

Hybrids & Cultivars

of the

Succulent Asphodelaceae

Volume 2 - Haworthia



Prepared & Edited by

Harry Mays

Woodsleigh, Moss Lane, St Michaels on Wyre, Preston, PR3 0TY, UK
hmays@freenetname.co.uk

Published by Alsterworthia International

30 August, 2013

ISSN 1474-4635

Acknowledgements.

Volume 2 has been in preparation for a long time, during which many amendments have been made in the light of more research and additional information received. The photographs in the original descriptions have been used for almost all the cultivars included in this issue. I am deeply grateful to all who have been involved. Without their assistance this book would never have been published.

The Japanese language (for me at least) is a formidable obstacle. Dr Hayashi has undertaken an independent rationalisation of Japanese cultivar names and has been of tremendous help. He published an interim list of Japanese cultivar name in Haworthia Study Number 20 and updated information on the Japanese Haworthia Society web pages. <http://haworthia.net> His work is continuing.

Contents

Publishing details	2
Identification of published references used in this volume	52
Haworthia cultivars	3-74
Index of Haworthia Cultivar Names & their Associated Invalid Names.....	74-75
Some Notes on Names	76
Hybrids & Cultivars of the Succulent Asphodelaceae - Volume 1	77
Alsterworthia International	78
Haworthia Study. Journal of the Japanese Haworthia Society	79
John Trager & the inflorescence of Haworthia ‘Three-Cornered Hat’	Back cover



Haworthia 'Abokyu' M. Hayashi

Description. Haworthia Study 6:10. (Sometimes misspelled Aboukyo.)

Parentage. *Haworthia (emelyae v.) comptoniana* x ? Breeder Dr. Hayashi.

Comments. The cultivar has the leaf markings of *H. (emelyae v.) comptoniana*, but the plants are larger, up to 20 cm. in diameter. Abokyu = An extra large palace of Qin.

Propagation. Offsets and leaf cuttings.

Haworthia 'Albinusta' Marx

Description. Haworthia Study 11:7. (Sometimes listed as *Haworthia 'Shiro-okina'*, a more recent, invalid description.)

Parentage. *Haworthia albispina* x *Haworthia venusta*.

Comments. Leaves green, vertical, incurving, gradually tapering to a long flexible spine, long flexible spines on margins and keels, short spines in more or less longitudinal rows on both leaf surfaces. Rosette ball shaped.

Propagation. Offsets.



Haworthia 'Alligator' Nishi

Description. Haworthia Study 15:2.

Parentage. *Haworthia margaritifera* x ?

Comments. Rosette open; leaves dark green, young leaves vertical, old spreading, slightly curved backwards, gradually tapering to a prominent point, both leaf surfaces with many white tubercles in longitudinal rows, margins clearly delimited by rows of white tubercles.

Propagation. Offsets & leaf cuttings.



Haworthia 'Alligator Pair' J. Trager

Description. C&SJ 69(2)95.

Parentage. *Haworthia koelmaniorum* x *Haworthia pygmaea* (especially papillose form previously known as *H. asperula*).

Comments. A low, starfish-shaped rosette with scabrous leaves resembling the surface of an avocado (hence plant found also as Alligator Pear an illegitimate name). The original description indicates a light-green plant but in strong light it turns reddish.

Propagation. Offsets and leaf cuttings.





Haworthia 'Aluminum Star' Gerhard Marx.

Parentage. *H. badia* x *H. splendens*.

Description. Alsterworthia International 9(3)4-5.

Comments. Rosette of large re-curved, narrowly pointed leaves. Dark green of the retuse leaf-ends is largely obscured by aluminum-white (aluminium) raised spots running in slightly ridged, longitudinal rows. The leaf edges are tinged red. An *Haworthia* with the most gracefully re-curved leaves, tightly packed into a neat and compact rosette with a peculiar metal-like colour. Plant illustrated is 8.5cm in diameter.

Propagation. Offsets and leaf cuttings.

Haworthia 'Amra Bengali'

Parentage. (*Haworthia retusa* ♂ x *Haworthia pygmaea* ♀) ♀ x *Haworthia emelyae* v. *major* ♂.

Description. Alsterworthia International 10(2)18.

Comments. Rosette open; leaves medium green, prominent retuse ends taper to a whitish spine, small marginal teeth white; irregularly-flowing. Cloudy white to pale, mildly foggy white partly obscures the blistered retuse ends, a few light green patches on the non-retuse upper leaf surface.

Propagation. Offsets.



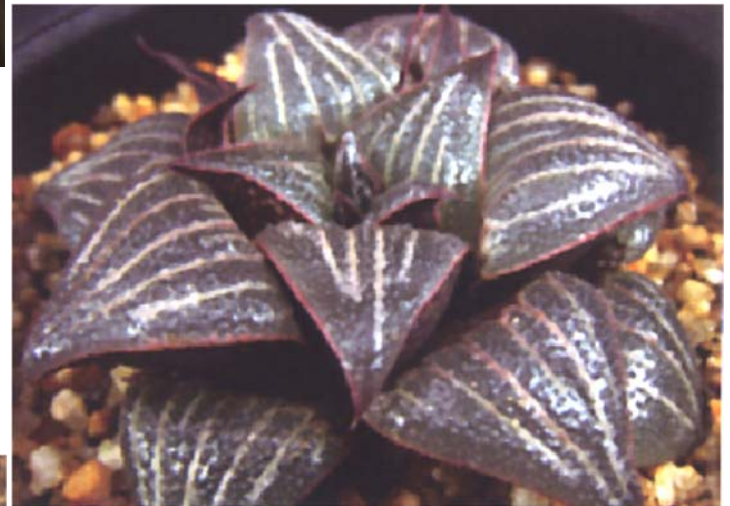
Haworthia 'Anitra' Yoshida

Description. Haworthia Study18:3.

Parentage. *Haworthia splendens* x ?

Comments. Rosette similar to *splendens*, but the leaves are very dark, blackish-green with red margins and about 4-5-6 distinct longitudinal white lines in the retuse leaf ends. Plant in the photograph is 8cm in diameter.

Propagation. Offsets and leaf cuttings.



Haworthia 'Aranami' Nishi

Description. Haworthia Study18:3.

Parentage. *H. koelmani* x *H. striata*.

Comments. Rosette diameter 13cm. Leaves hard, brownish-black, upper surface concave with many horizontal, somewhat wavy ridges, slightly recurved, terminate in a sharp point. Ø of the plant in the photograph is 13cm. 'Aranami' = Rough waves.

Propagation. Cuttings.

Haworthia 'Arati' Soumen Aditya.

Description. Alsterworthia International 11(1)2.

Parentage. (*H.* 'Lime Green' x *H. cooperi* var. *truncata*)♀ x *H.* 'Snehaneer'♂.

Comments. Rossulate, acaulescent; leaves upright, upper surface slightly concave, dark green, lower light green, rounded, boat shaped, keel present towards the tip, upper surface short rows of small white tubercles converge towards the junction of the keels and margins, margins lined with a row of short, white teeth; the leaf end between the upper and lower surfaces is more or less flat and inclined with overlapping light green at the top from the lower leaf surface and a few white tubercles in more or less short rows, dark green at the bottom of the upper leaf surface, truncate-ovate to slightly triangular; windows finely granular. Long roots are very fat, white. Photograph four year old plant 5.6 cm. high and 2.5 cm. diam. It does not flower. Named in honour Mrs. Arati Pradhan, who died from cancer.

Propagation. Offsets. Leaf & root cuttings may be possible.



Haworthia 'Atlantis' Bob Kent

Description. Haworthia Study 11.5.

Parentage. A Bob Kent hybrid. Presumed *Haworthia cooperi* x *Haworthia wimii*.

Comments. This cultivar is similar to *H.* 'Green Woody', but it differs in that it has fine, short and firm teeth all over the leaf. The colour is greyish-blue and reminiscent of sea water.

Propagation. Offsets.



Haworthia attenuata 'Hakucho'

Description. Not traced to date, but Dr Hayashi states this is a Japanese cultivar named 'Hakucho'. *Haworthia attenuata* 'White Butterfly', P.A.S.C. Vol. 3, a later published name, is invalid - Art. 24.4 ICNCP.

Parentage. A selected form of the species.

Comments. Form as for the species. Variegation is cream, but it turns pinkish in good light. Leaves c. 6 cm long and 1 cm wide.

Propagation. Offsets.



Haworthia attenuata 'Junimo-Hikari'

Description. Not traced to date, but Dr Hayashi states this is a Japanese cultivar named 'Junimo-Hikari'. *Haworthia attenuata* 'Little Lemon', P.A.S.C. Vol. 3, a later published name, is invalid - Art. 24.4 ICNCP.

Parentage. A selected form of the species.

Comments. Form as for the species. Clear, longitudinal, yellow variegation, which may turn pink in strong light. Band-like tubercles on the undersides of the leaves. Leaves ca. 6cm long and 1cm wide.

Propagation. Offsets.





***Haworthia attenuata* v. *radula* 'Matsunoshimo-Nishiki'**

Description. Not traced to date, but Dr Hayashi states this is a Japanese cultivar named 'Matsunoshimo-Nishiki'. *Haworthia attenuata* 'Golden Arrow' P.A.S.C. Vol. 3, a later published name, is invalid.

Parentage. Variegation in the variety.

Comments. Overall form as for the variety. Leaves ca. 10cm long and 1.5 cm wide at the base. Colour is green with some yellow to yellow with some green. The green ranges from dark-green, longitudinal bands to diffused (lighter) green towards the lower part of the leaves. Yellow tubercles on both surfaces, small marginal teeth yellow.

Propagation. Selected offsets.

***Haworthia attenuata* v. *radula* 'White Arrow'**
H.C.K. MAK

Description. P.A.S.C. Vol. 3.

Parentage. Variegation in the variety occurring in the UK.

Comments. White, longitudinal variegation turning pink in strong light. Leaves c. 6 cm long and 1cm wide. Many dot-like white tubercles on the underside of leaves, smaller on the leaf surface. Leaves have a tendency to twist.

Propagation. Offsets



***Haworthia attenuata* 'Wide-Band-Nishiki'**

Description. Not traced to date, but Dr Hayashi states this is a Japanese cultivar named 'Wide-Band-Nishiki'. In the UK it is circulating as *H. attenuata* variegated.

Parentage. A variegated clone of the species.

Comments. Rosette large. Leaves dark green with bright yellow to greenish yellow longitudinal bands in varying widths; conspicuous, thick, raised, interrupted, white bands on the backs of the leaves, upper leaf surfaces slightly concave with scattered, raised white spots. Leaf colour depends on the season and growing conditions. Slow-growing, unwilling to offset.

Propagation. Beheading to promote offset production. Leaf cuttings possible.

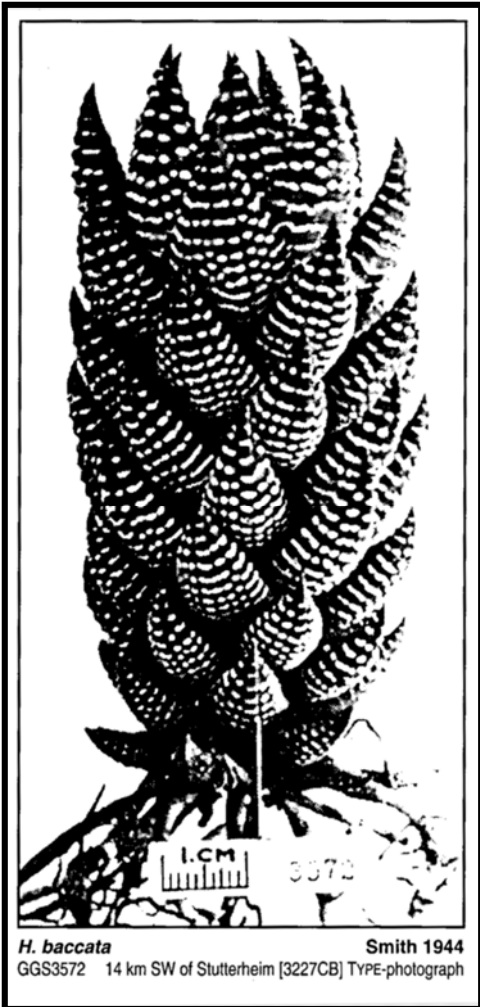
Haworthia attenuata 'Shiricho'

Description. Not traced to date, but Dr Hayashi states this is a Japanese cultivar named 'Shiricho' *H. attenuata* 'Ground Yellow' P.A.S.C. Vol. 3, a later published name, is invalid - Art. 24.4 ICNCP.

Parentage. Variegation in a large growing form of the species .

Comments. Leaves dark green with blurred yellowish-grey variegation enhanced by strong light, ca. 8 cm long and 1.5 cm wide, continuous, horizontal bands of tubercles on the underside. Rosettes up to 12 cm in diameter.

Propagation. Offsets.



Haworthia 'Baccata' (G.G. Smith) ex Gordon Rowley.

Description. Alsterworthia International 8(1)1,6.

Parentage. Described as *H. baccata* G.G. Smith in Journal of South African Botany 10:20 (1944). As it was not accepted as a valid species, it was converted to a cultivar. G.G. Smith collected stock material 9 miles SW of Stutterheim, C.P., S.A. under his number 3572. This was propagated by the Huntington Botanical Gardens and distributed under number ISI 1576

Comments. Stems erect to 100mm, 40mm diameter, proliferous. Leaves spiralling, erect, incurved, multifarious, about 30mm long, ovate, acute, upper surface flat to concave, back convex with keel, tubercles white in horizontal bands. Red in full sun, green in shade.

Propagation. Offsets.

Haworthia badia 'Bacchus' Bob Kent

Description. *Haworthia* Study 11:5 is recorded as the published description in *Haworthia* Study 20:6.

Parentage. A selected field collected plant..

Comments. As for the species, but the dense small tubercles on the shorter (less attenuate), retuse leaf-ends make the clone distinctly metallic red.

Propagation. Offsets and leaf cuttings.





Haworthia badia 'Frosty' Kawahigashi

Description. Haworthia Study 12:3.

Parentage. Presumably a selection of the species.

Comments. Form as for the species but the curved, retuse ends of the attenuate leaves are densely covered with fine white tubercles.

Propagation. Offsets and leaf cuttings.

**Haworthia bayeri 'Zaramado Variegated'
M. Hayashi & H. Mays**

Description. Alsterworthia International 6(2)23 & 24.

Parentage. A selected clone of the species. Known as *H. correctata* L8 in Japan. *H. correctata* sensu Scott was included in *H. bayeri* by Venter & Hammer.

Comments. Form as for the species. Pale pink, occasionally cream, variegation associated with dark green on the leaf sides and lighter green on the retuse leaf ends, which also have mainly longitudinal white lines with a small amount of reticulation. The rosette is quite compact.

Propagation. Offsets and leaf cuttings.



Haworthia bella 'Aoi Yōsei' Hayashi

Description. Haworthia Study 16:14.

Parentage. A selection of the species.

Comments. Form as for the species, but the leaves have a bluish tinge. 'Aoi Yōsei' = Blue fairy

Propagation. Offsets.

Haworthia 'Benitei' Banno

Description. Haworthia Study 15:2.

Parentage. *Haworthia retusa* x ?

Comments. Similar to *H. retusa*. A large clone. Plant in the photograph is 18cm in diameter. Shiny windows with distinct red lines fill the retuse leaf ends. 'Benitei' = Red house.

Propagation. Offsets & leaf cuttings.



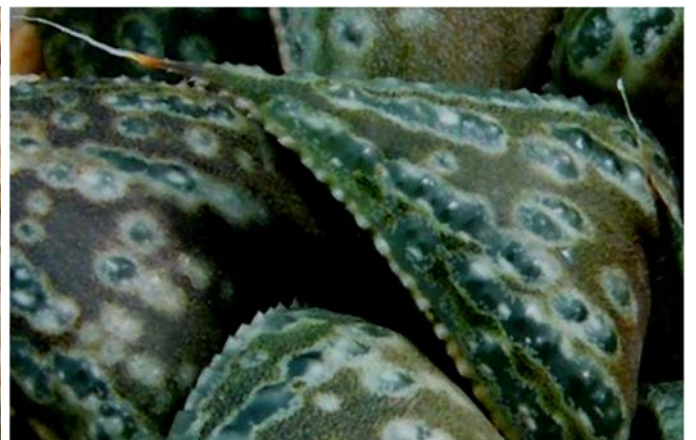
Haworthia 'Bird's Tail' Francois Hoes.

