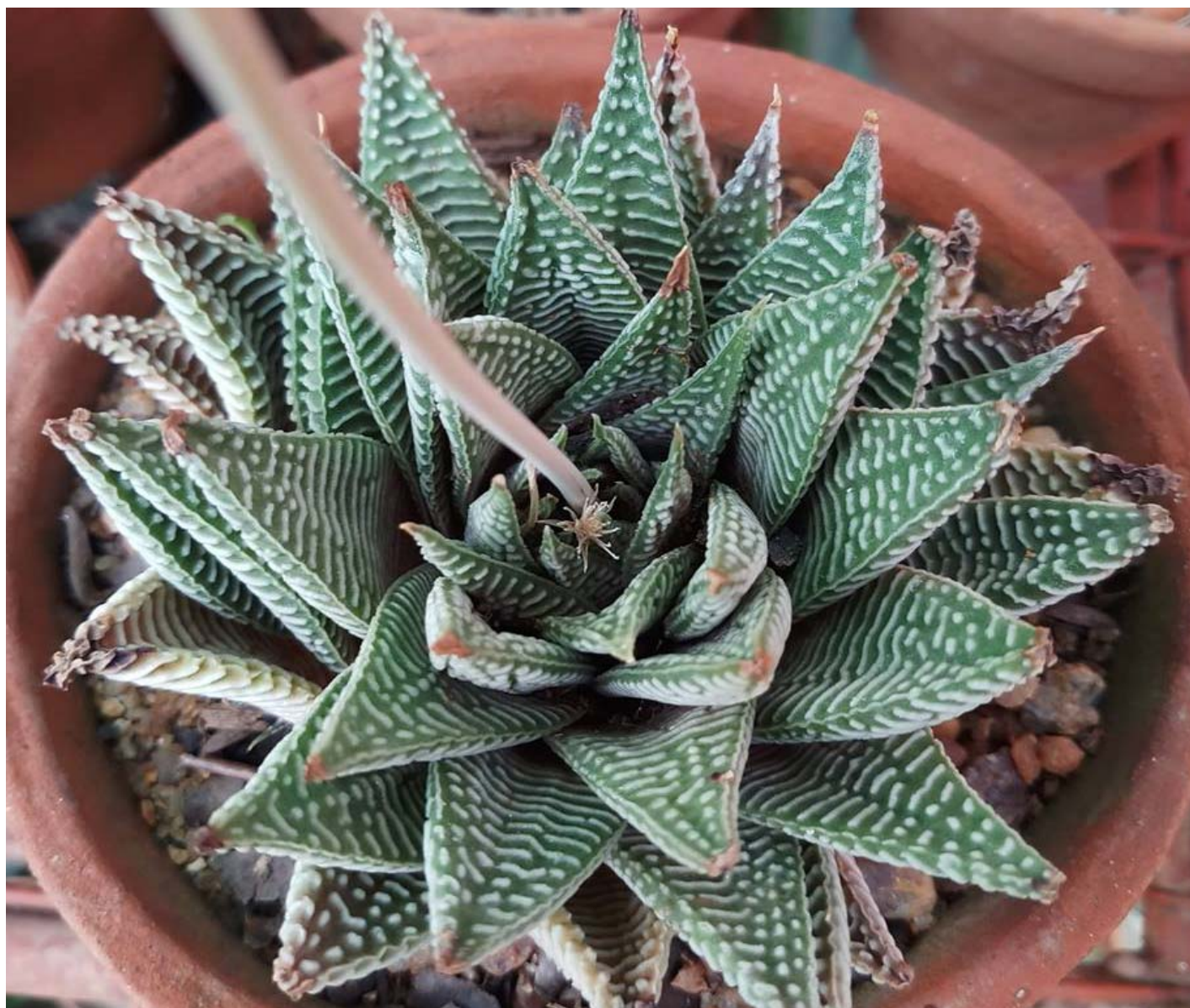




Meena Singh. *Gasteria batesiana* var. *dolomitica*.



Photo. Diederick Van den Abbeele. *Haworthia mirabilis* 'Bobii' (before 'pilosa.') which is very close to *Haworthia mirabilis* var. *paradoxa*. Left MBB 7248. Right. MBB 7249



Photograph. Subir Sarkar India . *Haworthia limifolia* var. *striata* 'Spider White'



Fernando José
Fernández
Hingking

Haworthia
EF15B178.

Hybrid made
using EF12A52,
this one made
using *reticulata*
var. hurlingii.
Growing in a
7 cms pot.

Ezequiel Coelho
& Fernando
Fernández
Hingking's
hybrid.
EFcollection.
Lisboa, Portugal.



Haworthia
archeri

Ricthuisies
S W of
Fraserburg

Haworthia lívida
 Ouhangberge
 E of Lemoenpoort



Haworthias esterhuizenii
 E of Albertinia.

Haworthia bolusii var. *bolusii*
 Graaff-Reinet
 after the first watering of the new growing
 season.





Haworthia emelyae major hybrid.
Leo González No detail.



Haworthia pumila "Tears of Angel"
Leo González



Haworthia vincentii (VdV071) after the first watering
of the new season. Diederik Van den Abbeele.



Bill Hildyard. Bill's *Haworthia* March 21
Something on the dark side, a *comptoniana* ex Cok



Sueb Anyamaneetrakul
Haworthia Lover
Thailand. 3 March 24
Haworthia 'Ura Hannya'

A tiny shiny gem.

Haworthia magnifica 'Morning Star' GM685, seems to attract the dust.



Kris Tamayo
Haworthia Enthusiasts
March 24 ·

Haworthia picta

Mukesh Vaid Cactus and Succulent
India.

Yesterday ·

Haworthia emelyae

GM 581

Doornriver West — at Panchavati, Poona





Fernando José Fernández Hingking
March 25 ·

Haworthia EF15B122.
Hybrid made using EF12A06 / EFC1177.
Growing in a 7 cm pot.