Description. Alsterworthia International 9(1)4.

Parentage. *Haworthia cooperi* v. *venusta* x *Haworthia truncata* 'Lime Green'.

Comments. Leaves slightly twisted, lanceolate, ascending, each ending in a sharp point, margins and keels with white teeth; colour green with lengthwise windows of white stripes of varying length and width. It remains green throughout the year. Rosette about 5 cm diameter. Non-offsetting. It dislikes too much water.

Propagation. Leaf cuttings.



Haworthia 'Black Knight' Gerhard Marx.

Description. Alsterworthia International 9(3)5.

Parentage. *H. marumiana* var. *dimorpha* ♀ x *H. splendens* ♂.

Description. Rosette compact. Leaves dark blackish-green, pimples in more or less longitudinal rows in the short retuse leaf-ends dark blackish-green in the centre surrounded by a ring of light green, the leaf ends terminate in a spine. Marginal spines short. Diameter of plant illustrated is 7.5cm.

Propagation. Offsets and leaf cuttings.



Haworthia 'Black Mask' Tsuruoka

Description. Haworthia Study 14:15.

Parentage. *Haworthia springbokvlakensis* x ?

Comments. Rosette 2cm diameter. Leaves light green at the base, blackish brown above. Large, silver windows obscure the retuse leaf ends except for the blackish-brown, longitudinal lines.

Propagation. Offsets and leaf cuttings.



Haworthia 'Blue Haze' Ohkuwa

Description. Haworthia Study 6:15.

Parentage. *H. comptoniana* x *H. picta*.

Comments. The form of this cultivar resembles that of *Haworthia comptoniana*, but the leaves have a distinctive glaucous-blue haze.

Propagation. Offsets and leaf cuttings.



Haworthia 'Bristle Tip' F. Hoes

Description. Alsterworthia International 4(1)22-23.

Parentage. (*H. truncata* x *H. maughanii*) x *H. emelyae* var. *major* [= *H. wimii* Hayashi.]

Comments. Rosette of chunky leaves, crystalline bristles on all sides of the upper half of the leaves. Young plants and plants in low light dark green. In summer under strong light dark reddish-black, leaf tips always appear rough and shiny. Lower right original clone Above dark-green offset in the process of rooting. Offsets freely.

Propagation. Offsets. Leaf cuttings and probably root cuttings may also be used for propagation.



Haworthia 'Brocco' Francois Hoes

Description. Alsterworthia International 9(1)3.

Parentage. *Haworthia* 'Chocoletto' x *Haworthia* 'Keganii'

Comments. Similar to *Haworthia* 'Pongo', but the leaves of *H. 'Brocco'* are triangular; terminal spine, marginal teeth and surface spines are bright white; leaf colour brownish in winter, almost black in good light in summer. Diameter 3.5 cm. No offsets to date. Slow growing. Dislikes too much water. Requires bright light. 'Brocco' from "Broken maker" = trouble maker because of plants precise cultivation conditions.

Propagation. Leaf cuttings.



Haworthia 'Bononi Monat' Soumen Aditya.

Description. Alsterworthia International 10(2).

Parentage. *Haworthia* 'Snehanuv' ♂ x (*H. Cooperi* v. *dielsiana* x *H. bolusii*) ♀

Comments. Rosette open; young leaves green, vertical, ends incurving; as they age the leaves begin to spread and the ends turn back forming (slight) retuse ends, the oldest (lower) leaves are essentially strait with but a vestige of a retuse end; the leaf edges and the rudimentary keel have tiny, yellowish spines; the terminal spine is blackish on young leaves turning to yellow on the older; the leaf end windows are on both the upper and lower leaf surfaces, opaque with fingers of yellow intruding from below.

Propagation. Offsets.



Haworthia 'Bunraku' Hirose

Description. First listed in Cactus Nishi web catalogue. Now validly published here.

Parentage. *Haworthia* 'Kegani' x *Haworthia arachnoidea* (as *leuteorosa* a synonym = *H. pallida* Hayashi)

Comments. This cultivar is a different clone of the same cross as *Haworthia* 'Koyo' and is similar to it. The main differences appear to be smaller, milky-white spots, tubercles and spines, and more of them. The overall result is a bluish green colour in contrast to the brownish-green of 'Koyo'.

Propagation. Offsets and leaves.

Haworthia 'Byakko' Kawahigashi

Description. *Haworthia* Study 18(2).

Parentage. *Haworthia wimii* x *Haworthia* ?

Comments. Rosette diameter 7cm. Leaf colour blackish-brown. The retuse leaf ends taper to a short, sharp brown point, The prime distinguishing characteristic of the cultivar is the dense, thick, long, white fuzz on the windows divided by 7 +/- blackish -brown longitudinal lines.

Kawahigashi = white tiger.

Propagation. Offsets and leaf cuttings.





Haworthia 'Caramel Sensation' Francois Hose

Description Alsterworthia International 9(1)5.

Parentage. *Haworthia* 'Bev's Wonder' x *H. emelyae* v. *major*.

Comments. Rough, retuse leaf ends are covered with longitudinal rows of prominent tubercles in shades of grey, many with pale pink terminal spines. Leaf surface between the tubercles light brown (to pinkish brown). Terminal spine and marginal teeth pale pink. Non-retuse parts of leaf blackish-brown, fingers of blackish-brown invade lower part of the retuse end for short distances. Rosette about 6 cm. Ø. No offsets to date. This cultivar is best grown in strong light as it enhances the contrast between the blackish-brown leaves and the light, pinkish retuse, leaf ends. The plant is darker in summer and more brown in winter.

Propagation. Leaf cuttings.

Haworthia 'Cat's Tongue'

Description. Not traced, long in circulation. Origin Australia?

Parentage. Not known.

Comments. Leaves attenuate, slightly recurved, rough hence the name, dark green with longitudinal lines of closely-packed, yellowish-green tubercles. Leaves shrivel and turn red if too dry. If too wet and turgid prone to fungus and spotting - brown and black.

Propagation. Offsets.



Haworthia 'Cassiopeia' Horikawa

Description. *Haworthia* Study 18:2.

Parentage. *Haworthia* 'Ginsekai' x *Haworthia* 'Karakusa'

Comments. Rosette compact; leaves dark green, margins and keels lined with closely packed, low, white tubercles; windows lined longitudinally with circa 12 prominent white lines which may be linked; short, interrupted blackish lines are scattered on the lower half of the retuse end. Short terminal spine brown. The backs of the leaves bear many small white spots. Sun darkens the colours.

Propagation. Offsets and leaf cuttings.



Haworthia ciliate 'Day Dream' Hayashi

Description. *Haworthia* Study 16:14.

Parentage. A selected clone of the species.

Comments. As for the species but this clone has many and particularly fine cilia.

Propagation. Offsets.



Haworthia 'Chock Wonder' Gerhard Marx

Description. Alsterworthia International 9(3)6-7.

Parentage. *H. 'Chocolate'* x [*H. wimii* Hayashi {=*H. emelyae* var. *major* (G.G. Smith) M.B. Bayer x *H. badia*].

Comments. Rosette small, clumping; leaf colour dark-chocolate; windows glossy-white, raised spots (pimples) arranged in irregular longitudinal lines, a few spot continue into the non-retuse leaf surface, marginal teeth white, recurved. Base of the leaf is broad, retuse end tapers sharply to a point with a white spine. Plant illustrated is 8cm in diameter.

Propagation. Offsets and leaf cuttings.



Haworthia cooperi v. pilifera 'Milky Cloud' H.C.K. Mak

Description. P.A.S.C. Vol. 3.

Parentage. Variegation in the variety.

Comments. This cultivar has the form of the variety but with milky-white variegation. Common in many countries. Rosette ca. 7cm in diameter.

Propagation. Offsets.



Haworthia 'Crackling Rosy' Francois Hoes

Description. Alsterworthia International 9(1)6.

Parentage. *Haworthia cooperi* v. *venusta* x *H. 'Bev's Wonder'*

Comments. Leaves upright, quite thick, green all year even in strong light; marginal & keel teeth & terminal spine small, white; leaf ends slightly retuse with large inverted v-shaped windows with fingers, sometimes disjointed, extending from the base of the leaf into the inverted v; within windows scattered white spots and white tubercles. Rosette ball shaped, about 5 cm Ø.

Propagation. Leaf cuttings.



Haworthia 'Crocodile Rock' J. Trager

Description. C&SJ 69(2)95. ISI97-74.

Parentage. *Haworthia koelmaniorum* x *H. pygmaea*.

Comments. Leaves rough, hard, papillae white in longitudinal rows, leaf colour ranges from dark green to purplish green as stronger light is applied.

ISI 97-74. Cross by Sam Williams, Carmichael, California A second Clone B = *H. 'Alligator Pair'*

Propagation. Offsets and leaf cuttings, but in this photograph the top offsets is actually growing on the stem of the previous year's inflorescences.





Haworthia 'Crocodile Skin' J.A. Audissou.

Description. Alsterworthia International 2(1)4.

Parentage. *Haworthia koelmaniorum* x *H. limifolia* v. *ubomboensis*

Comments. The open rosette and long leaves are similar to those of *H. limifolia* v. *ubomboensis*. In 'Crocodile Skin' there are longitudinal rows of many, prominent tubercles clearly inherited from *H. koelmaniorum*. The leaves are a mid-green with whitish tubercles, but in stronger light they develop a pinkish tinge, deepening in intensity at the base, and they appear lighter green.

Propagation. Leaf cuttings, occasionally offsets.

Haworthia 'Crystal Eye'

Description. Haworthia Study 15:3 & 20:6.

Parentage. *H. mutica* variegated x *H. springbokvlakensis*? in Haw. Study 15:3 amended to *H. bayeri* hybrid? 20:6.

Comments. Rosette open. Leaves thick, turgid, variegated longitudinally cream and dark green in various proportion on all surfaces. In the windowed retuse ends the variegation is (partially) obscured by the cloudy, shiny windows. Leaves may occasionally have a small terminal spine.

Propagation. Offsets. Leaf cuttings may be possible.



Haworthia cymbiformis 'Frog Mouth' J. Trager

Description. C&SJ 72(2)100-101.

Parentage. A selected clone of *Haworthia cymbiformis* from Howiesonpoort, SW of Grahamstown, South Africa.

Comments. In shade this clone is unmarked and a most vivid Kelly-green. In brighter light the colour is more lime-green and two lineate windows appear along the leaf margins. End-on, these markings give the amusing effect of a parliament of frogmouths, odd, owl-like Australian birds. Distributed as ISI 2000-59.

Propagation. Offsets.

Haworthia xcuspidata

Description & Parentage. Described as a species (Supplementum Plantarum Succulentarum, London 51, 1819) from a plant without documentation cultivated at Kew. As it is a hybrid it should be cited as above.

Comments. Rosette compact. Leaves thick, stubby, green, cuspidate (terminating abruptly in a point), retuse ends rugose. A variegated form exists in Japan apparently without a cultivar name.

Propagation. Offsets.



Haworthia cymbiformis var. obtusa ‘Chik-chun Mak’ H.C.K. Mak

Description. Alsterworthia International 2(2)3.

Parentage. Variegated sport of an *H. cymbiformis* v. *obtus*a.

Comments. Named after Mr. Chik-chun Mak in whose greenhouse it occurred in Hong Kong. Creamy yellow variegation is very even. The obese leaves (ca. 2.5cm long, 2cm wide and 1cm thick) have translucent tips with terminal bristle about 1 cm long. Leaf margins minute teeth. Heads are joined by common stem tissue and roots.

Propagation. The heads have to be cut apart with a sharp knife.



Haworthia cymbiformis ‘Takaragusa-Nishiki’

Description. Not located to date. Dr Hayashi states this is an old Japanese cultivar. *Haworthia cymbiformis* ‘Yu-Hung Luk’ P.A.S.C. Vol. 3 is a later invalid name. ‘Takaragusa-Nishiki’ is the correct cultivar name for *Haworthia cymbiformis* variegated ISI 94-28, C&SJ 66(2)60.

Parentage. Variegation in the species.

Comments. Form as for the species. White variegation with a touch of pink in bright conditions.

Propagation. Offsets.



Haworthia cymbiformis (Haw.) Duval ‘Rose’ S. Gildenhuis

Description. Alsterworthia International 9(2)19.

Parentage. Of horticultural origin. An unusual form of the species found by Sean Gildenhuis among other *H. cymbiformis* growing at the Gariep Nursery.

Comments. The light green leaves are more or less vertical, deltoid, thin, slightly concave with 2-3-4 lengthwise shallow channels. Leaves taper rapidly to a point. Rosette diameter 12cm. Leaf width 4cm.

Propagation. Offsets.



Haworthia ‘Cynara’ J. S. Audissou

Description. Alsterworthia International 6(3)23.

Parentage. *H. arachnoidea* var. *nigricans* x *H. pubescens*.

Comments. Densely-packed, ascending, turgid leaves abruptly narrowing into a slightly-incurved point with terminal spine; upper surface distinctly rounded with very short spines in one or two longitudinal rows, lower face with central keel, keel and margins with short spines. Leaf colour light green with greyish-white spines. This cultivar is named ‘Cynara’ because of its resemblance to an artichoke, genus *Cynara*.

Propagation. Reluctant offsets and beheading to promote offsets.



Haworthia cymbiformis 'Garakuden Shirofu' Sato

Description. 1999 Nishiki Succulent Handbook. (Dr Hayashi and his colleagues have been unable to trace the publication of *Haworthia* 'Mori-no-Sono' assigned to this clone in *Alsterworthia International* 1(1)4-5 as amended by 3(3)2 though it is listed for publication in Japan in Mr Yasuhara's notebook. Apparently it is not a variegated plant. *Haworthia cymbiformis* 'Lo Bing' P.A.S.C. Vol. 3 is a redescription and invalid.)

Parentage. A clone of the species with variegation.

Comments. The leaves are light to dark green with clean-white, longitudinal variegation which is generally broad, but sometimes narrow. The amount of variegation varies from leaf to leaf. Cultivations conditions affect the colour and shape of the leaves. The margins have fine teeth, the leaf tip a spine. Offsets are freely produces, but vary from green through various combinations of white and green to all white.

Propagation. Selected variegated offsets.



Haworthia xcuspidata 'Yellow Lotus' H. Mak

Description. Dr Hayashi states that this is an old Japanese cultivar which has not been traced. It is somewhat similar to *Haworthia cymbiformis* 'Takaragusa-Nishiki' page 15 but the colour is different.

Parentage. Variegation in the species.

Comments. Leaves turgid, dark green with patches of light, yellow-green, longitudinal variegation pale yellow of variable widths on both leaf surfaces, terminal spine brown.

Propagation. Offsets.



Haworthia 'Daiginjoh' M. Hayashi

Description. *Haworthia* Study 5:3.

Parentage. *Haworthia wimii* (Bayer - *H. emelyae*) x ?

Comments. This cultivar is a large form of *H.* 'Hakuginjoh'. Diameter to 15 cm. Windows turn silvery when the plant becomes large. Daiginjoh = Big Silver Castle.

Propagation. Offsets, leaf cuttings.

Haworthia 'David Grigsby'

Description. C&SJ 72(5)287.

Parentage. Believed to be a natural hybrid, *H. pumila* x *H. marginata*. Received by David Grigsby in a shipment from Robertson District, S. A. in 1970.

Comments. Rosettes up to about 25cm in Ø. Leaf upper surfaces have only a few spots, lower rounded white tubercles, each margin and keel has a row of white tubercles.

Propagation. Offsets. Leaf cuttings also possible.



Haworthia 'Debidas' Soumen Aditya.

Description. Alsterworthia International 13(1)4.