Ezequiel Coelho & Fernando Fernández
Hingking's hybrid.
EFcollection. Lisboa, Portugal.



Mukesh Vaid. Cactus and Succulent India

Haworthia emelyae var GM267
from Kammanaise Dam



Diederik Van den Abbeele

Haworthia Enthusiasts

Haworthia pumila

Lemoenspoort

stressed in late winter sun.



Meena Singh. Cactus and Succulent India

March 24 ·

Gasteria rawlinsonii in flower



Ken Uy

Variegated Haworthias are AWESOME

Photo from Panca Warna Lembang



Fernando José Fernández Hingking

Haworthia minima.

Swellendam.

Growing in a 7 cm pot.

EFcollection. Lisboa, Portugal.



Fernando José Fernández Hingking

Haworthia variegated mix. EF private collection.

Growing in 7 cms pots.

EF collection. Lisboa, Portugal.66



Fernando José
Fernández
Hingking

added 3 new
photos.

March 28 at
1:32pm ·

*Haworthia
truncata*
variegated.
ex. Txema
Satostegui.
EFC2073.

Growing in a 7
cm pots.

EF collection.
Lisboa,
Portugal.



Haworthia emelyae
v. *multifolia*.
Sandkraal.



Fernando José Fernández Hingking
Haworthia cv. White Christmas (?) or
cv. Seiko Nishiki (?).
ex. Mr. & Mrs. Lai. Taiwan.
EFC2036.
Growing in a 9 cms pot.
EFcollection. Lisboa, Portugal.



Fernando José Fernández
Hingking

Haworthia EF12A36.
Hybrid made using
marumiana PE1006.
Growing in a 7 cms pot.
Ezequiel Coelho &
Fernando Fernández
Hingking's hybrid.
EFcollection. Lisboa,
Portugal.





Fernando José Fernández
Hingking

Haworthia EF15B116.

Hybrid made using a hybrid of
comptoniana (with variegated
genes). ex. Zong Li Huang.

Growing in a 7 cms pot.

Ezequiel Coelho & Fernando
Fernández Hingking's hybrid.
EFcollection. Lisboa, Portugal.

Bill Hildyard Bill's Haworthia

You don't need to be a hybrid to be
high bred, a star in a 5cm pot

Haworthia archeri 'marmorata'

MMB 5209

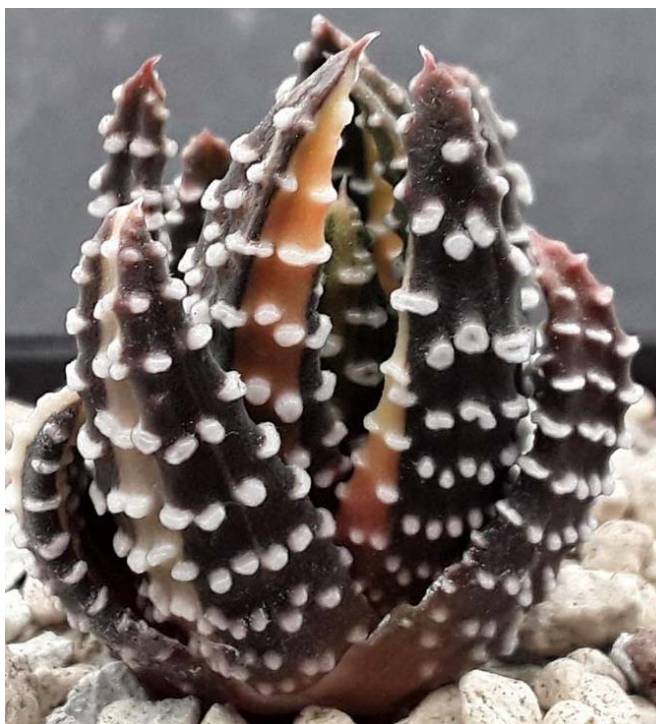


No Comments..



Diederik Van den Abbeele. Haworthia Enthusiasts

A favourite of many I suppose: *H. mirabilis* 'bobii' (before 'pilosa'), which is very close to *H. mirabilis* var. *paradoxa*. Pictured are specimens of: left MBB 7248, right MBB 7249.



Fernando José Fernández Hingking
Haworthia 'Green truncata' variegated.
ex. Zong Li Huang. Taiwan. / EFC2047.
Growing in a 7 cms pot.
EFcollection. Lisboa, Portugal.

Fernando José Fernández Hingking
Yesterday at 4:37pm ·
Haworthia pumila DONUT variegated.
ex. Leo González. Spain.
Growing in a 7 cms pot.
EFcollection. Lisboa, Portugal

Kris Tamayo Haworthia Enthusiasts
Admin · Yesterday ·
Haworthia tessellata 'Fang'





Kris Tamayo Haworthia Enthusiasts

Haworthia bayeri

Bakenskraal

Haworthia semiviva
Yes, the name suited her...



Fernando José Fernández Hingking

Haworthia minima.

Swellendam.

Growing in a 7 cms pot.

EFcollection. Lisboa, Portugal.



Kris Tamayo Haworthia Enthusiasts

Haworthia bayeri (super lactea)

Haworthia Bayeri (Super Dairy)

No details

Abner Lim

3:42pm Apr 14 I bought the plant
in china, they make up names for
them.



Kris Tamayo Haworthia Enthusiasts

Haworthia bayeri



Ken Uy
May 2 at 10:37pm

Haworthia 'White Christmas' albino offset
hopefully becoming viable.