Parentage. (*Haworthia springbokvlakensis* x *H. comptoniana*) ♂ x *H. 'Pulin-Suprava'* ♀

Comments. Acaulescent. Large, open rosette. Leaves somewhat elongated, dark green with white-windowed, elongated retuse ends; windows are brownish-green, parallel lines subdued with dots and lines to thick stripes of white. The dark green background is seen as lines between the windows; terminal spine white. This very big plants in summer is quite dark brown, "The name honours my Guru for succulents plant Debidas Choudhuri."

Propagation. Offsets.

Haworthia decipiens (Crown Group) 'Crown' Hayashi

Description. Haworthia Study 11(6).

Parentage. This cultivar was grown from seed of *Haworthia decipiens* from Gertskraal, South Africa.

Comments. As for the species, but the cultivar is noted for its large size (15cm diameter) which is clearly in the form of a crown.

Propagation. Offsets.





Haworthia 'Debashis-Samarpita' Soumen Aditya

Description. Alsterworthia International 13(1)2.

Parentage. (*H. Bayeri* x *H. emelyae* var. *major*) ♀ x *H. pygmaea* ♂.

Comments. Acaulescent. Young leaves curved, retuse with age, almost blackish with a dark brownish tint present through the year, inner flattened leaf bases can be noticeably tinted brown, rugose, margins and keel lined with small teeth, leaf tip with or without a terminal spine, windows pellucid with 3-5 vertical white lines. Slow growing, "The name honours my best friend, a truly interested person in succulents and a very good grower of plants from many succulent families."

Propagation. Offsets.

Haworthia dekenahii 'Sanekata's Nishiki'

Description. Haworthia Study 5:10. Sanekata's variegated is the English translation and invalid as the cultivar name.

Parentage. A selected clone from the type locality.

Comments. Form as for the species except that the rosette is very large and the very broad, blackish-green leaves are variegated pale to deep pink and the windows are bluish.

Propagation. Offsets and leaf cuttings.



Haworthia 'Delight' S. Gildenhuys

Description. Alsterworthia International 9(2)20.

Parentage. *Haworthia koelmaniorum* x *Haworthia marginata*.

Comments. Rosette tight, leaves lanceolate, very hard, bluish-grey often with a pink flush, covered with raised pearl like tubercles more or less in latitudinal rows, leaf margins tuberculate. Diameter 15cm. Leaf width 2.8cm. Slow growing and solitary.

Propagation. Leaf cuttings.



Haworthia 'Diana' G. Marx

Description. Haworthia Study 19.16.

Parentage. *Haworthia mutica* x *Haworthia splendens*.

Comments. Rosette diameter 7cm, leaf width 2cm. The leaves are dark green. The retuse leaf-ends have thick white lines composed of white maculae and random white spots. The white is frequently diffused and there are a few brown lines with the white, leaf margins are brownish with minute, white setae, terminal spine blackish-brown.

Propagation. Offsets and leaf cuttings.



Haworthia 'Dream Walk' Gerhard Marx

Description. Alsterworthia International 9(3)11.

Parentage. *Haworthia bayeri* x *Haworthia mutica*.

Comments. Rosette medium size; leaves recurved, chocolate brown, windowed retuse leaf-ends brownish-green-grey with soft-edged, white, longitudinal lines that curve outward towards leaf-tips, tessalately connected. Leaf margins lined dull white. Fingers of chocolate-brown intrude into the base of the retuse leaf ends. Plant illustrated is 8cm in diameter. Although the parentage is the same as for *Haworthia 'Sago Jelly'* the two clones are quite different.

Propagation. Offsets and leaf cuttings.



Haworthia 'Ebisu Nishiki' Hirose & Kawahigashi

Description. Haworthia Study 16:3 .

Parentage. *Haworthia cooperi* x ? Bred by Mr Hirose, developed by Mr Kawahigashi.

Comments. This cultivar is very similar to *Haworthia cooperi*, but the leaves are light to darker green with pale yellow variegation. Fingers of green and yellow extend upwards into the extensive translucent widow at the leaf end, which can be seen from all angles. Ebisu = God of wealth.

Propagation. Offsets.

Haworthia emelyae v. comptoniana 'Genesis' S. Gildenhuys.

Description. Alsterworthia International 9(2)22

Parentage. A selection by S. Gildenhuys, Gariep Plants from GM226 seed grown plants.

Comments. As for the species except that this clone has amazing leaf colouration - light, slightly yellowish, green with dark green irregular markings. These are in longitudinal rows which are separated by yellowish green stripes. Note: in Aloe 45 (4)85 a "white" plant was illustrated with white replacing the yellowish green. No cultivar name has been published for this clone.

Propagation. Leaf cuttings. One divided dichotomously.



Haworthia emelyae v. emelyae 'Chocolate Stripes' S. Gildenhuys.

Description. Alsterworthia International 9(2)19.

Parentage. This cultivar was selected from plants grown from seed (GM256) from Rooiberg Pass.

Comments. The form of the cultivar is that of the variety. It differs from having prominent, chocolate-coloured lines on the retuse leaf ends, which distinctly separate the flecks into (3)4(5) somewhat oblong blocks

Propagation. Offsets and leaf cuttings.





Haworthia emelyae v. emelyae 'Super Reticular'

Description. Haworthia Study 4:11.

Parentage. A selected clone of the species.

Comments. Rosette open. Retuse leaf ends grey-green with abundant white reticulation, otherwise the leaves are dark to blackish green. This cultivar has been selected for the impressive amount of reticulation on the retuse leaf ends. See *Haworthia laeta* (Tokuami Group) 'Chō-ami'.

Propagation. Offsets and leaf cuttings.

Haworthia fasciata (Willd) Haw. 'Schizophrenia' S. Gildenhuis

Description. Alsterworthia International 9(2)17.

Parentage. Tissue culture of the species by Etwin Aslander. Sean Gildenhuis selected one clone with a mixed green and lime colour as the base for this cultivar.

Comments. Form as for the species. Leaves variegated dark green and lime. Young (central) leaves are predominantly lime, the older (basal) leaves are green as in the species. This cultivar has the same transverse bands of white tubercles on the leaf under side as the species.

Propagation. Offsets.



Haworthia 'Fouras' Jean A. Audissou

Description. Alsterworthia International 6(3)22.

Parentage. *H. pubescens* LAV 23558 x *H. pulchella* v. *pulchella* JDV 87-187.

Comments. Rosette open, leaves spreading, dark green, recurved, scattered spots opaque, rarely small tubercles, on the end-half of the upper leaf surface, which could almost be described as slightly retuse, opaque marginal teeth and terminal spines. Offsets occasionally. This cultivar is quite unlike the parents which have incurved leaves in compact rosettes. It is named after the town where it was developed.

Propagation: Leaf cuttings and occasional offsets.



Haworthia 'Frosty Cream' H.C.K. Mak

Description. Alsterworthia International 2(2)3 as *H. pygmaea* v. *pygmaea* 'Frosty Cream'. Amended here.

Parentage. A variegated hybrid of *H. pygmaea* of Japanese origin according to Dr Hayashi.

Comments. Rosette compact similar to *H. pygmaea*, leaves crusty with cream-tinged-pink variegation on blackish-green leaves. Rosette up to 4 cm across. Harry Mak received a small head of about 1.5 cm diameter from Mrs. H. Omori (ex Mrs. Aoki) in November 1999. In 2002 it had 3 offsets with good variegation.

Propagation. Offsets or leaf cuttings.



Haworthia 'Frosty Morn' M. Hayashi

Description. Haworthia Study 5:3

Parentage. *H. wimii* x *H. badia*?

Comments. Chunky leaves with acute, retuse ends terminating in a distinct spine. The non-retuse parts of the leaves are blackish and spotted white. The retuse ends have white lines, white spots and small, white marginal teeth which give the cultivar a frosty appearance with a blue background.

Propagation. Offsets and leaf cuttings.



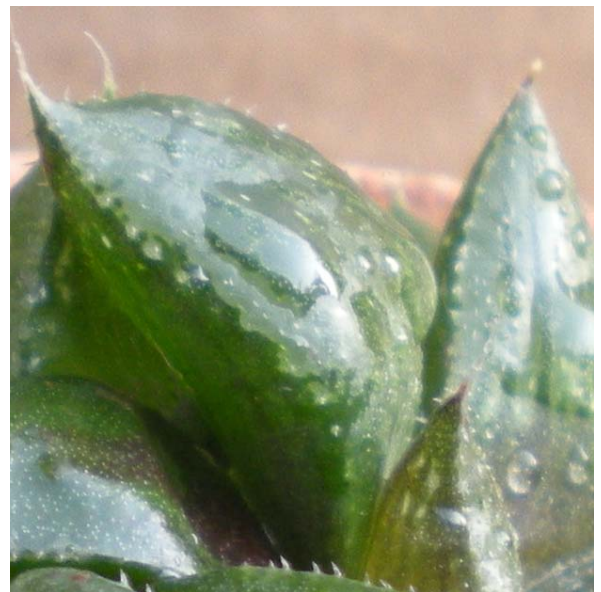
Haworthia 'Frosty Tips'

Description. Not traced but the name has been used for some time. In the absence of prior publication this will establish it.

Parentage. *Haworthia truncata* x unknown.

Comments. Rosette compact, leaves vertical, broad and narrow, somewhat rounded, windowed ends blunt to rounded with ridges and lumps, frosty. Leaves dark green, hard.

Propagation: Leaf cuttings and (rarely) offsets.



Haworthia 'Funny Guys' Soumen Aditya.

Description. Alsterworthia International 10(2)24.

Parentage. (*Haworthia springbokvlakensis* x *Haworthia mirabilis*)♂ x (*Haworthia cooperi* x *Haworthia retusa* v. *acuminata*)♀.

Comments. Leaves dark green, short, fat, slightly recurved, small marginal teeth white, terminal spine whitish, somewhat twisted; The upper parts of the upper leaf surfaces have variable amounts of (thin) cloudy white blotches and a few blisters of variable size; all surfaces have a few scattered white spots some with spines.

Propagation. Offsets.



Haworthia 'Gekkō' Hayashi

Description. Haworthia Study 11:7.

Parentage. *Haworthia comptoniana* x *Haworthia springbokvlakensis*.

Comments. Rosette large, compact, low; leaves dark green, retuse ends large, somewhat rounded, glassy, bluish, white reticular markings fine. Gekko = Moonlight.

Propagation. Offsets and leaf cuttings.

Haworthia 'Gerald Barad' Southwell

Description. C&SJ 70(4)198.

Parentage. *Haworthia maughanii* x *H. gigas*.

Comments. Slow growing. Rosette more or less stemless, 8cm wide; leaves ca. 44, incurving apically, linear-obovate, 16 mm thick, forest green, with 3-5 translucent ridges meeting at leaf apex, strongly keeled on back, apical awn ca. 7 mm long, marginal teeth less than 1 mm long, whitish translucent.

Propagation. Leaf cuttings possible. The plants originally offered for sale were tissue cultured.



Haworthia 'Gessekai' Oikawa

Description. Haworthia Study 17:3

Parentage. *Haworthia wimii* (Bayer - *H. emelyae*) x ?

Comments. Though similar in form to *Haworthia 'Daiginjoh'* this cultivar looks very different because of the pinkish, dark, brown-green leaves. It also has fewer white papillae resulting in more distinctive white lines. Gessekai = Moon world.

Propagation. Offsets and leaf cuttings.

Haworthia 'Gian-A' Nishi

Description. Haworthia Study 13:2 & 20:6.

Parentage. *Haworthia pilifera* x ?

Comments. Similar to *H. pilifera* except that the leaves are very thick and much shorter.

Propagation. Offsets.





Haworthia 'Giga-pulchella' Ohkuwa

Description. Haworthia Study 9:5.

Parentage. *Haworthia gigas* x *Haworthia pulchella*.

Comments. The hybrid is far bigger than *Haworthia pulchella*. The dark green leaves bear thick, comb-like spines on the leaf edges and keel, curved terminal spine.

Propagation. Offsets.



Haworthia 'Ginrei'

Description. Haworthia Study 15:3.

Parentage. *Haworthia pygmaea* x (*Haworthia* 'Daiginjoh?')
Breeder Mr. Kobayashi.

Comments. Rosette similar to *Haworthia pygmaea*, but the leaf colour of this cultivar is brownish-green and the windowed retuse leaf ends are heavily studded with white tubercles. A few brown lines project from the upper leaf base into the windows. Ginrei = Silver grace. Plant illustrated was cultivated by Mr. Kaneko.

Propagation. Offsets and leaf cuttings.

Haworthia 'Giant Panda' Nishi

Description. Haworthia Study 18:1.

Parentage. *Haworthia pygmaea* x ? Recorded as having been bred in China.

Comments. Resembles an extra large hybrid of *H. pygmaea*. Leaves blackish-green with a number of scattered, small, white spots; retuse ends have variable numbers of white lines linked at the bases in loops and are covered with small, randomly-distributed white spots; margins lined white with small white teeth; keels less distinctly lined; leaf tip small, white spine. Rosette 13cm diameter, Leaf width 3.5cm.

Propagation. Offsets and leaf cuttings.



Haworthia 'Ginga Tetsudō' Hayashi

Description. Haworthia Study 6:11, 18:16.

Parentage. *Haworthia pygmaea* x *Haworthia comptoniana*.

Comments. Rosette flat, compact; leaves dark green, retuse ends triangular, distinctly pointed, many small white tubercles present a cloudy appearance, a variable number of longitudinal white lines converge towards the leaf tip, but link only occasionally. Rosette diameter to 15cm. Leaf width 3cm. Fast growing. Breeder Mr. Ohkuwa.

Propagation. Offsets.





Haworthia 'Gintejō' Ohkuwa

Description. Haworthia Study 15:3.

Parentage. A hybrid, sister of *Haworthia* 'Hakuteijoh' which see.

Comments. Leaves triangular in cross section, colour dark brown, windowed leaf ends terminate in a short white spine, dense, fine, white spots in longitudinal lines cover the windows, on the undersides of the leaves scattered spots and a few short lines. Gintejō = Silver Emperors Castle

Propagation. Offsets and leaf cuttings.



Haworthia 'Gipsy Rose' Francois Hoes

Description. Alsterworthia International 9(1)5.

Parentage. (*H. truncata* x *H. scabrispina*) x *Haworthia* 'Silver Bug'.

Comments. Leaves broad and relatively thin, edges somewhat twisted, tips rounded; rosette flattish; colour green with bubble-like, white, longitudinal, continuous or intermittent windows on the retuse leaf ends. Window spines, terminal spine and marginal spines to 2 mm long, white, Rosette about 5 cm. diameter. None offsetting. Remains green all the year round even in good light. "When I was a little younger, I once attended a concert of Uriah Heap. Ken Hensley (lead) appeared with a big green Rose on his shirt and began one of his hits 'Gipsy'. Hence 'Gipsy Rose'"

Propagation. Leaf cuttings.



Haworthia 'Glass Compto' M. Hayashi

Description. Haworthia Study 5:2. *Haworthia* 'Garasu' Haworthia Study 15:10 is a redescription and invalid.

Parentage. *H. comptoniana* x an unrecorded pollen donor

Comments. This cultivar is quite similar in form to that of *H. comptoniana*, but the yellowish reticulation on a light green leaf and the glassy appearance are distinctive features of the cultivar.

Propagation. Offsets, leaf cuttings and beheading.



Haworthia 'Glass Emblem' Gerhard Marx

Description. Alsterworthia International 9(3)9.

Parentage. *H. pygmaea* 'Crystallina' x *H. splendens*.

Comments. Rosette compact; dark-green leaves short, rough, the windowed retuse leaf-ends have up to seven whitish lines converging, but not connecting, near the rounded leaf tips and are covered in glossy, crystalline projections which appear glassy and transparent. Some projections terminate in a short spine. Plant illustrated is 7cm diam.

Propagation. Offsets and leaf cutting.



Haworthia 'Gojunotou-Nishiki'

Description. Not traced to date. Dr. Hayashi states this is an old Japanese hybrid. *Haworthia* 'Golden Tongue' P.A.S.C. Vol. 3 is a later invalid redescription.

Parentage. A variegate developed in Japan, probably of *Haworthia x tortuosa*.

Comments. Form as for the cultivar *H. x tortuosa*, which was originally named as a species. The yellow variegation is irregularly arranged in longitudinal stripes and some blotches. Leaves ca. 5 cm long and 1.5 cm wide.