Kris Tamayo . Haworthia Enthusiasts
Haworthia bayeri



Mukesh Vaid. April 24 at 5:14am
Haworthia emelyae GM 538 , Moerasriver

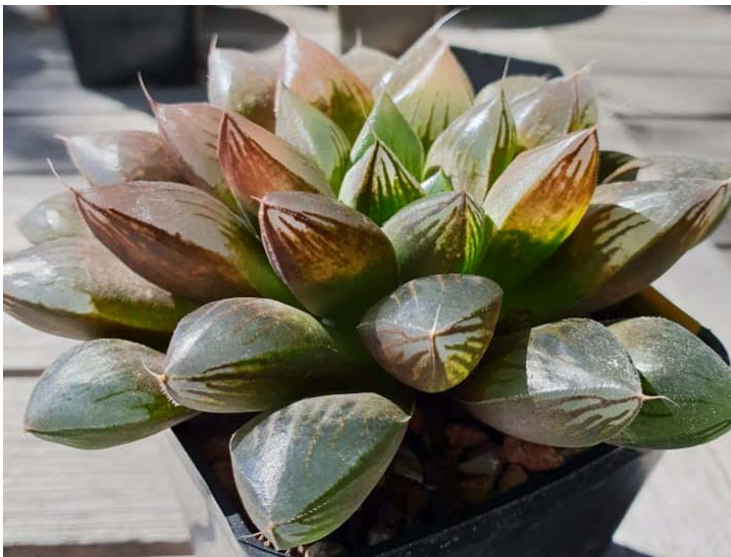


Essie Esterhuizen May 5 at 3:52pm
Haworthia decipiens east of De Rust



Diederik Van den Abbeele

Recently obtained this plant as "MBB7809 Koeisekop", which apparently is a mirabilis (looks a bit as mutica): https://haworthiaupdates.org/.../volume-5-chapter-13-a-febru...



Patrick Didiot

· August 17 at 7:36 AM

Haworthia obtusa 'Murasaki'
12cm





Haworthia blackburniae, IB06594, Kruisrivier, ENE of Calitzdorp /ex. Ingo Breuer
Haworthia blackburniae, this is a very unusual Haworthia. In aesthetics, it seems to be in itself, nothing like it. And here flowered, three stems. What would it cross with? I'm try to imagine... If you know interesting examples of hybrids with *Haworthia blackburniae*, write! Thank you in advance.

Haworthia scabra
 v. *scabra*
 Congo Caves
 Kris Tamayo





Haworthia magnifica var. *splendens*

W of Albertinia

Kris Tamayo

June 27 at 4:58 AM

Haworthia "Marine Snow"

Leo González



Haworthia cooperi
hybrid.

Subir Sarkar

Ingo Breuer's Contribution to Haworthia Literature. The World of Haworthias Volume 1.

In the March issue, 2018 *Alsterworthia International* journal a brief review of changes over the years from just before the 2nd world war to date and the way they altered the progress of interest in haworthia was given. Lack of space prevented the early days of Ingo's work then being included but his more recent were. His earlier works based on much research are now detailed below.

Ingo's and my beginnings differed somewhat. Essentially, mine started pre-war changing to war and post war whilst Ingo's was post war. In the "World of Haworthias Volume 1" he wrote 'My serious interest in Haworthia did not start until 1933 when I began building up a comprehensive Haworthia collection. By the end of my college days, and the start of my professional life in another town, it became obvious that I could no longer keep my succulent collection at my parents' home.' After moving to a new dwelling ... "By chance I received nearly 50 different Haworthia offsets as a gift from the Botanical Gardens in Bonn."

Ingo then went on to deal with "The Lexicon of Succulent Plants by H Jacobsen". This "contained numerous brief description of Haworthias" which Ingo found "difficult to match in order to classify" his own plants. (Editors' note. On one occasion Jacobsen told me that he was having great difficulty in keeping descriptions brief enough to comply with the publishers demands for briefness to keep costs down.) Ingo then deals with Bayer's first Haworthia book, Pilbeam's book and Scott's book. He concludes "these three books could not give me satisfactory answers to all of my question" and "were the inspiration for my own investigation. Staring in 1989, I decided to collect and analyse all available references published on haworthias. This book (*The World of Haworthias Volume 1.*) is the culmination of my preliminary findings." Ingo stresses that this book is not a casual read. It is a "working book" with a great deal of data. "How to obtain information is described at the beginning of each chapter, where the reference numbers will lead to the respective sources.

The World of Haworthias Volume 1 presents all the relevant data necessary for original research and the status of taxa. Drawings and photographs are in their original colours, black and white.

Chapter 1 is a literature index of authors names Ingo has traced with an alphabetical list of their publications against each name. Black and White photographs are also published. 82 pages,

Chapter 2 is an alphabetical list of the names of authors (and their basionyms) in alphabetical order. The names published by them are in chronological order. Names accepted by Breuer at that time are in **bold face type** most of which are accepted by Bayer. 16 pages. Black and White original photographs are included.

Chapter 3 is a short, updated classification dividing Haworthia into Subgenera, sections and series. 10 pages.

Chapter 4 is an annotated index of all names. It is the main part of the book with 205 pages. Each Haworthia is listed in alphabetical order with the author's name. This is followed by details of where the name was published, the origin of the plant, Type details, Status details (whether or not it is synonym) and concludes with a list of reference for each plant by number. All the numbers are in Chapter 1 and for each the bibliographic details are given. Black and White photographs are included.

Chapter 5 is a check list of accepted taxa and their synonyms. The synonyms are numerous. 22 pages.

Pages 307-340 are devoted to indices .

307-319 Index of Plant Names.

321- 327 Index of Black and White illustrations

329 - 330 Index of Colour Pictures.

331– 340 Index of Reference Numbers. In numerical order.

The authors name is given for each number

References which contain locality data are in bold type.

Quotations from Gideon F. Smith's forward to this volume are significant and appropriate. He was the Director of Research and Scientific Services, National Botanical Institute of South Africa; Honorary Professor, University of Pretoria and President International Organization for Succulent Plant Study. He referred to the period covered by Breuer's research as the "Golden Age of Disseminating Information on Haworthia"

He says "The southern Africa subcontinent has been shaped and honed by divergent climatic patterns. It is home to a tremendous variety of geological formations and sediments and has a robust topography of majestic mountain ranges creating rain shadows that result in seemingly endless arid plains. The plains are variously covered with sparse grasses, miniature xerophytic shrubs or gravel beds dotted with brightly flowered succulents..... South Africa also hosts rain forests, densely wooded ravines and valleys clothed in impenetrable thickets. Superimposed on this mosaic of macro and microhabitats available to plants to colonise is climatic antagonism created by two oceans currents - one warm one cold - lapping south Africa's rugged coast line and bringing with them the promise of rain.....But rainfall is erratic and generally low....."

"Although succulents of the region are dispersed among almost 60 plant families.....many of them have diversified extensively at the species rank.....One of these is Haworthia which, with its numerous forms is a collector's delight and a taxonomist's challenge. Therefore, anyone attempting to solve classification problems in, or indeed simply disseminate information on, this fascinating group, should not be faint of heart.....Over the last 25-odd years *Haworthia*have been subject to numerous studies. The result is a considerable body of published information on the group. Indeed, few genera in the rich and diverse southern African flora can claim to have led to the production of so many books and innumerable scientific and popular papers on various aspects as diverse as nomenclature, genetics, leaf anatomy, molecular studies and ethnobotany. However, along with this incredible level of interest has come apparently unavoidable controversy and today collectors and herbarium workers are often faced with conflicting treatments."

"The treatment of Ingo Breuer comes as a refreshing change. It allows the reader to make his or her own decisions on the application of some of the controversial names, and therefore assist in maintain an acceptable level of stability in the 400 names that have been variously upheld for the more or less 80 species of Haworthia."

"Ingo Breuer has established himself as a leader in the field of accessing information on taxon definition in the popular succulent plant genus Haworthia. The success of what he has begun as a scholarly and meticulous librarian and researcher will no doubt continue and in years to come serve as a most worthwhile basis for further refinement of our understanding of the classification of and relationship in this taxonomically and morphologically interesting group."

The World of Haworthias Volume 2 is devoted entirely to Descriptions of Haworthia Names. 496 pages. In his opening remarks Breuer says Volume 1 presented all the relevant data necessary for original research and the status of the taxa. He, of course, put this to good use and produced Volume 2 which presents all the descriptions for Haworthia names and their basionyms in alphabetical order. Under each name comprehensive information is given.

References. Details of the publication are given. The number in brackets at the beginning refers to Volume 1 Chapter 1 - where authors are listed in alphabetical order with lists of their publications.

Illustrations. Illustrations of the type are given where possible. For further comments please see page 341 of Volume 2 Chapter 6 - Description of Haworthia names.

Latin Diagnosis. Until about the early 19th century Latin was the predominantly the language of Science and also from 1935 to date when it was adopted by the International Code of Botanical Nomenclature. For those names given before Latin was compulsory the then "phrase names" are given. Note: there are normally English descriptions.

Description. Contains descriptions in the original language with English translations.

Further names included. Takes the form of name or phrase name, author, reference number, page table, figure.

Origin. Details of where the plant was found as far as can be ascertained from notes

Type. Explained on page 341. Only compulsory since 1.1.90

Distribution. Details of the location as far as they can be ascertained

Additional Notes. Other additional relevant text.

Remarks. Newly available information or problems with taxonomy etc.

Graessner of Perleberg near Dresden under the name *H. tessellata* Haw. I really was not able to find out about the origin of these seeds but with a great certainty it can be suggested that they had been imported from the former German South-West-Africa. All 5 specimens looked exactly the same; thus the probability of dealing here with a hybrid is nearly out of the question. Mr. Uitewaal of Amsterdam had already informed me that he had seen such a plant in Haarlem but again I do not know of the origin of the plant in Haarlem, nor do I know the origin of this plant. If we compare our new variety with the species and its other varieties it becomes apparent that it is very close to var. *engleri* (DINTER) POELLN. as this only has 2 longitudinal nerves as well. The number of leaves in a rosette is 20 versus 5-9 in var. *engleri* and 10-15 in var. *tessellata*. The number of flowers is the same as in the species, the length of the flower is between the two of them and the pedicels are longer. The petals are again smaller as in both others and the peduncle 3-4 times as long in spite of the fact that they were grown in full sun. The form of the leaves is somewhat similar to that of the varieties *tuberculata* POELLN. and *inflexa* BAKER, but these have larger teeth at the margins. The shorter leaves of the young stoloniferous branches are in 3 rows in the beginning as is also observed in young plants of other multi-rowed Haworthias as well. Stolons vary in length between 10-90 mm and are white but take on the colour of the plant as soon they get above the ground. For the collector of small succulents this is a very nice addition. This plant will find its way into collections quickly as it is not difficult to grow and branches quickly.

***H. tessellata* var. *inflexa* BAKER**

Publication:

[36] A synopsis of Aloineae and Yuccoideae; Journal of the Linnean Society **18**:211, 1880.

Latin Diagnosis:

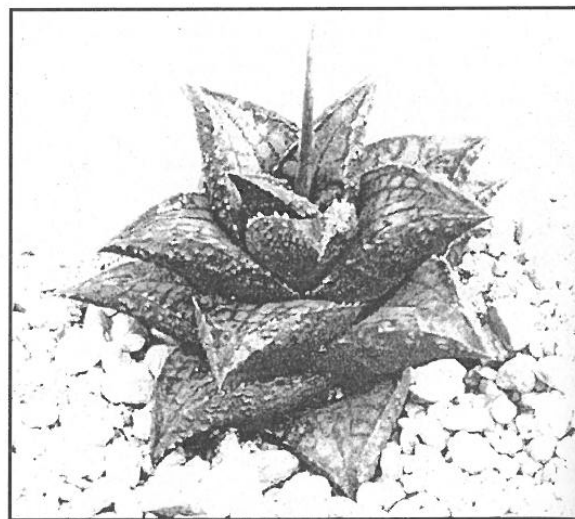
Rosula foliorum 50-75 mm longa, 50 mm Ø. Folia deltoidea purpureo-viridia facie concava, inferiora marginibus prominulis inflexis.