Propagation. Offsets.



Haworthia 'Gothlet' Gerhard Marx.

Description. Alsterworthia International 9(3)10.

Parentage. *H. pulchella* (from Die Draai, north-east of Touwsrivier) x *H. 'Bev's Wonder'*. All the seedlings were almost identical.

Comments. Dark, small rosette; leaves narrowly attenuate, dark-green; longitudinal rows of white teeth along the leaf edges and keel and on the upper surface converge towards, but do not link, at the leaf tip. Plant illustrated is 6cm diameter.

Propagation. Offsets and leaf cuttings.



Haworthia 'Green Gem' Ohkuwa.

Description. Not traced to date. Dr. Hayashi states this is an old Japanese hybrid.

Parentage. *H. maughanii* x *H. blackbeardiana*.

Comments. Similar to *H. cooperi* x *H. maughanii*, developed by Mr. Ohkuwa, the leaves of which have prominent terminal spines. The very thick leaves of 'Green Gem' are very rough and covered with hair-like projections. The window area is about one-fifth of the leaf. Each leaf has a keel at the window running towards the tip and ending with a bristle about 4-5mm long. Edges and keels are toothed. Window with up to 15mm light green lines run from base to tip. Rosette about 8 cm diam, leaves about 3 cm long, 2.5 cm wide and 1.3 cm thick.

Propagation. Leaf cuttings, occasional offsets.





Haworthia 'Green Ice' S. Gildenhuys

Description. Alsterworthia International 9(2)21.

Parentage. A spontaneous *H. emelyae* v. *comptoniana* (G.G. Smith) Venter & Hammer hybrid occurring at the Gariep Plant nursery, South Africa.

Comments. This hybrid look nothing like the seed bearing parent which has a flattish rosette made up of highly retuse leaves. The cultivar has more or less upright, lanceolate, curved-back, light-green leaves with dark green lines, intermittent to continuous on both surfaces, but denser on the under side, margins brown, solitary

Propagation. Leaf cuttings.

Haworthia 'Green Gyokusen'

Description. Dr Hayashi - old Japanese cultivar, description not traced. *H. 'Down-under'* Haworthiad 12(1)23 & *H. truncata* 'Lime Green' are later invalid descriptions. *H. truncata* "Green" JSS No.302:15, 1992(7) is an error.

Parentage. Mr. H. Hirao suggests this hybrid was made by the late Mr. Watanabe on or around 1969 (*H. 'Seiko'* x *H. truncata*)?

Comments. Leaves distichous, about 3cm wide, 5-8mm thick 2-3cm long, always bright green even in strong light (*H. 'Seiko'* always dark green). Leaf ends windowed with distinct lines, truncate to retuse. Offsets readily, fast-growing.

Propagation. Offsets.



Haworthia 'Green Sword' H.C.K. Mak

Description. Alsterworthia International 2(2)4.

Parentage. *Haworthia blackburniae* x *H. emelyae* var. *major* hybrid.

Comments. Leaves to 7cm long, 1cm wide and 3 mm thick (a characteristic of *blackburniae*, though not as long); distinct keel on the lower side of the leaves and white spots throughout the leaf surfaces, particularly on the upper parts. Leaf margins are toothed. All leaves terminate with a short bristle. At first sight, it resembles a dwarf *Aloe* with spotted leaves. One head can easily grow to a large clump of over 30. 'Green Sword' is derived from the general shape of the leaves.

Propagation. Offsets.

Haworthia 'Grey Salt' J. Trager

Description. C&SJ 75(2)77.

Parentage. *Haworthia truncata* x *H. angustifolia*

Comments. Although the *truncata* leaf form is not evident in the cultivar, *truncata* does contribute the stout, firm, more or less upright component of the cultivar leaves. The greyish green leaves are in the form of a rosette, the influence of *H. angustifolia*, and suggest a lushly grown *Ariocarpus scapharostrus*. Fine white papillae near the leaf tips appear crystalline and exude salts towards the apex, leaving fine mineral deposits on the older leaves. This and the colour of the leaves account for the name.

Propagation. Offsets and leaf cuttings.



Haworthia 'Hakuyokyu-Nishiki'

Description. Not traced to date. Dr. Hayashi states this is an old Japanese hybrid. *Haworthia* 'Golden Goat' P.A.S.C. Vol. 3 is a later invalid redescription.

Parentage. A variegate of *Haworthia* "Manda's Hybrid"

Comments. Blurred whitish to yellow variegation covering part or the whole of a dark green leaf; small, fine, marginal teeth. The rosette is ca. 6 cm diam.

Propagation. Offsets.



Haworthia 'Hakuginjo' Horikawa

Description. *Haworthia* Study 5:3. *Haworthia* 'Hakuma' is an invalid redescription.

Parentage. *Haworthia magnifica* v. *major* (Hayashi *H. wimii*) x ? The breeder is Mr Horikawa, Japan.

Comments. Rosette diameter 8-10 cm. Leaves dark green, lower surface scattered white spots and teeth, margins and keels with white teeth, retuse ends with many white tubercles and teeth which spill over into the upper lower leaf surface, terminal spines (brownish) white. Leaves turn reddish in strong light.

Upper photo show a more open plant grown in the NW of England, with lower light intensity, resulting in a darkish green leaf. Lower photo shows a plant grown in Japan in stronger light resulting in a more compact rosette with reddish leaves. "Hakuginjo" means "Silver Castle". Sometimes spelt Hakuginjoh which is incorrect - *Haworthia* Study 20:7

Propagation. Leaf cuttings, rarely offsets.

Haworthia 'Hakuteijo' Yamashiro

Description. *Haworthia* Study 2:5.

Parentage. *Haworthia* 'Green Gem' x *Haworthia wimii* (Bayer *H. magnifica* v. *major*).

Comments. Leaves dark green, more or less vertical, large windowed leaf ends are covered in longitudinal rows of white tubercles and spots, small marginal teeth and large terminal spines white. Under strong light the leaves are dark blackish green. Hakuteijo = White Emperor's Castle. Sometimes incorrectly spelt Hakuteijoh - *Haworthia* Study 20:7

Propagation. Leaf cuttings, rarely offsets.





Haworthia 'Harikishan' Soumen Aditya

Description. Alsterworthia International 11(1)3.

Parentage. {*H. emelyae* var. *major* x *H. emelyae* var. *major* "wimii"} ♀ x *H. springbokvlakensis*. ♂

Comments. Rosette small; leaves dark green, initially more or less upright quickly developing a more or less flattened, triangular, windowed, retuse end. Windows light green with longitudinal reddish brown stripes, very short spiny to prominent teeth; lower surface rounded with a suggestion of a rounded keel at the upper end, white tubercles in more or less longitudinal rows separated by tiny scattered white spots; marginal teeth and terminal spine white. Roots long and very fat. Plant in the photographs is three years old and just 12 mm. in diam. Very slow growing. "It is named after the late Mr.



Harikishan Gupta, one of the founders of the Maharaja Agrasen model school and father of my friend Shanker".

Propagation. Offsets, leaf cuttings may be possible.



Haworthia 'Hari Mushiro' Hirose

Description. Not traced. This publication will establish the name in the absence of any other.

Parentage. *Haworthia herbacea* (Hayashi *H. pallida*) x *Haworthia cooperi* v. *pilifera*. Breeder Mr. Hirose.

Comments. Rosette quite open with vertical green leaves. Leaves incurved; large marginal and keel teeth white, variegation silvery-white in longitudinal, interrupted stripes which may become reddish in strong light.

Propagation. Offsets and leaves.

Haworthia 'Indira Priodarshini' Soumen Aditya

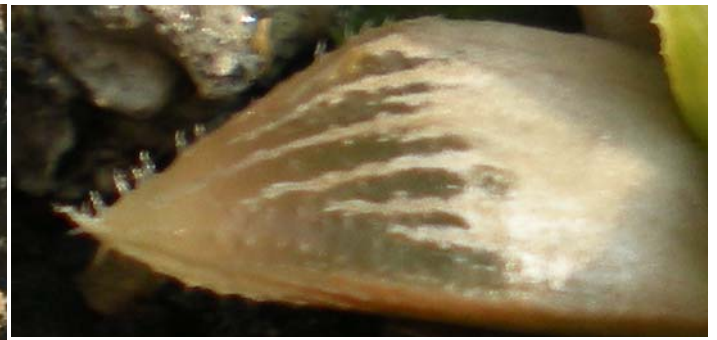
Description. New cultivar this publication.

Parentage. (*Haworthia springbokvlakensis* x *Haworthia mirabilis* v. *mundula*) ♂ x *Haworthia retusa* v. *longibracteata* ♀.



Comments. Open rosette; leaves mid-green, erect to spreading, slightly recurved with pale greyish windowed ends visible on both the upper and lower surfaces into which fingers of parallel mid-green lines project from the lower leaf surfaces, marginal and keel teeth small, white. The windowed leaf ends have a varying number of small and larger blisters on both surfaces.

Propagation. Offsets.



Haworthia 'JOY' Soumen Aditya.

Description. Alsterworthia International 10(2)21.

Parentage. *H. 'Snehanuv'* ♂ x *Haworthia a pygmaea* ♀ .

Comments. Leaves dull white with large, pinkish, opaque windows in the retuse ends, which have 5-6-7 white lines, leaf ends taper to a twisted terminal spine, scattered marginal spines

glassy.

Propagation. Offsets.

Haworthia 'Joy Bubbles' Francois Hoes.

Description. Alsterworthia International 9(1)6.

Parentage. *Haworthia keganii* x *Haworthia cooperi* v. *venusta*

Comments. Leaves broad, relatively thin, each with a keel and one or two (bubble like) inverted v-shaped ridges in the windows in the prominent, slightly-retuse leaf ends. Small, marginal and terminal spines white. Windows are ice-green giving the plant a predominantly ice-green colour (upper figure), in summer a little brown-green (lower figure). The leaf base is a pale brownish-black with fingers protruding into the retuse leaf ends. The shape of the rosette is that of a ball. Diameter about 6 cm. No offsets have been produced to date.

This plant with its bubble-like markings creates emotions of pleasure, of joy, hence the name 'Joy Bubbles'.

Propagation. Leaf cuttings.



Haworthia 'Jaydip' Soumen Aditya.

Description. Alsterworthia International 13(1)5.

Parentage. *Haworthia* 'Nirmal' ♂ x *H. magnifica* ♀

Comments. Leaves compact, spreading; the retuse ends elongated triangular with a variable number of longitudinal white lines also variable in length; leaf margins whitish with vestigial white teeth; terminal spine twisted, brown. Leaf colour bluish green.

"The name honours my friend Jaydip Biswas, who has a great interest in many succulents plants family."

Propagation. Offsets.



Haworthia 'Kamen Butōkai' Kawahigashi

Description. *Haworthia* Study 18:2 as *Haworthia* 'Commonju' but renamed in *Haworthia* Study 19:5 as *Haworthia* 'Kamen Butōkai' Kawahigashi under the provisions of the ICNCP Art. 24.4 .

Parentage. A seed grown clone of *Haworthia* 'Monju'.

Comments. Rosette compact, low. Leaf rounded, turgid, colour darkish brown-green. The windows have greenish-white, chain-link lines

Propagation. Offsets and leaf cuttings.



Haworthia 'Karakusa'

Description. *Haworthia* Study 17:2

Parentage. *Haworthia comptoniana* x ?

Comments. Described as a middle sized hybrid with arabesque markings in the windows. The white lines decorating the windows intertwine in a variety of patterns differing from leaf to leaf. Leaf colour shiny brownish-green except that the lower upper leaf surface is white somewhat discoloured with brown. The white continues as white lines in the windows. Karakusa = arabesque.

Propagation. Offsets and leaf cuttings.



Haworthia 'Kent's Wonder' Gerhard Marx

Description. Alsterworthia International 9(3)7-8.

Parentage. (*H. wimii* [= *H. emelyae* var. *major*] x *H. badia*) x (*H. 'Ginsekai'* x *H. splendens*).

Comments. Rosette flattish; leaves reddish green, re-curved lanceolate, margins white with fine, white teeth; white windows cover the retuse leaf ends and are separated by longitudinal lines of reddish-brown epidermis, the windows have many prominent raised, white spots some of which end in short spines. Plant illustrated is 7cm in diameter.

Propagation. Offsets and leaf cuttings.



Haworthia 'Kouyou' Yoshimichi Hirose

Description. Shaboten No. 100 page 100, 2001

Parentage. *Haworthia 'Kegani'* x *Haworthia herbacea* (Hayashi *H. pallida*). Breeder Mr. Hirose.

Comments. Rosette compact; leaves more or less vertical, dark green, prominent white marginal and keel teeth, leaf faces studded with white spots, tubercles and teeth, frequently in V-shaped rows.

Propagation. Offsets and leaves.

Haworthia 'Kuroshima'

Description. *Haworthia* Study 5:9, 15:10 & 20:7.

Parentage. *Haworthia picta* x *Haworthia pygmaea*.

Comments. Broad, silvery-white lines (and some very small dots) contrast well with the reddish brown leaves. Said to be relatively common in Japan. Kuroshima means black stripes presumably in reference to the dark lines in the silvery-white retuse leaf ends. 'Kuroshima' is a misspelling occasionally encountered.

Propagation. offsets and leaf cuttings.



Haworthia laeta (Jupiter Group) 'Arowana' Hayashi

Description. *Haworthia* Study 16:1.

Parentage. A selected clone of the species.

Comments. A large clone to 12cm in diameter with thick white lines in shiny, glassy windows. The ends of the white lines curve outwards somewhat irregularly towards the leaf edges, occasionally linking.

Propagation.





Haworthia laeta 'Daikokuten' Hayashi

Description. Haworthia Study 2:3 & 3:14 as *Haworthia correcta* 'Daikokuten' amended to *H. laeta* 'Daikakuten' Haworthia Study 20:6.

Parentage. A selection of the species.

Comments. As for the species except that this clone is large, leaves bluish-green with dense white reticular markings in the windows. Daikokuten = God of wealth.

Propagation. Offsets.

Haworthia laeta (Tokuami Group) 'Chō-ami' Hayashi

Description. Haworthia Study 4:11 as *Haworthia correcta* "Super Reticular" amended to *Haworthia laeta* 'Chō-ami' Haworthia Study 20:6. Both are the same. Name change evidently much later because it was found the original English name was not approved. *Haworthia laeta* (Tokuami Group) 'Chō-ami' Hayashi is the correct name.

Parentage. A selection of the species.

Comments. As for the species except that the leaves are blackish with white reticular markings on the grey-green retuse ends, which seem to have more horizontal links in the windows.

Propagation. Offsets.



Haworthia laeta 'Jupiter' M. Hayashi

Description. Haworthia Study 4:11.

Parentage. A back crossed clone of *H. correcta*. *H. correcta* Poelln has had a controversial history. It is now frequently included in *H. emelyae* v. *emelyae*. In Dr Hayashi classification it is *Haworthia laeta*.

Comments. This cultivar has an open rosette. The diameter of the plant illustrated is 18cm. Leaves shiny, light green with darker green adjacent to the retuse leaf ends and yellow bases. Leaf width 3cm. Lines mainly longitudinal with some reticulation.

Propagation. Offsets and leaf cuttings.

Haworthia 'Lady Lai Kuen' H.C.K. Mak

Description. Alsterworthia International 2(3)15.

Parentage. *Haworthia bayeri* x *Haworthia emelyae* var. *comptoniana*.

Comments. Leaves have very large, slightly rough, triangular windows, more translucent than in *Haworthia emelyae* var. *comptoniana*. As in *Haworthia bayeri*, there are several (up to 10) whitish, deeply imbedded, lines in each windows. The lines are seldom branched or crossed. They usually run parallel towards the leaf base. All leaf tips end with a bristle up to 5 mm long. Overall, each rosette may be up to 9 cm across with leaves up to 3.5 cm long, 2 cm wide and 1.3 cm thick. Even under good growing conditions, it offsets slowly.

Propagation. Offsets and leaf cuttings.





Haworthia 'Linda-Steve' Soumen Aditya

Description. Alsterworthia International 10(2)22.