Origin:

CAPE: Without locality. Introduced in Kew Gardens at 1879.

Type:

Cultivated in (K). Not preserved.



H. tessellata* var. *inflexa

Cact. Succ. J. (US) **14**:51

Brown 1942

no data

Description after BAKER [38]:

Rosette 50-75 mm long, 50 mm Ø; leaves dull purplish-green, with a concave face and inflexed margins.

Distribution:

Not mentioned.

Additional Notes after BROWN [139]:

The illustration shows a plant scarcely 50 mm tall, the leaves of which were 30 mm long and 22 mm wide towards the base. The margins are very inflexed at all seasons, the color is dull and dark compared with other well known forms of *H. tessellata*, the lines on the leaf faces are ± obscure, especially in the dormant season, hence the name *H. pseudotessellata* POELLN. The lengthwise lines on the leaf faces of mature leaves are usually about 5 but may be up to 7. One often sees plants, especially of *H. tessellata* var. *parva* under the name, var. *inflexa*. This is no doubt due to the fact that in a very dry, or in a very dormant condition, the edges of the leaves of *H. tessellata* and its forms are rolled inwards.

H. tessellata* var. *luisieri

RESENDE & POELLN.

Publication:

[417] Suculentas Africanas II: Variedades novas de Haworthia tessellata Haw.; Revista (da So-

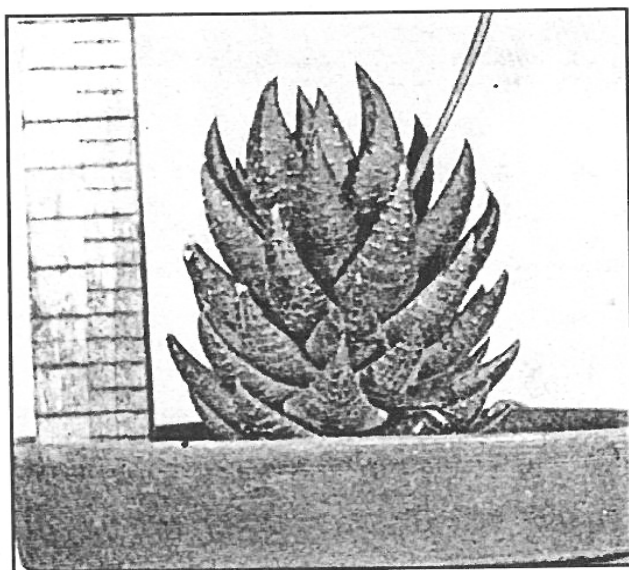
Sociedade Broteriana (Portugal) 2 :85, fig.33 b, 1943.

Distribution:
Not mentioned.

H. coarctata var. *krausii* RESENDE

Publication:

[414] Suculentas Africanas III: Contribuicao para o estudo da morfologia, da fisiologia da floração e da geno-sistemática das Aloinae; Memórias de la Sociedade Broteriana (Portugal) 2 :84, 1943.



H. coarctata var. *krausii*
Mem. Soc. Brot. 2 :85, fig.33 a

Resende 1943
no data, LECTOTYPE

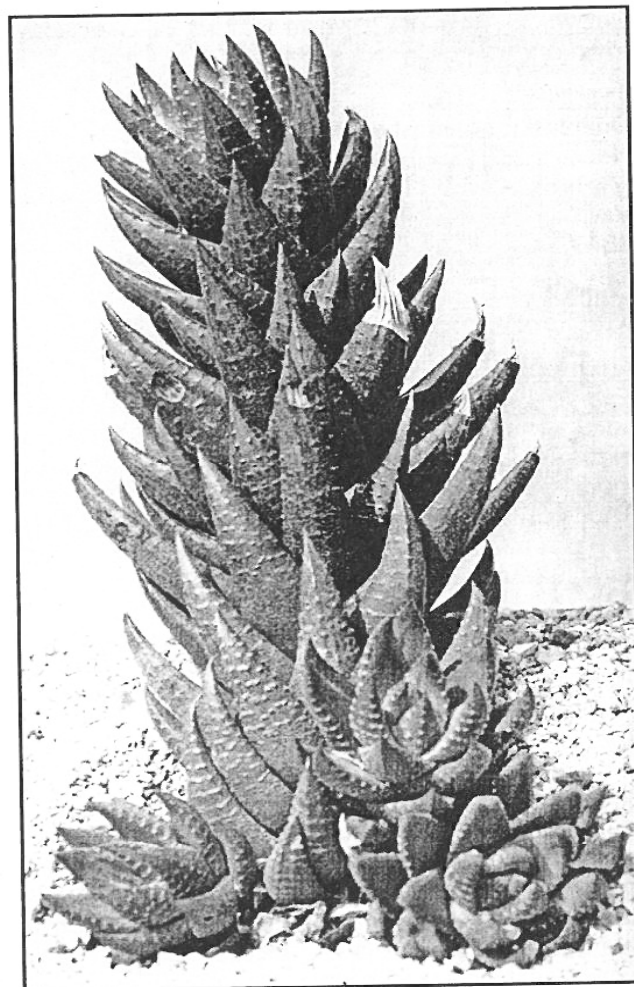
Latin Diagnosis:

Folia non longicre quam 40 mm pro rata latiore, crebre tuberculata, tuberculis saepius viridioribus in lineis ± regulariter transverse seriatis ornata.

Description after RESENDE l.c.:

Encontrei esta variedade no Jardim Botânico de Breslau. Distingue-se da var. haworthii forma major RESENDE pela folha mais pequena e relativamente mais larga, tubérculos dispostos em linhas transversais e de cor verde; o verde das folhas é mais escuro e glauco, quando as duas variedades são cultivadas no mesmo meio; cultivadas em meios diferentes pode suceder precisamente o contrário no que diz respeito a cor. Difere da forma pseudocoarctata (POELLN.) RESENDE pela folha proporcionalmente maior e

tubérculos de diferente aspecto e tamanho. Pedunculo 300-400 mm; cacho 200-300 mm; tubo da corola 10-12 mm; lábios róseos de 8-10 mm, pedicelos 5-6 mm.