Parentage. *Haworthia* 'Joy' ♂ x *Haworthia* 'Soumyajit' ♀.

Comments. Young leaves dark green, quickly becomes reddish-brown; dull, opaque (pale greyish-white) windows fully occupy the retuse ends, 5-6-7 longitudinal reddish-brown lines project upwards from the leaf base; marginal and keel teeth glassy to white; leaf surfaces bear a few, scatter, white spines. "Named for my USA friend's Steven and Linda Brack."

Propagation. Offsets.



Haworthia 'Little Cup' H.C.K. Mak

Description. P.A.S.C. Vol. 3.

Parentage. A dwarf form of *Haworthia* 'Cuspidata' from Japan.

Comments. Leaves very obese, light green with darker green dots and stripes of varying length (windows). Rosette up to only 5cm in diameter. Offsets readily.

Propagation. Offsets.



Haworthia 'Lombard Star' Gerhard Marx

Description. Alsterworthia International 9(3)5.

Parentage. [(*H. mutica* x *H. mutica* 'White Window') x *H. 'Ginsekai'*] x *H. badia*.

Comments. Rosette a compact, white star. Leaves re-curved; large, retuse leaf ends are completely covered with dense, white flecking except for up to five longitudinal, dark, greenish-brown lines which are continuous with the upper lower leaf epidermis. Leaf tips end in a short spine. Plant illustrated is 7cm in diameter. Named in honour of George Lombard, Phoenix, Arizona

Propagation. Offsets and leaf cuttings.

Haworthia limifolia 'Ruriden Nishiki' Kusanami Watanabe

Description. Kouha-en 1967. *Haworthia limifolia* 'Stripes' H.C.K. Mak P.A.S.C. Vol. 3 as amended in *Alsterworthia International* 4(1)2 & 7(2)21 are invalid. later descriptions.

Parentage/Description. As for the species but with longitudinal yellow-white variegation. It is apparently described as an unclear yellow-white variegated of Ruriden. The ISI plants ISI 94-30 and ISI 94-29 fit the description. This cultivar produces variable offsets freely, ranging from all green through variegated plants to plants without chlorophyll. Ruriden-Nishiki = variegated Ruriden. The green species is known colloquially as Ruriden in Japan, which is not a cultivar name.

Propagation. Selected offsets.

The following are the Japanese names for a range of *H. limifolia* cultivars:

'Makiruriden' Furuo Kuroda = strongly spiralled leaves. Published Houmei-en 1962.

'Ruriden-no-Hikari' Tony Sato = A clear yellow variegated Ruriden.

'Sekkanden' = clear white variegation in Ruriden.

'Sekkanjō' = clear white variegation in *H. limifolia* v. *schuldtiana*, but this variety is no longer recognised. It is regarded as coming within the description of, and therefore part of, *Haworthia limifolia*.

'Yushijo' Kusanami Watanabe = upright leaves. Published Kouha-en 1963.

'Yushijo Nishiki' Tony Stao = yellow variegation of 'Yushijo'

It is important not to confuse 'Ruriden Nishiki' and 'Ruriden-no-Hikari'. The latter has pure yellow variegation, the former ("unclear") yellow-white variegation.

Note.

Some plants grown from seed obtained by crossing ISI94-29 with ISI 94-30 are within the description of 'Ruriden Nishiki'

The seedlings illustrated below were produced by crossing ISI 94-29 with ISI 94-30. With age some developed the yellow-white (unclear variegation) of 'Ruriden Nishiki'

Hybrids such as *Haworthia limifolia* (variegated) x *Haworthia koelmaniorum* have produced plants which come within the descriptions of pure *H. limifolia* cultivars. Art. 2.17 of the ICNCP states that "In



considering whether two or more plants belong to the same or different cultivars, their origin is irrelevant. Cultivars that cannot be distinguished from others by any of the means currently adopted for cultivar determination in the group concerned are treated as one cultivar". Thus a yellow-white striped hybrid that looks like *H. limifolia* can be given the cultivar name *H. limifolia* 'Ruriden Nishiki' or, of course, you could leave it with the formula name under the provisions of the ICBN. To do this would at least demonstrate that it is a hybrid.



Haworthia 'Love Me Once' Soumen Aditya.

Description. Alsterworthia International 12(2)14.

Parentage. *Haworthia* 'Shanker' ♀ x *Haworthia emelyae* var. *comptoniana* ♂.

Comments. Rosette compact, stemless. Leaves very glossy-green; upper surface reticulate (3-5 longitudinal lines randomly linked horizontally), lines thick, white; lower surface with white dots and irregular short lines; leaf end abruptly acute; strong, brown terminal spine short; marginal spines white, recurved; keel teeth sharp.

Propagation: Offsets.



Haworthia 'Lussi' Soumen Aditya

Description. Alsterworthia International 10(2)20.

Parentage. *Haworthia pygmaea* ♀ x *Haworthia cooperi* v. *venusta* ♂.

Comments. Rosette open; leaves mid green, thin, rounded ends, young leaves have distinct retuse ends, but rapidly become curved; marginal spines white, generally backwards pointing, the leaf ends have white, spine-topped, tubercles and variable channels and ridges which are lost with age so that the leaf becomes more or less smooth.



Propagation. Offsets.



Haworthia 'Maboroshi-no-Tou'

Description. Not traced to date but Dr Hayashi states this is an old Japanese cultivar. *H* 'White Star' Mak Alsterworthia International 4(1)10 is a later and invalid description.

Parentage. Clone originally labelled *H tortuosa*, but as the leaves are not arranged in three distinct spiral rows, it is probably a hybrid.

Comments. Leaves deltoid very slightly twisted, clearly defined dark green and white longitudinal variegation on both surfaces from base to tip. Each rosette is about 7 cm high and 8 cm across. Leaves are not particularly thick (4mm), length up to 4cm and width up to 2cm. Offsets are readily produced.

Propagation. Offsets.



Haworthia 'Maju-E-Mallika' Soumen Aditya

Description. Alsterworthia International.9(3)26.

Parentage. (*H. emelyae* v. *comptoniana* x *H. springbokvlakensis*) x (*H. retusa* v. *multilineata* x *H. bayeri*)

Comments. Leaves spreading with long, retuse ends ending in a very sharp apex and short spine. Leaves are non-glossy green all the year round and bear dark-green vertical lines in the retuse ends, which are rarely linked by side branches. There are also white flecks some of which amalgamate to form short, latitudinal lines. Leaf margins bear many short, green teeth. It can grow to about 8cm across and 4.5cm in height. Plant in the photo is 4 years old. The cultivar bears the name of Mr Aditya's wife, who helped him to develop his cultivars.

Propagation. Cuttings.

Haworthia 'Malachite' S. Gildenhuys

Description. Alsterworthia International 9(2)47.

Parentage. *Haworthia koelmaniorum* x *Haworthia venosa* ssp. *tessellata*.

Comments. Dark green, polished, caniculate leaves in a spiral of three tiers, hard, rough with longitudinal, sometimes raised, rows of opaque tubercle on both leaf surfaces, Those on the upper surface form blisters. Rosette diameter 8cm. Leaf width 1.8cm. This cultivar was produced by Gariep Plant Nursery, South Africa.

Propagation. Offsets



Haworthia 'Mamata' Soumen Aditya

Description. Alsterworthia International 13(1)2.

Parentage. *H. cooperii* var. *venusta* ♂ x *H. 'Three Sisters'* ♀.

Comments. Rosette acaulescent, extremely slow growing; leaves upright, very hard, light green, the ends darkening with age; many features similar to *venusta*, but lacks the uniform dense covering of course, white hairs, the inward curved end and prominent terminal spine. Leaf apex obtuse-triangular, with vertical dull-green tissue projecting into the crystal-like, watery, windowed end with rows of pubescent, hard, white, relatively short hairs. A small terminal spine is present. The edges of the triangular (in cross section) leaves are lined with white flexible spines. The name honours CM Mamata Banerjee.

Propagation. Offsets.



Haworthia 'Mangala' Soumen Aditya

Description. Alsterworthia International 11(1)4.

Parentage. (*H. wimii* x *H. bayeri*) ♂ x (*H. emelyae* v. *major* x *H. magnifica* v. *magnifica*) ♀.

Comments. Large rosette compact; leaves dark green, vertical and incurving at first, then spreading with bluish-green, retuse ends; apices acute, sharp; white marginal spines spaced, windows with white spots and white spines in longitudinal rows converge at the apex, reverse side of leaves with white spots and small white tubercles in more or less longitudinal rows, keel with small white tubercles and small spines. Leaf colour does not seem to change with the intensity of the sun. Plant in photograph 6 years old, 10 cm. Ø.

Propagation. Offsets. Leaf cuttings possible.



Haworthia marginata 'Kin Orizuru'

Description. Haworthia Study 4:13 (as "Paper Crane" = Orizuru)

Parentage. A selected clone of the species.

Comments. Leaves medium green. The leaf margins and keels prominently white. There are a few, scattered, white spots on both leaf surfaces. Slow growing. Few offsets.

Propagation. Offsets and leaf cuttings.



Haworthia 'Marilyn' M. Hayashi

Description. Haworthia Study 5:2.

Parentage. A seedling of *Haworthia* 'Garasu' x ?

Comments. Leaves dark green, random, pale, greenish-white spots, occasional irregular, white blotches. Retuse leaf ends are covered with large, white tubercles coalescing into closely -packed, longitudinal rows, which overflowing to some extent into the non-retuse lower leaf surfaces. Marilyn Monroe inspired this cultivar.

Propagation. Offsets and leaf cuttings.



Haworthia 'Maugan' J.W. Dodson

Description. C&SJ 60(2)94.

Parentage. *H. maughanii* x *H. angustifolia*

Comments. This cultivar was made in 1955 by Meredith Morgan, Richmond, California. Distributed as ISI 1858 in 1988. It has the compact rosette of *H. maughanii* with the longer leaves of *H. angustifolia*. Leaves up-curved, dark green, small tubercles on both surfaces, short terminal spine and marginal teeth.

Propagation. Offsets and leaf cuttings.



Haworthia maxima 'Chō-kyodai Doughnut' Horikawa

Description. Haworthia Study 20:11 & 4:15 as *H. margaritifera* 'LSD' (=Large Super Doughnut). *H. margaritifera* is now regarded as a synonym of *Haworthia maxima*.

Parentage. A selection of the species.

Comments. Form as for the species but with very raised, conspicuous, white doughnuts on dark green leaves.

Propagation. Offsets.



Haworthia maxima 'Cuban Doughnut' Ohkuwa

Description. Haworthia Study 4:13 as *H. margaritifera* 'Cuban Doughnut' amended Haworthia Study 20:11.

Parentage. Recorded as a clone resulting from selection over several generations of *Haworthia margaritifera* (L) Haw., now *H maxima*.

Comments. This clone was selected for its prominent, octopus-sucker in white circles to ovals on a lighter green leaf. The species normally has solid white circular tubercles.

Propagation. Offsets.



Haworthia 'Meera Ajoy' Soumen Aditya

Description. Alsterworthia International 10(2)28.

Parentage. (*H. mirabilis* var. *mundula* x *H. springbokvlakensis*)♂ x *H. 'Soumyajit'* ♀

Comments. Leaves stubby, deltoid, dark-green spotted white in longitudinal rows in the milky windows, lines dark green, undersides with white spots and lines; marginal and keel teeth small, recurved, white; terminal spines white, twisted. Peduncle very thin, and short. Flowers: upper throat pinkish, lower white. The plant in the photographs is 5 years old.

Propagation. Offsets. Leaf cuttings?



Haworthia 'Mirror Ball' Nishi

Description. Haworthia Study 13:15 and private correspondence Yoshimichi Hirose.

Parentage. *Haworthia cooperi* v. *pilifera* x *Haworthia emelyae* v. *major*.

Comments. Rosette compact. Leaves somewhat similar to *H. cooperi*, but brownish green, windowed leaf ends rounded, white leaf-edges and keel with white teeth look the same; windows with some scattered white spot and white lines converging, but not uniting, towards the tips, terminal white spine, The central white line on the face of the window bears short spines. Breeder Mr. Ohkuwa.

Propagation. Offsets and leaves.

**Haworthia mirabilis v. beukmannii (V. Poelln.) Bayer
'Emerald Giant' S. Gildenhuys.**

Description. Alsterworthia International 9(2)18

Parentage. A selection of the species found growing in Kotie Retief's nursery, Gariëp Plants, South Africa.

Comments. Robust, leaves chunky, rich, dark emerald-green with less prominent light green lines projecting into the retuse ends from the base. Surfaces rough with small tubercles. Tubercles also line the leaf edges and the keel. Rosette diameter 12.5cm. Leaf width 3.6cm. Plantlets are sometimes produced on the inflorescences.

Propagation. Offsets. Gariëp Plants - tissue culture.

Haworthia mirabilis ssp. mundula 'Batwings'

Description. C&SJ 71(2)95,98.

Parentage. A selected natural variant of the species.

Comments. Form as for the species. Lower upper leaf surface discoloured white. Retuse windows dark. Prominent lines extend from the top of leaf base into the windows, forming a pattern that resembles the stylized bat of Hollywood fane. As with the species, it blushes a ruddy pink in bright light. Distributed as ISI 1995-54.

Propagation. Offsets and leaf cuttings.

Haworthia minima 'Doughnut Fuyu no Seiza' Nishiki

Description. The first reference traced to date is Variegated Plants in Color as *H. papillosa* 'Doughnut Fuyu no Seiza' Nishiki. *H. papillosa* was incorporated into *H. margaritifera* which in turn was incorporated into *H. minima*.

Parentage. A variegated form of the species.

Comments. As for the species but with green and yellow variegation in variable widths with prominent, doughnut tubercles. Doughnut Fuyu no Seiza Nishiki translates to "Doughnut Winter Constellation Brocade"

Propagation. Offsets. Beheading aids production.





***Haworthia* 'Morning Dew' Francois Hoes**

Description. Alsterworthia International 9(1)3.

Parentage. *Haworthia* 'Bev's Wonder' x *H.* 'Keganii'.

Comments. Leaves triangular, somewhat upright; surface spines and marginal teeth small, white, terminal spine brown; leaf dark green with inverted V-shape windows at the apex; retuse ends hazy light green surrounding a few fingers of dark green; under side dark green with small white spines. The area of glazing varies slightly from leaf to leaf. It is less prominent in older leaves. Rosette to 4 cm Ø. 'Morning Dew' is reminiscent of an autumn morning with dew on the grass.

Propagation. Leaf cuttings.



***Haworthia* 'Munna' Soumen Aditya**

Description. Alsterworthia Internatinal10(2)21.

Parentage. *Haworthia pygmaea* ♀ x (*Haworthia* 'Soumyajit' x *Haworthia* 'Snehanuv') ♂.

Comments. Leaves dull white with dark green windows in the retuse ends which taper to a white terminal spine, marginal teeth small, greenish-white; windows with circa three white lines. "This cultivar is named after my brother."

Propagation. Offsets, leaf cuttings?



***Haworthia mutica* 'Drew White' Gerhard Marx.**

Description. Alsterworthia International 9(3)11.

Parentage. *Haworthia mutica* (from Klippoort) x *H.* 'White Widow' (a clone of *Haworthia mutica* from Sandrift).

Comments. Rosette medium size; leaves brown-green, slightly acuminate, recurved. Retuse leaf ends green, densely covered in white dusky flecks, becoming almost solid in the central leaf area. Retuse ends have five to seven white, longitudinal lines, some of which have a few opaque brown-green islands. A few fingers of brown-green extend from the upper, lower leaf surface into the lower retuse end. Plant illustrated is 7.5cm Ø

Propagation. Offsets and leaf cuttings.



Haworthia mutica 'Lemon Cream' H.C.K. Mak

Description. P.A.S.C. Vol. 3.

Parentage. Variegation in the species of unknown origin.

Comments. Form as for the species, but with cream/white variegation which is more distinct when viewed from the underside of the leaves against a strong light. Rosette ca. 7cm.

Propagation. Offsets, which readily form.



Haworthia mutica 'White Widow' M.B. Bayer ex S.A .Hammer ex H. Mays.