H. coarctata var. *krausii*
Cact. Succ. J. (US) 29 :24

Brown 1957
no data

English Translation: This variable species can be found at the Bot. Garden of Breslau. Distinguished from var. *haworthii* forma *major* RESENDE by the mostly small and relatively broad leaves. Tubercles positioned in transverse lines and of green colour. Leaves mostly dark green and glaucous when the two varieties are cultivated under the same healthy growing conditions. Cultivation under different conditions may lead to decrease or increase in coloration. Distinguished from forma *pseudocoarctata* (POELLN.) RESENDE by relatively larger leaves and tubercles of different size. Peduncles 300-400 mm, race-

me 200-300 mm, corolla tube 10-12 mm, sepals 8-10 mm, pedicel 5-6 mm.

Description after BROWN [210]:

Plant with a leafy stem 150 mm or more in length, 50-60 mm Ø, decumbent in age, proliferous from or near the base. Leaves 35-40 mm long, to 20 mm broad, green, back of leaves with numerous greenish-white tubercles arranged in ± transverse rows.

Origin:

CAPE: Without locality. No collector mentioned. Observed at (WRSL).

Type:

Cultivated in (WRSL). Not preserved. LECTOTYPE (designated by Breuer et al. [999]): [photographic icon] in Resende, Memorias de la Sociedade Broteriana (Portugal) 2 :85, fig.33 a, 1943.

Distribution:

Not mentioned.

Additional Notes after RESENDE l.c.:

Denominada em honra do Dr. Krause, professor do Instituto Botânico de Breslau, a quem devo imensas gentilezas pelas facilidades que me deu sempre, quando eu procurava material no Jardim Botânico daquela cidade.

English Translation:

I name it in honor of Dr. Krause, Professor of the Botanical Institute of Breslau, who has always given me friendly assistance and collected material for the Botanical Garden of our town.

Additional Notes after BROWN [210]:

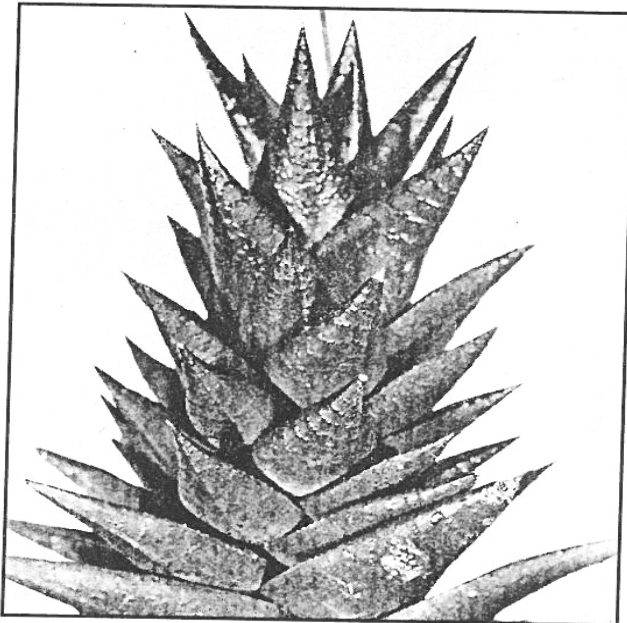
Over a long period of years several Haworthias have been received from South Africa which seemed to be forms of *H. coarctata*, varying in the size and shape of leaves and the more distinct tuberculation on the back of leaves. The present form var. *krausii* RESENDE illustrates this variation quite well. This plant was observed by Resende in the Botanic Garden at Breslau, and many years ago I received a *Haworthia* from South Africa, without locality, under the name *H. coarctata* var. which seems to be quite similar. The plant shown in the illustration of var. *krausii* was sent to me by Dr. Resende of Lisbon several years ago. The leaves are shorter and broader, the tubercles more numerous and more prominent than in the type. This *Haworthia* should not be confused with the old horticultural form *H. krausii* HORT., which is a form belonging, most probably, in the § *Tortuosae*.

H. coarctata var. *sampaiana*

RESENDE

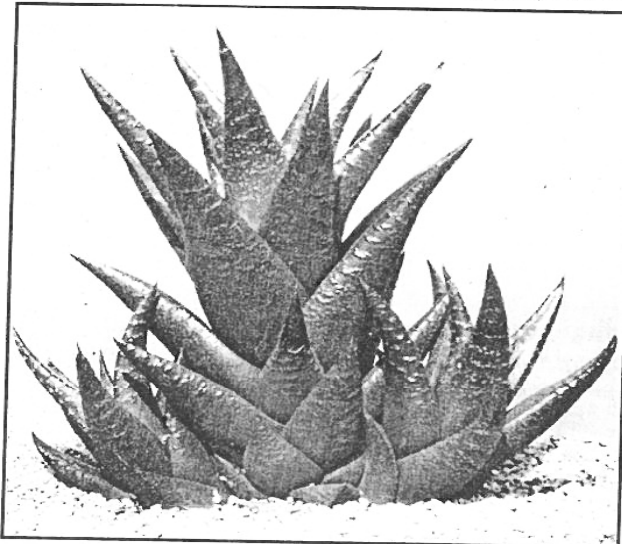
Publication:

[409] *Haworthia coarctata* var. *sampaiana* var. nov.; Feddes Repertorium specierum novarum regni vegetabilis 45 :177, 1938.



H. coarctata var. *sampaiana*
Mem. Soc. Brot. 2 :73, fig.28

Resende 1943
no data, NEOTYPE



H. coarctata var. *sampaiana*
Cact. Succ. J. (US) 24 :6

Brown 1952
no data



H. cooperi var. *gordoniana* JME5/89 N of Uniondale

J.M. Esterhuizen



H. cooperi var. *pilifera* E of Willowmore

H. Mays

D



H. decipiens E of Willowmore

H. Mays



H. gracilis NE of Grahamstown

H. Mays

Addendum

On the 16th August Neil Oakman published an interesting comment on the internet “When I started growing cacti (late 60's/early 70's) there was no internet, I found out names of plants by looking in books like Lambs, Borg, Haage etc. I also compared my plants with those at shows and branch table shows. If all that failed I would take a plant along to a branch meeting to ask the more experienced members. I purchased plants with labels from other members plant sales at meetings and shows and from specialist nurseries. Am I alone in thinking that all the identification posts on here show that people no longer use books, attend branch meetings, go to shows or visit specialist nurseries? It seems the internet has created a culture of wanting everything instantly without any effort”

I, too, resent the loss of the good old days but the fact is that times change. Tremendous progress has been made in inventions in all walks of life and interests change as rapidly, from generation to generation, and will continue to do so. What is disturbing is that the opportunities which also arise are some times not pursued. For example, whilst the sharing of photographs on line is informative, it is incomplete. For a firm understanding information is required. How were the many new cultivars created, do some require precise cultivation conditions or watering regimes. How do you stabilize selected variable progeny. Why do some lose their outstanding characteristics after a time etc.

It is also worth remembering that the old time nurseries filled with habitat plants have long gone with the inception of import and export permits, which are not generally available for habitat plants. There are still a few nurseries which propagate long-ago imported plants (pre import and export permit days) thus preserving and increasing some of the plant genes. The inception of tissue culture has also given propagation a massive boost and has increased widely the number of cultivars for sale. They are widely sold on the internet. Old systems fade away to be replaced with new and more prolific.

Garden centres and others frequently display cacti and other succulents for sale with no more than a label such as “Selected succulents”, “Selected cacti” etc. This is how they receive them. Why does the public not cry out for each plant to be properly labelled? Probably because the market has been expanded to take in only the casually interested, not true collector.

Editor

Other books produced by Ingo Breuer

Whilst doing his research Ingo Breuer used the collected information to produce two additional relevant books:
Notes on Haworthias J.R. Brown @ Haworthia photographs used to typify taxa described by Dr. Karl von Poellnitz.

Notes on Haworthia J.R. Brown. J. R. Brown was born on August 14th 1885. In the 1920's he opened Soldena Gardens as a nursery in Los Angeles area. He issued catalogues and advertised in the journal of the Cactus and Succulent Society, U.S.A. He eventually sold the nursery and worked as a gardener. At the same time he maintained a sizeable collections of Haworthia. He corresponded with, and obtained specimens from all the notable collectors and student of the time, many plants being obtained directly from South Africa. He wrote profusely and comprehensively about Haworthia plants, all of which is preserved in “Notes of Haworthia J./R. Brown”. 219 pages.

Haworthia photographs used to typify taxa described by Dr. Karl von Poellnitz. This book publishes for the first time photographs used to define (typify) many Haworthia specimens. Behind all this is a fascinating storey. Dr Karl von Poellnitz diligently preserved Haworthia type specimens to facilitate identification and taxonomic work of Haworthias. Unfortunately all his type specimens were destroyed during the 2nd World War (regrettably as was Poellnitz) creating problems for future work. The International Code for Botanical Nomenclature provides for the creation of other types, such as neotypes, lectotypes etc, to be established to replace the absence of a preserved type. In decades following the 2nd world war the few scientists dealing with Haworthia paid little attention to their creation. This changed when Ingo Breuer examined material in the herbarium of the Botanical Museum Berlin-Dahlem and identified many old photographs which could be used to establish a variety if types. These Ingo Breuer used to create various types for the destroyed war time types. Remembering that these photographs are very, very old they are in remarkable condition though a few do not quite come up to this standard. Nevertheless, do provide mostly lectotypes to replace the types destroyed in the Second World war. One page is devoted to each photograph. The photographs are either actual size or, for most, enlargements. Most include a scale to show the correct size.

Note. 1. A lectotype is an element chosen as a basis of the description for a plant when an original plant collected at the time the plant was discovered is not available to be named as the Type or is lost or destroyed. There are other types available for other purposes.

Note 2. In addition to photographs, Breuer found 11 alcoholic preserved Haworthia specimens of Dr. Karl von Poellnitz.

Validation of the description of some *Haworthia* species published by M. Hayashi.

By Ingo Breuer

Haworthia angiras M.Hayashi -- *Haworthia* Study 14: 13 (-14; fig. 3). 2005
Haworthia cangoensis M.Hayashi -- *Haworthia* Study 14: 13 (-14; fig. 2). 2005
Haworthia ciliata M.Hayashi -- *Haworthia* Study 14: 11 (9; fig. 4). 2005
Haworthia dura M.Hayashi -- *Haworthia* Study 14: 11 (9; fig. 2). 2005
Haworthia erii M.Hayashi -- *Haworthia* Study 14: 11 (9; fig. 5). 2005
Haworthia ernstii M.Hayashi -- *Haworthia* Study 14: 11 (10; fig. 6). 2005
Haworthia ianthina M.Hayashi -- *Haworthia* Study 14: 12 (fig. 12). 2005
Haworthia incrassa M.Hayashi -- *Haworthia* Study 14: 12 (fig. 11). 2005
Haworthia joubertii M.Hayashi -- *Haworthia* Study 14: 16 (fig.). 2005
Haworthia kogmanensis M.Hayashi -- *Haworthia* Study 14: 14 (-15; fig. 5). 2005
Haworthia laxa M.Hayashi -- *Haworthia* Study 14: 14 (-15; fig. 6). 2005
Haworthia lazulis M.Hayashi -- *Haworthia* Study 14: 11 (10; fig. 8). 2005
Haworthia limbata M.Hayashi -- *Haworthia* Study 14: 16 (fig.). 2005
Haworthia luri M.Hayashi -- *Haworthia* Study 14: 11 (-12, 10; fig. 9). 2005
Haworthia montana M.Hayashi -- *Haworthia* Study 14: 14 (-15; fig. 7). 2005
Haworthia odyssei M.Hayashi -- *Haworthia* Study 14: 13 (-14; fig. 4). 2005
Haworthia pellucida M.Hayashi -- *Haworthia* Study 14: 12 (fig. 10). 2005
Haworthia rava M.Hayashi -- *Haworthia* Study 14: 11 (9; fig. 3). 2005
Haworthia royalis M.Hayashi -- *Haworthia* Study 14: 13 (-14; fig. 1). 2005
Haworthia vitris M.Hayashi -- *Haworthia* Study 14: 16 (fig.). 2005