Description. Alsterworthia International 10(1)8-9.

Parentage/Comments. Form as for the species except that the windowed leaf ends are white with a central blush of ivory yellow, the green leaf edges form a triangular frame with the base of the retuse leaf end. The leaves of *H. mutica* are generally darkish green with a few longitudinal whitish lines in the retuse ends.. One clone at the Karoo Gardens, South

Africa began to develop a white centre after a few years then over a period of several years the white centre expanded to produce a white leaf end with a central blush of ivory yellow all surrounded by the green leaf edge. This phenomena has also been reported in another clone. It is only the mature adult form which has the characteristics of the named cultivar.

Propagation. Offsets and leaf cuttings.

Haworthia mutica 'Robert Rodin' J. Trager

Description. C&SJ 77(2)99.

Parentage. A selected clone of *H. mutica* supplied by Robert Rodin (2034) in 1949, originally from van Heerde's garden in Springbok, South Africa.

Comments. Most forms of *H. mutica* are somewhat glaucous grey-green. This elegant clone is glossy, dark green and has been given a cultivar name for ease of reference. It offsets slowly. Distributed as ISI 2005-25

Propagation. Offsets and leaf cuttings.





Haworthia 'Nilotpal'. Soumen Aditya.

Description. Alsterworthia International 13(1)4.

Parentage. (*H. arachnoidea* x *H. emelyae* var. *major*) ♂ x (*H. cooperi* var. *cooperi*) ♂.

Comments. Acaulescent. Leaves more or less vertical, spreading with age; upper surface green to slightly darker green with scattered white spots and small tubercles; lower surface black with opaque windows in short blocks and lines, keel and leaf margins lined with small, white teeth; terminal spine slightly twisted, brown, deciduous with age. Slow to grow. A very nice cultivar with upright leaves which stays blackish all the time. "The name honours my friend Nilotpal Ganguly, a keen Haworthia grower."



Propagation. Offsets.



Haworthia 'Nirmal' Soumen Aditya.

Description. Alsterworthia International 10(2)23.

Parentage. (*H. pygmaea* x *H. 'Funny Guys'*) ♂ x (*H. maughanii* x *H. cooperi* v. *venusta*) ♀

Comments. Leaves dark green, initially erect, eventually spreading; leaf ends retuse, somewhat rounded; windows broad, light greenish-grey divided by thin lines of dark-green longitudinal lines, water-like blisters; small, backward pointing marginal teeth white, terminal spine if present identical to marginal teeth; all surfaces have a few scattered white spots, a few with spines.

Propagation.
Offsets.



Haworthia 'Oni Hitode' Hirose (?)

Description. Not traced. An old Japanese cultivar which must be established, but if it is not this publication will establish it.

Parentage. *Haworthia keganii* x *Haworthia aranea*.

Comments. Rosette open, flattish. Thick, dark-green leaves non-retuse; large marginal teeth, keel spines in two opposed rows and terminal spines white, a few scattered white teeth on the upper leaf surface some in short rows. Oni Hitode' = Devil Starfish.

Propagation. Offsets and possibly leaves.

Haworthia obtusa ‘Emperor’ Hayashi

Description. *Haworthia* Study 15:7 & 29:6. Dr Hayashi classifies the species as *H. imperialis* hence *Haworthia imperialis* ‘Emperor’.

Parentage. A form of the species.

Comments. Form as for the species except that in this cultivar the rosette is 12cm Ø. The photograph is of a plant cultivated by M. Osada. The pot had moss growing in it though this is not clear in the photo.

Propagation.



Haworthia ‘Ollason’s Pride’ P.I. Forster.

Description. *Alsterworthia* International 10(3)2-3. Originally named *H. ‘Ollasonii’*, an illegitimate name, in N.S.W. Cac. & Suc. Journal, 4:55

Parents. Uncertain. Found in the garden of Mr L.O. Ollason, Australia after his death. A.E.S., Botany, NSW Haw Study Group “parents...reported to be *H. retusa* x *H. obtusa* v. *dielsiana*” but some Australians record the parents as *H. retusa* x *H. cuspidate*. Others state it is a hybrid of *H. cooperi*.

Comments. Leaves turgid obovate-spathulate; dark green; prominent, translucent windows surround top third; upper surface 6-7 green lines; short end bristle and marginal 1 mm teeth white; tips and keels have reddish tinge. Cultural conditions influence colours.

Propagation. Dichotomous divisions, offsets and leaf cuttings.



Haworthia ‘Ollason’s Pride’ variegated.

Yellow and white variegation. No cultivar name has been traced to date for this cultivar.

Haworthia ‘Pale Peace’

Description. A Tarrington Exotics Nursery plant list (1992).

Parentage. ‘Pale Peace’ arose as a mutation in *Haworthia* ‘Big One’ in Tarrington Exotics Nursery, Australia in 1991. *H. ‘Big One’* is a hybrid of *H. ‘Bronze Giant’* ♀ and an unnamed *Haworthia* hybrid ♂.

Comments. Attractive yellow leaves, green tips with finger-like downward-pointing projections. On some plants the yellow may be tinged green. Cultivation conditions may affect the leaf colour. Move between strong and less strong light to experiment.

Propagation. Offsets, but often slowly and not all may be variegated.





Haworthia parksiana 'Muresame Nishiki' Hirose & Yokoi

Description. Variegated Plants in Color.

Parentage. Variegation in the species.

Comments. A typical plant of the species, but with yellow variegation. The variegation is much more prominent on the older leaves. 'Muresame Nishiki' = A School of Sharks.

Propagation. Offsets.

Haworthia 'Partha' Soumen Aditya

Description. Alsterworthia International 13(1)5.

Parentage. (*H. emelyae* var. *comptoniana* x *H. springbokvlakensis*) ♂ x (*H. springbokvlakensis* x *H. mutica*) ♀.

Comments. Acaulescent. Leaves glossy dark green with a ting of yellow. Retuse ends concave, slightly twisted, many longitudinal yellowish white lines occasionally reticulate; terminal spine brown, twisted. The dark green leaf surface is seen as dark green lines between the windows.

"The name honours my life long school friend Partha Ghosal."

Propagation. Offsets.



Haworthia 'Pearl' Jozef Verhoven

Description. Alsterworthia International 9(2)15.

Parentage. *Haworthia truncata* x unknown species.

Comments. Rosette open, somewhat untidy. Young leaves chunky, ends blunt, elongating with growth with retuse ends. Old (basal) leaves curved to almost straight, retuse ends less prominent. Warts on the ends of the upper leaf surfaces much reduced on the older leaves. Young leaves dark green. Upper leaf surfaces of older leaves yellowish-green, fingers of darker green or the yellowish green show as lines on darker green.

Propagation. Offsets.

Haworthia 'Pearl of Dew' J.A. Audissou

Description. Alsterworthia International 6(3)22.

Parentage. *Haworthia retusa* fa. *geraldii* x *H. cymbiformis* var. *reddii* JDV 92-43.

Comments Rosette freely offsetting. Leaves light green with dark-green windows in the form of interrupted, longitudinal lines of variable width and length on the retuse leaf ends. Each leaf terminates in a prominent recurved spine. The leaves are rounded and highly turgid. The formation of the dark green windows suggested the cultivar name.

Propagation. Offsets.



Haworthia picta 'Chocolate' Nishi

Description. Haworthia Study 3:14 & 20:6. Dr Hayashi classifies the species as *H. tricolor* hence *H. tricolor* 'Chocolate'.

Parentage. A clone selected from imported plants..

Comments. The basic colour of this clone is chocolate. The retuse leaf ends are noted for the thick lines, variable in number, separated by dense, white tubercles.

Propagation. Offsets and leaf cuttings.



Haworthia picta (Dairi Group) 'Akagitsune'

Description. Haworthia Study 11:16 as *H. picta* 'Red Fox', Haworthia Study 20:8 *Haworthia picta* 'Akagitsune'. Akagitsune = Red Fox. The Japanese name has priority and it therefore the established name.

Parentage. Bred in Japan by Mr. Tsukahara *Haworthia (picta v.) tricolor* x ? If a hybrid *picta* will have to be removed from the name.

Comments. Rosette *picta*-like. Leaves dark green, retuse ends studded with large, white flecks grouped into longitudinal rows separated by prominent dark green stripes. The retuse ends are diffused reddish .

Propagation. Offsets and leaf cuttings.



Haworthia picta 'Daisekkei' Kawahigashi

Description. Haworthia Study 6:45 referred to as *Haworthia picta* 'Giant Form', HS 20:6 *H. picta* 'Daisekkei' Kawahigashi.

Parentage. A selection of the species.

Comments. An extra large form with dark brownish-green leaves. Retuse leaf ends are covered with dense white spots separated by narrow, dark-green lines. Bags of white spots droop over the lower edge of the retuse end. Daisekkei = Large snow valley.

Propagation. Offsets and leaf cuttings.





Haworthia picta 'Dairi' Tsukahara

Description. Haworthia Study 10:16 as 'Dali' said to be a translation of 'Dairi'. Haworthia Study 20:6 'Dairi'

Parentage. Presumably a selected clone of the species.

Comments. Rosette large. Leaves dark green, retuse ends large white flecks in longitudinal groups separated by thick green lines, marginal teeth white, spaced. Young leaves may be a little reddish. Dairi = Marble.

Propagation. Offsets & leaf cuttings..

Haworthia picta (Dali Group) 'Gingitsune'

Description. Haworthia Study 11:16 as *Haworthia picta* (Dali Group) 'Silver Fox' & Haworthia Study 20:6. Silver Fox is a translation of Gingitsune which has priority.

Parentage. Bred in Japan by Mr. Tsukahara *Haworthia (picta v.) tricolour* x ? If a hybrid *picta* must be removed from the name.

Comments. Rosette as for the species. The distinguishing features are the brownish green stripes contrasting with the silvery flecks on the retuse leaf ends.

Propagation. Offsets and leaf cuttings.



Haworthia picta (Galaxy Group) 'Daisetsu' Hayashi

Description. Haworthia Study 10:3.

Parentage. A selection of the species.

Comments. A vigorous, large clone. Leaves dark green, retuse ends densely studded white, which is divided into longitudinal groups by dark green lines. Daisetsu = the name of a Japanese mountain.

Propagation. Offsets and leaf cuttings.



Haworthia picta (Galaxy Group) 'Horikawa Pikuta' Tsukahara

Description. Haworthia Study 3:3 as *H. picta* 'Horikawa Picta' corrected Haworthia Study 20:7.

Parentage. A selected clone of the species.

Comments. Rosette more than 15 cm Ø. Leaves dark green taper abruptly to a long point. Retuse ends dense, white flecking interrupted by longitudinal thin, green lines.

Propagation. Offsets and leaf cuttings.



Haworthia picta (Royal White Group) 'Meiro' Hayashi

Description. Haworthia Study 6:3 (as *H. picta* 'Maze Picta' not established) & 20:7.

Parentage. A selected clone of the species - breeder Mr. Ohkubo.

Comments. The green leaves have low, white tubercles in variable sized groups and lines, some interrupted, distributed over the retuse leaf ends in intricate patterns, which prompted the cultivar name.

Propagation. Offsets and leaf cuttings.



Haworthia picta (Moegi Group) 'Mr. K. Ohkuwa's Silver Green' M. Hayashi

Description. Haworthia Study 5:10. Amended Alsterworthia International 6(2)23.

Parentage. Developed from seedlings of large clones of *H. picta* v. *janvlokii*.

Comments. Leaves medium green with just a suggestion of reddish-brown on the non-retuse upper leaf surface. Retuse leaf ends dense, silver flecks coalescing into broad longitudinal bands separated by green lines of variable width. The silver retuse ends give the cultivar its name.

Propagation. Offsets and leaf cuttings.



Haworthia pygmaea 'Pink Beauty' Christian & Françoise Prud'hon

Description. Alsterworthia International 11(2)9.

Parentage. Apparently a habitat plant imported into Japan.

Comments. Overall form as for the species, which embraces the form *crystalina*, an invalid name. See Breuer's The World of Haworthias Volume 2, page 685. Rosette low, compact, diameter to 8cm; leaves reddish-brown, up to 18, symmetrically placed; windows bluish-grey, seem to be



covered with a cartilaginous surfaces densely studded with small but prominent, white tubercles, which also define the edges of the windows, tips generally rounded. Circa three, brown, longitudinal lines of variable length separate the tubercles. The windows turn pink in strong light.

Propagation. Offsets and leaf cuttings.



Haworthia 'Pink Nebula' Gerhard Marx

Description. Alsterworthia International 9(3)6-7.

Parentage. *H. 'Marx Red'* x (*H. 'White Window'* x *H. mutica*).

Comments. Rosette large; leaves thick, stubby, grey-green; retuse leaf ends have longitudinal white stripes, scattered white spots and red lines, some interrupted. In summer leaves are pink but in mid-spring and mid-autumn the pink loses some of its intensity, but never completely. Plant illustrated is 7.5cm in diameter.

Propagation. Offsets and leaf cuttings.



Haworthia 'Pongo' Francois Hoes.

Description. Alsterworthia International 9(1)2

Parentage. *Haworthia 'Korizato'* x *Haworthia 'Keganii'*.

Comments. Rosette compact, flattish. Leaves small, hard, rounded; marginal teeth and terminal spines whitish, surface

teeth chocolate brown with whitish tips with age; leaf colour dark brown to blackish brown in summer (left above) to chocolate brown in winter (right above). Plant diameter circa 3 cm. Slow growing.

Propagation. Leaf cuttings and offsets.

Haworthia 'Prodigy' S. Gildenhuys.

Description. Alsterworthia International 9(2)16.

Parentage. *Haworthia truncata* x *Haworthia springbokvlakensis*.

Description. Leaves in the form of a low rosette, the dark green, rounded, retuse leaf ends are inverted V-shaped windows with irregular bases where they meet the dark green of the lower upper leaf surface. Rosette diameter 6cm. Leaf width 2.2cm. Plants have remained solitary to date. This cultivar was produced by Gariep Plants, South Africa.

Propagation. Leaf cuttings.





Haworthia 'Protorose' Gerhard Marx.

Description. Alsterworthia International 9(3)10.

Parentage. *H. pygmaea* 'Crystallina' x *H.* 'Ginsekai'.

Comments. Rosettes small; leaves blackish-green, the white windows cover the retuse leaf ends except for blackish-green, longitudinal lines (ca. 3 to 8), the windows are studded with fine, whitish tubercles some of which bear spines which are in

longitudinal rows. Terminal spines white. Plant illustrated is 7.5cm diameter.

Propagation. Offsets and leaf cuttings.



Haworthia 'Pulin-Supravha' Soumen Aditya

Description. Alsterworthia International 10(2)23.

Parentage. *Haworthia retusa* v. *longebracteata* ♀ x *Haworthia springbokvlakensis* ♂,

Comments. Low rosette of slightly yellowish-green, spreading, recurved leaves, tapering gradually to a point. Marginal teeth small, white backward pointing. The slightly yellowish light green windows are divided into elongated blocks by green, longitudinal stripes. The leaf surfaces have a few scattered tubercles, occasionally with a white spine, upper surfaces have a few blisters of varying size with a white tip.

Propagation. Offsets.



Haworthia pumila 'Dots-n-Streaks'

Description. PASC Vol 3.

Parentage. Variegation in the species from Japan.

Comments. Leaves with yellow, longitudinal stripes with pinkish tinge and prominent, bulging, whitish tubercles. Reluctant to offset.

Propagation. By damaging the growing point to encourage the production of offsets.