All the type specimen of this new described species were stored in The Research Institute of Evolutionary Biology, Tokyo. Later they were moved to (TI) Herbarium, University Museum, University of Tokyo.

Reference: M. Hayashi- *Haworthia* Study 15 :14, 2006

Haworthia rooibergensis var. *erii* (M. Hayashi) Breuer

Validation of the new combination of *Haworthia rooibergensis* var. *erii* (M. Hayashi) Breuer
Alsterworthia Int. 16(2): 6. 2016 [25 Jun 2016].

Basionym: *Haworthia erii* M. Hayashi in *Haworthia* Study 14: 11. (2005).

Holo in (TI).

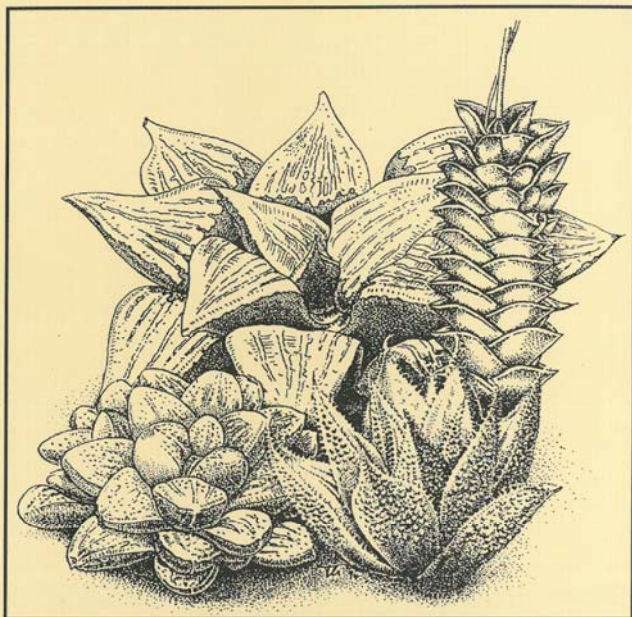
Tulista kingiana (Poelln.) Breuer.

Validation of the new combination of *Tulista kingiana* (Poelln.) Breuer
Alsterworthia Int. 16(2): 7. 2016 [25 Jun 2016].

Basionym: *Haworthia kingiana* Poelln. Repert. Spec. Nov. Regni Veg. 41: 203. 1937

The World of Haworthias

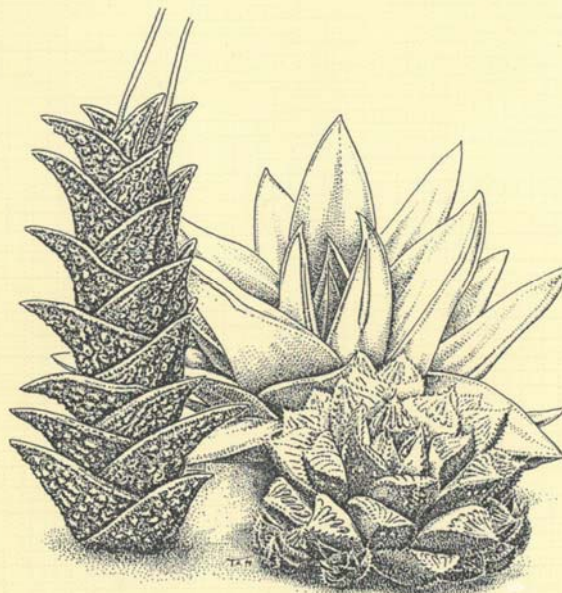
Volume 1



Ingo Breuer

The World of Haworthias

Volume 2



Ingo Breuer

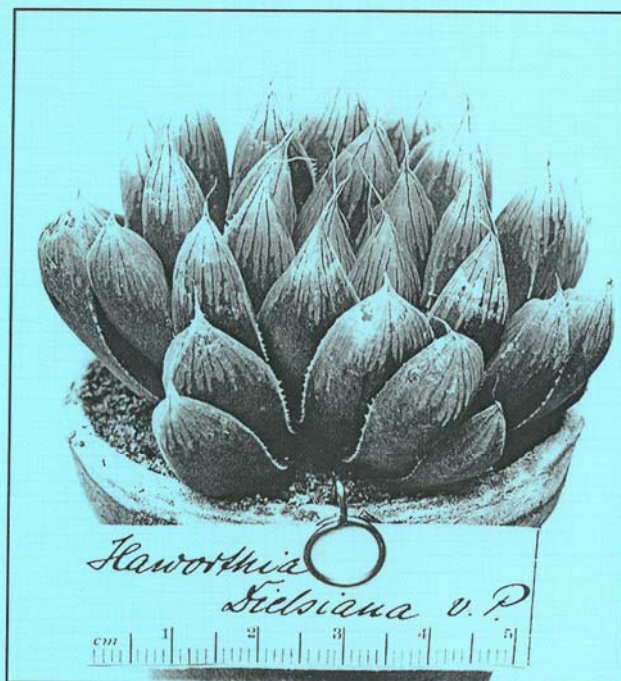
Notes on Haworthias



J. R. Brown

Haworthia photographs

used to typify taxa described by
Dr. Karl von Poellnitz



Ingo Breuer