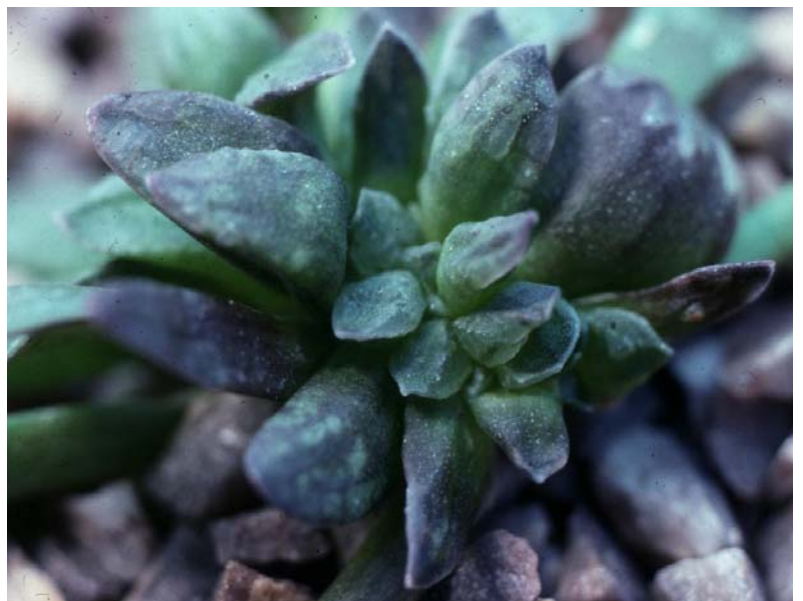
Haworthia pygmaea 'Fan of Woodstock' H.C.K. Mak

Description. Haworthiad 14(1)8.

Parentage. A sport in a smooth, small (up to 50 mm diameter) form of the species, origin unknown, which occurred in the collection of John Collins, Bolton, England.

Comments. Leaves reduced to about 10mm long and 5mm wide (Parent 20mm by 10mm). Occasionally some growing points revert to normal then back to cristate, forming a multi stacked fan-like growth. Strong light results in slower growth and more compact greenish leaves with a brown tinge. Too much water leads to root loss. Root regeneration is slow. 'Fan of Woodstock' is named after Woodstock Crescent where it was born.

Propagation. Division of crests and removal of stacked crests.



Haworthia pygmaea 'Rosepollux'
Christian & Francois Prud'hon.

Description. Alsterworthia International 11(2)9.

Parentage. *Haworthia pygmaea* 'Pink Beauty' x monstrous form of *Haworthia pygmaea*

Comments. Rosette more open than *Haworthia pygmaea* 'Pink Beauty', to 6 cm diameter; leaves slightly twisted, reddish-brown, windows whitish-grey with white tubercles, less numerous than in *Haworthia pygmaea* 'Pink Beauty', sides generally straight, tapering, ends pointed with a white terminal spine, distinct, small, white, marginal teeth. Produces offsets more readily than *H. pygmaea* 'Pink Beauty'.

Propagation. Offsets and leaf cuttings.





Haworthia 'Rasper'

Description. Not traced. In the absence of the original description this publication will establish the name.

Parentage. *Haworthia emelyae* var. *major* x *H truncata* ?

Comments. Rosette of ascending, relatively short, leaves with dense, white warts on all surfaces; margins and irregular ribs lined with small white teeth, somewhat retuse, curved back, leaf ends, dark-green.

Propagation. Offsets and leaf cuttings.



Haworthia 'Rose Green' H.C.K. Mak

Description. Alsterworthia International 3(2)7.

Parentage. *Haworthia truncata* x *Haworthia magnifica*.

Comments. Rosette compact, 8 -10 cm Ø, leaf arrangement similar to the petals of a rose, windowed leaf ends blunt or slightly retuse, terminating in a 2mm long bristle, rough, 1-1.5 cm thick. When grown in small pots it offsets readily. In larger pots it grows bigger, but is slow to offset. It stays green even in strong light.

Propagation. Offsets.

Haworthia 'Raja' Soumen Aditya

Description. Alsterworthia International 13(1)3.

Parentage. (*H. bayeri* x *Haworthia emelyae* var. *major*) ♀ x *H. pygmaea* ♂.

Comments. This is a sister clone of *Haworthia* 'Debashis-Samarpita'. Leaves more compact, dark green with bluish retuse ends which are rugose with up to eight white longitudinal lines, short terminal spine may be twisted sideways or point down; leaf edges lined with small, strong, marginal teeth. Very slow growing. "Named after my Haworthia friend and enthusiast Mr. Raja Bose."

Propagation. Offsets.



Haworthia 'Renjaku' Hirose

Description. Not traced, but it is a well-known cultivar. In the absence of the original publication this publication will establish it.

Parentage. (*Haworthia gigas* x *Haworthia emelyae* v. *major* [Hayashi. *H. wimii*]) x *Haworthia maughanii*.

Comments. Rosette of upright, dark green, chunky leaves with irregular, small-toothed margins and keels. Tubercles are found on the undersides of leaves, more rarely on the upper sides, mainly in the upper parts, producing spiny tripartite leaf ends.

Propagation. Offsets and leaves.





Haworthia 'Ruby Star' H.C.K. Mak

Description. Alsterworthia International 3(2)7.

Parentage. *Haworthia retusa* x *Haworthia mirabilis* v. *badia*.

Comments. A large plant up to 10cm diam. Rosette similar to *H retusa*, but with a *badia* like retuse leaf-tip and reddish-brown colour. Slow growing and offsets only rarely.

Propagation. An occasional offset and leaf cuttings.

Haworthia 'Shadow Dancer' Francois Hoes

Description. Alsterworthia International 9(1)6.

Parentage. *Haworthia emelyae* v. *major* x *H. 'Keganii'*

Comments. Young leaves upright, older spreading; small marginal teeth and terminal spines white; retuse leaf-ends with longitudinal rows of small tubercle, silvery windows broad; leaf colour blackish-brown with fingers extending into the lower retuse leaf ends; backs of the leaves white spot in lengthwise rows. Rosette about 5 cm Ø. Good light preferable

Propagation. Leaf cuttings.



Haworthia 'Shishi Ryu'

Description. Old Japanese cultivar - description not traced . If it does not exist this publication will establish the name.

Parentage. (*H. maughanii* x *H. bolusii* v. *blackbeardiana*) x *H. emelyae* v. *major* [Hayashi. *H. wimii*].

Comments. Rosette compact; leaves dark green, upright, chunky, adorned liberally with strong, white spines on all sides; on leaf edges and keels, terminal spine white. A little reddish in strong sun.

Propagation. Offsets and leaves.



Identification of published descriptions used in this volume.

- Alsterworthia International.....Journal of Alsterworthia International, UK
C&SJ.....Cactus & Succulent Journal of the U.S.A.
- Haworthia Study.....Journal of the Japanese Haworthia Society.
- P.A.S.C Volume 3.....Photographic Album of Succulents in Color, book by Harry Chi-King Mak, UK
- Variegated Plants in Colour.....book by Yoshimichi Hirose & Masato Yoki, Japan
- Other references are as cited - dealer's publications.

Note. Descriptions not traced for Japanese cultivars with names known to have been approved by their creators - in the absence of these not being validated elsewhere, this publication will validate their creators' cultivar names.

Haworthia 'Sijima' Ohkuwa

Description. Haworthia Study 5:6 & 20.11.

Parentage. *Haworthia maxima* x *Haworthia zenigata*.

Comments. Leaves upright dark green, tapering to a sharp, dark spine turning red in bright light, solid white, scattered, raised, more or less circular spots which sometimes form horizontal or diagonal lines. Sijima translates approximately as Calm, Starry Night or Silent Starry Night.

Propagation Offsets.



Haworthia 'Sago Jelly' Gerhard Marx

Description. Alsterworthia International 9(3)11.

Parentage. *Haworthia bayeri* x *Haworthia mutica*.

Comments. Rosette flat and compact, leaves blackish green retuse leaf ends somewhat rounded, flat to slightly concave, faintly milky, spotted white; circa 4-6 longitudinal white lines the ends of which curve outwards generally, but inwards occasionally. Plant illustrated is 7.6cm in diameter. Superficially similar to *Haworthia mutica* 'Drew White', but differing significantly in the detail.

Propagation. Offsets and leaf cuttings.

Haworthia 'Saikat' Soumen Aditya.

Description. Alsterworthia International 13(1)4.

Parentage. (*H. arachnoidea* x *H. emelyae*. var. *major*) ♀ x *H. cooperi* var. *cooperi* ♂.

Comments. A sister clone of *Haworthia* 'Nilotpal' but quite distinct. Acaulescent. Leaves spreading, light green but distinctly yellowish brown to very dark brown in summer; keel and marginal teeth white, terminal spine brown; windowed leaf ends are somewhat curved back (mildly retuse), upper and lower sides lined with white teeth or tubercles. The somewhat elongated, spreading leaves make this a large plant. The name honours Mr. Saikat Dutta, an *Haworthia* enthusiast.

Propagation. Offsets.





Haworthia 'Sandra' Cok Grootsholten

Description. Alsterworthia International 7(1)10.

Parentage. A selected clone from the hybrid {*Haworthia magnifica* v. *major* (Garcia Pass) [Hayashi. *H. wimii*] x *Haworthia pygmaea* (crystalline form from Klein Brack)} x {*Haworthia truncata* x *Haworthia maughanii* (Oudtshoorn)}.

Comments. Compact rosette, chunky leaves, rounded, dark green with shiny-white tubercles in longitudinal rows, some of which coalesce. Leaf margins and keels are lined white. The margins have small teeth. It offsets rarely. Named after Cok's eldest daughter.

Propagation. Mainly leaf cuttings, occasional offset.

Haworthia 'Seiko' Watanabe

Description. Haworthiad 17(2)73

Parentage. *Haworthia truncata* x *Haworthia retusa*.

Comments. Stemless, offsets freely. Leaves rough, distichous to twisted, truncate, occasionally with a very short apical hair, dark green, window translucent. Variable, green finger-like lines project from the upper leaf surface into the window.

Propagation. Offsets.



Haworthia 'Seiko - Nishiki' Watanabe

Description. Not traced to date, but Dr Hayashi states this is an old Japanese hybrid, which is established. *Haworthia 'Golden Drum'* P.A.S.C. Vol. 3 is a later invalid name.

Parentage. Yellow variegate of *Haworthia 'Seiko'* (*Haworthia truncata* x *Haworthia retusa*)

Comments. Broad, thin, dark to medium green leaves, short retuse ends, longitudinal yellow stripes of various widths.

Propagation. Offsets.



Haworthia 'Shadow Dancer' Francois Hoes

Description. Alsterworthia International 9(1)6.

Parentage. *Haworthia emelyae* v. *major* x *H. 'Keganii'*

Comments. Young leaves upright, older spreading; small marginal teeth and terminal spines white; retuse leaf-ends with longitudinal rows of small tubercle, silvery windows broad; leaf colour blackish-brown with fingers extending into the lower retuse leaf ends; backs of the leaves white spot in lengthwise rows. Rosette about 5 cm Ø. Good light preferable

Propagation. Leaf cuttings.



Haworthia 'Shankar' Soumen Aditya

Description. Alsterworthia International 9(3)26.

Parentage. *H. springbokvlakensis*♀ x (*H. cooperi* v. *pilifera* x *H. truncata* v. *maughanii*)♂.

Comments. Rosette to 6cm across and 4cm in height; leaves chocolate coloured; windows translucent blue, shiny; with short and long chocolate brown lines of variable length running into the retuse leaf end from the leaf base; leaf end short-retuse with a slightly pointed apex. Very slow growing and has not offset to date. In the summer months the plant body may turn a deeper chocolate-reddish-brown colour. Flowering time is early Feb. Plant illustrated is four years old.

Propagation. Leaf cuttings & decapitation to promote offsets.



Haworthia 'Shinsekai' Hayashi

Description. Haworthia Study 5:3.

Parentage. *Haworthia wimii* x (*H. beaukmanii*?)

Comments. Leaves greyish-green, large, wide. Retuse ends heavily studded with white tubercles, dense white lines looped at the base converge towards the tip without uniting, terminal spine white, twisted. Shinsekai = New World.

Propagation. Offsets and leaf cuttings.



Haworthia 'Sikinjoh' Hayashi.

Description. Haworthia Study 5(3) & 13(16).

Parentage. *Haworthia splendens* x ?

Comments. Leaves brown, compact; margins with short, broad, whitish teeth, occasionally indented; retuse leaf ends brown; windows grey, longitudinal, occasionally interrupted, blocks converging, but not uniting, towards the pointed tip with varying amounts of brilliant white; a few scattered white spot at the junction of the upper lower leaf face with the retuse leaf end. Overall the rosette is compact and flattish. Sikinjoh = purple golden castle.

Propagation. Offsets & leaf cuttings.



Haworthia 'Silver Bug' F. Hoes

Description. Alsterworthia International 4(1)23-24.

Parentage. *Haworthia pygmaea* f. *crystallina* x *Haworthia emelyae* var. *major* [Hayashi. *H. wimii*].

Comments. Rosette compact. Leaves dark, blackish. Retuse leaf-ends covered with dense, silver-papillae and lines. A little dark-red can be found at the top of the leaf base where it joins the retuse end and some dark-red lines can be seen among the silver lines on the retuse ends in very strong light. Overall the retuse leaf ends appear bluish-grey.

Propagation. Leaf cuttings.





Haworthia 'Silver Thunder'

Description. Alsterworthia International 2(2)3 as *Haworthia pygmaea* var. *pygmaea* 'Silver Thunder' H.C.K. Mak. Amended here.

Parentage. *H. pygmaea* x ? according to Dr Hayashi.

Comments. In cultivation in Japan, at least since the 70s. Leaves large, wide; windows retuse, dense, crystalline, white papillae in longitudinal rows converging towards the tip. In good light plant turns a little pinkish. Slow grower, but offsets. Rosette Ø to 7 cm 'Silver Thunder' is a direct translation from its Japanese name.

Propagation. Offset and leaf-cuttings.



Haworthia 'Silver Winning' Francois Hoes

Description. Alsterworthia International 9(1)4.

Parentage. *Haworthia 'Kegani'* x *Haworthia emelyae* v. *major*

Comments. Compact. Leaves small, distinctly retuse resulting in a flattish rosette with little height; dark brown to blackish brown (above) according to light intensity. The retuse leaf

ends are decorated with bubble-like, longitudinal, opaque rivers of silver; terminal and surface spines and small marginal teeth white. Plant diameter 4cm. The name is a combination of the silvery appearance and part of the name of the street - begijnenwinning - in which the author lives.

Propagation. Leaf cuttings.

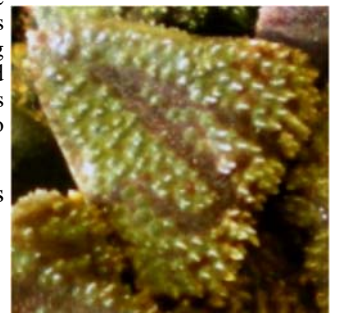
Haworthia 'Simee' Soumen Aditya

Description. Alsterworthia International 11(1)3.

Parentage. {*H. emelyae* var. *major* x *H. mirabilis* var. *paradoxa*.} ♂ x {*H. magnifica* var. *atropusca* "enigma" x *H. pygmaea* var. *cristalina*.} ♀.

Comments. Rosulate; leaves very hard, greyish-green with circa three broad reddish-brown lines dividing the greenish windows. It always appears brownish because of the prominent reddish-brown lines. Small marginal spines white, retuse ends short, thumb like, apex generally obtuse, windows with many scattered, white tubercles, some with prominent teeth give the retuse ends a rugged appearance, lower leaf surface is glabrous. It does not seem to flower. The plant in the photograph is about two years old. "It is named in honour of my Labrador Dog "Simee". When she was only 2 month old she destroy my pan or seedlings of this cultivar from which only one survived, so I named it after her!"

Propagation. Offsets. Leaf cuttings possible.



Haworthia 'Sisinden' Ohkuwa

Description. Haworthia Study 13:3 as 'Black splendens' invalid, amended 15:10.

Parentage. *Haworthia splendens* x ?

Comments. This cultivar has the form of *Haworthia splendens*, but the leaves are overall purplish-black with silver windows. 'Sisinden' = An imperial building.

Propagation. Offsets and leaf cuttings.



Haworthia 'Sneha-Neer' Soumen Aditya

Description. Alsterworthia International 9(3)27.

Parentage. [*H. maughanii*♀ x (*H. emelyae* v. *major* x *H. springbokvlakensis*)♂]

Comments. Rosette 5-7cm Ø, height 4cm. Leaves dark, glossy green throughout the year, vertical, more or less rounded, truncate; windowed ends sunken, crinkled round the edges forming ridges down the leaf sides with very small, white teeth. Entire leaf is covered with scattered, faintly distinguishable, small, white spot ending in a prickle. White lines of varying thickness run from near the leaf centre to the leaf edge linking either completely or partly to form a (partial) white rim. Roots not thick. Offsets easily. Flowers throughout the year. Easy to growth, but slow. The plant illustrated is five years old.

Propagation. Offsets and leaf cuttings.



Haworthia 'Snehanuv' S. Aditya

Description. Alsterworthia International 9(3)26.

Parentage. *H. habdomadis* v. *inconfluens*♀ x (*H. bolusii* v. *blackbeardiana* x *H. decipiens*)♂

Comments. Rosette lotus-like. Leaves large, normally paler yellowish green with large chalky white longitudinal blocks and lines on both leaf surfaces, apex acuminate, marginal teeth small. In strong light the leaves sometime develop a pinkish flush. Rosette to 10cm Ø, height to 7cm in. Flowering Feb-Mar. "Named after my parents who inspired me to pursue this hobby."

Propagation. Offsets.



Haworthia 'Spetter' Jozef Verhoven

Description. Alsterworthia International 9(2)15. Circulates as *Haworthia truncata* 'Spetter', but as it is a hybrid the cultivar cannot be associated with a species name. The original publication of the name has not been traced.

Parentage. *Haworthia truncata* x unknown species.

Comments. The slightly retuse leaf ends are rounded but terminate in a distinct radial line which runs down both sides of the leaves, quite unlike the blunt leaf ends of *H. truncata*. The rounded ends have greenish white-spotted windows. At first sight the leaves seem to be distichous, but the influence of a roseate parent can be seen in the twist of the central leaves. Leaf colour diffused, reddish-brown.

Propagation. Offsets and leaf cuttings.





Haworthia 'Someno' Gerhard Marx

Description. Alsterworthia International 9(3)6-7.

Parentage. (*H. marginata* x *H. minima*) x *H. koelmaniorum* var. *koelmaniorum*.

Comments. Young rosettes rather flat and open, with age the leaves become semi-erect; leaves dark green, but even darker in full sun, white blisters in longitudinal rows on both surfaces, occasionally amalgamating to form short lines in the centre of a leaf; leaf margins brown, cartilaginous. Plant illustrated is 8cm in diameter. The name 'Someno' is derived from 'south-meets-north' and refers to the fact that *H. koelmaniorum* is one of the northernmost species in South Africa while both the miniature *H. marginata* and *H. minima* are found very close to the southernmost tip of the country.

Propagation. Offsets and leaf cuttings.



Haworthia 'Soumyajit' Soumen Aditya

Description. Alsterworthia International 10(2)22.

Parentage. *Haworthia acuminata* ♂ *H. 'Snehanuv'* ♀.

Comments. Leaves dark green, ends retuse tapering to a whitish terminal spine, marginal spines white inclined back to the base of the leaves; windows in upper and lower leaf ends dusky grey-green, upper surface with circa three longitudinal brownish white lines which may be slightly raised. "Named after my son."

Propagation. Offsets.



Haworthia splendens 'Silver King' Nishiaki ex Havashi & Mavs

Description. Alsterworthia International 6(2)21.

Parentage. A selected clone of the species by Mr Nishiaki. In Japan this cultivar was known as *H. splendens* "Nishiaki No. 1" during development work.

Comments. Form as for the species, but leaves distinctly rounded and predominantly silvery-white because of the increase in size and number of tubercles. Some of the brown lines are prominent others are obscured by the dense concentrations of tubercles.

Propagation. Offsets and leaf cuttings.



Haworthia splendens 'Toffee' Gerhard Marx

Description. Alsterworthia International 9(3)12.

Parentage. A selected clone of the species. *Haworthia splendens* has attractive makings which vary from clone to clone. This one was selected for cultivar status because of its outstanding beauty.

Comments. Rosette compact, medium size and flattened; leaves triangular ending in sharp spine, chocolate brown, retuse leaf ends densely flecked with pale, purplish white flecks, interrupted by several prominent, but irregularly-broken, opaque, chocolate-brown, longitudinal lines that blend into one another towards the leaf-tips. Plant illustrated is 8cm in diameter.

Propagation. Offsets and leaf cuttings.



Haworthia splendens 'Murasaki-Sikibu'
Kobayashi & Hayashi

Description. Haworthia Study 17:4 Previously know as 'D-1' which is not a cultivar epithet.

Parentage. A selection of the species.

Comments. As for the species, but the distinguishing feature of this cultivar is the purple colour of the leaves. 'Murasaki-Sikibu' = Author of "The Tale of Genji"

Propagation. Offsets and leaf cuttings.



Haworthia xsubattenuata 'Kinjoh' Shinnosuke Matuszawa

Description. Catalogue of Yokohama-Ueki, 1925. The new name *Haworthia* 'Watercolor' published in P.A.S.C. page 146 is a duplicate and not established.

Parentage. Yellow variegated form of *Haworthia xsubattenuata* 'Ryu-no-Tsume'.

Comments. As for the species but with blurred yellow variegation with a tinge of pink when in good light. Dot-like tubercles mainly on the underside of the leaf, few on surface. The plant, right above, is very red, the result of strong light and high temperatures, but not direct sun. It retains some red colour in winter.

Propagation. Offsets.

Haworthia sucinea 'Benizakura' Ohkubo

Description. Haworthia Study 11: 6.

Parentage. A selected clone of the species.

Comments. As for the species, but the leaves are reddish-purple with dark red longitudinal lines in the windows.

Propagation. Offsets.





Haworthia ‘Sibashis’ Soumen Aditya

Description. Alsterworthia International 13(1)3.

Parentage. (*H. emelyae* var. *major* x *H. cooperi* var. *venusta*) ♀ x (*H. bolusii* var. *bolusii* x *H. arachnoidea* var. *scabrispina*) ♂.

Comments. A complex hybrid which resembles none of the parent species. Acaulescent. Leaves more or less vertical, with age curved backwards, greyish green with tips somewhat reddish, prominent white teeth on leaf margins and keels twisted to curved; upper and lower leaf surfaces have subdued whitish spots and tubercles and white spines in longitudinal rows; opaque windows are in short, narrow longitudinal blocks on the leaf lower surfaces. “The name honours a friend, who is very knowledgeable about many species.”

Propagation. Offsets

Haworthia ‘Three-Cornered Hat’ John Trager

Description. C&SJ March-April 2013

Parentage. *H. koelmaniorum* ♀ x *H. viscosa?* ♂. Cross made by Bob Kent’s “trained” hummingbird.

Comments. Slow-growing. Leaves stack one upon another in three rows up to six deep; glossy, coppery-brown, covered with concolorous tubercles. Inflorescence elongated. One specimen, once extracted from the overhanging branches through which it had scrambled in the Huntington greenhouse, measured an astonishing 2.6 m long! Please see the photograph on the back cover. The name refers to the three-ranked leaves and de Falla’s 1917 ballet, *El Sombrero de Tres Picos*.

Propagation. Originally tissue cultured for ISI 2013-22. Try offsets when produced and leaf cuttings.



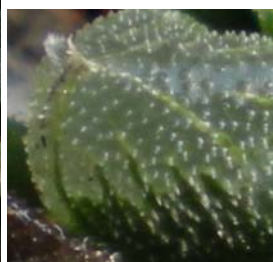
Haworthia ‘Three Sisters’ Soumen Aditya

Description. Alsterworthia International 10(2)18

Parentage. *Haworthia* ‘Snehaneer’ ♂ x (*Haworthia cooperi* v. *venusta* x *Haworthia maughanii*) ♀

Comments. Rosulate. Leaves finger-like, vertical, flat on the upper (inner) surface, rounded on the back; windowed leaf ends slightly convex to rounded and bluntly pointed; small, white spots in more or less longitudinal rows curve towards the leaf tip some of which may have a tiny, terminal spine; leaf edges between the upper flat surfaces and the rounded backs comb-like; white spines. Offsets freely.

Propagation. Offsets.





Haworthia 'Toff-O-Lux' Gerhard Marx

Description. Alsterworthia International 9(3)7-8

Parentage. *Haworthia splendens* x *H. 'Ginsekai'*.

Comments. Rosette compact; leaves brownish black; green retuse leaf-ends re-curved, slightly twisted, with longitudinal, broad, whitish lines and raised white spots, some of which terminate in a small spine; marginal teeth white, short, backward pointing. Terminal spine white. Plant illustrated is 7.5cm in diameter.

The cultivar is named after a brand of caramel toffee that is no longer in production, but on which Gerhard spent a large portion of his pocket money (and teeth) as a young child!

Propagation. Offsets and leaf cuttings.

Haworthia translucens ssp. tenera 'Anemome' J.N. Trager

Description. C&SJ 67(2) 98.

Parentage. Presumably a natural deviant clone of the subspecies

Comments. The small subspecies usually has prominently toothed or bristly leaves. This cultivar is distinctive in its slow growth and smooth hairless leaves, which often have a windswept character similar to small sea anemones waving in the current. Distributed as ISI 1999-55.

Propagation. Offsets.



Haworthia 'Triple B' Gerhard Marx

Description. Alsterworthia International 9(3)8-9.

Parentage. (*H. wimii* [*H. emelyae* var. *major* Bayer] x *H. badia*) x (*H. badia* x *H. 'Ginsekai'*).

Comments. Rosette large, compact, flattish; leaves dark green with reddish margins and small backward pointing marginal teeth; the windows in the retuse leaf ends are white and have many raised, white, scattered spots, longitudinal lines of dark green can be seen between the windows. Plant illustrated is 9.5cm in diameter.

Triple B stands for 'Big Beautiful Bastard'.

Propagation. Offsets and leaf cuttings.





Haworthia turgida 'Shukuem' Nishiki

Description. Not traced, old established Japanese cultivar according to Dr Hayashi. *H. retusa* v. *acuminata* 'White Ghost' in Grigsby's 1993 catalogue and *Haworthia turgida* 'Milky Wonder' in P.A.S.C. Vol. 3 are invalid and covered by *H. turgida* 'Shukuem'.

Parentage. A variegated form of the species.

Comments. Pale green leaves with many small scattered, white dots on the lower leaf surfaces, circa 5-6 white lines on the upper leaf surface, small marginal teeth & terminal spines white. Leaf end and spine somewhat twisted. Overall the cultivar has a ghostly appearance.

Propagation. Offsets.

Haworthia turgida 'Yellow Crystal'

Description. P.A.S.C. Volume 3.

Parentage. Variegated form of the species.

Comments. As for the species, but with pale yellow variegation of broad to narrow lines and spots, more prominent on the underside than on the top, which has a crystalline nature, hence the name.

Propagation. Offsets and leaf cuttings.



Haworthia vitris 'Chandelier' Hayashi

Description. Haworthia Study 19:8.. *H. albispina* Haworthia Study 8:2 is the original species name. *H. vitris* in Dr Hayashi's classification.

Parentage. A selection of the species.

Comments. As for the species. Leaves green, tidy, shiny, large, glassy-white spines in regular formation along the leaf margins (referred to as remarkable hemming in Japan) and keels. The spines are the prime distinguishing features of this cultivar. Rosette diameter 10cm.

Propagation. Offsets.

Haworthia 'Uzushio' Hirose

Description. Shaboten No. 100, page 75, 2001.

Parentage. *Haworthia* 'Kegani' x *Haworthia* 'Green Gyokusen'.

Comments. Rosulate. Leaves blackish-green, vertical, a few white tubercles more or less in scattered vertical rows on the sides of the leaves; truncate ends heavily outlined white round the irregular edges, many, scattered, white tubercles and a distinct central ridge. Overall the truncate ends are bluish dark green with highlights of white.

Propagation. Offsets and leaves.



Haworthia viscosa 'Ryujo Nishiki'

Description. Variegated Plants in Color.

Parentage. Variegation in the species.

Comments. Form as for *viscosa*. The variegation is in the form of a few yellow longitudinal lines, more prominent on the underside than the top. Ryujo Nishiki means Dragon Castle Brocade.

Propagation. Slowly produced side shoots aided by decapitation.



Haworthia 'VIVI-DR' Soumen Aditya

Description. Alsterworthia International 9(3)27.

Parentage. (*H. parksiana* x *H. heidelbergensis*) ♀ x *H. emelyae* v. *multifolia* ♂

Comments. Rosette 3cm across and 1.2cm in height. Leaves dark green, slightly



recurved, apex acuminate, marginal teeth dark green, recurved, terminal spine white, sharp; windows slightly variable longitudinal blocks of subdued, cloudy white separated by dark green lines continuous with the lower upper leaf surface. Mostly solitary. Peduncle very short to 5-8cm long. Plant in the photos is 3 years old.

Propagation. Offsets and leaf cuttings.

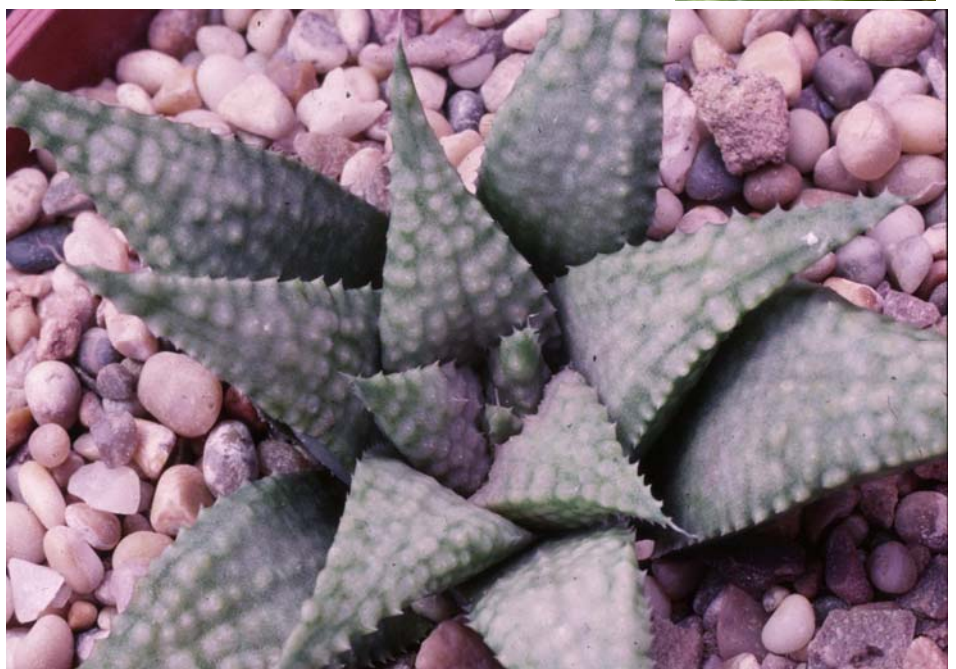
Haworthia 'Wonder Park' H.C.K. Mak

Description. P.A.S.C. Vol. 3.

Parentage. *Haworthia emelyae* [Hayashi. *H. picta*] x *Haworthia parksiana*.

Comments. Rosette ca. 5cm diameter. Leaves dark green ca. 3cm long 1.5cm wide tapering to a point, 8mm thick, large, round, tubercles in longitudinal rows pinkish-white. Rounded teeth on margins and keel pinkish-white. Terminal spine purplish.

Propagation. Offsets.





Haworthia 'Whirlpool' J. Trager

Description. C&SJ USA 78(2)80

Parentage. *Haworthia truncata* x *H. retusa*?

Comments. Leaves vertical, relatively thin, green; windowed ends rounded or thinly truncate, opaque, shiny. Rosettes are initially distichous then slowly spiral, reminiscent of a vortex in a dark pool. Distributed as ISI 2006-23.

Propagation. Cuttings.

Haworthia 'Yayoi' Ohkubo

Description. *Haworthia* Study 16:3 20:9.

Parentage. *Haworthia tricolor* x ?

Comments. As for *Haworthia* 'Yayoi Nishiki' except that the leaves are dark brown and the flecks white.

Propagation. Offsets and leaf cuttings.



Haworthia 'Yayoi Nishiki' Ohkubo

Description. *Alsterworthia* International 6(2)22, *Haworthia* Study 15:10.

Parentage. *Haworthia tricolor* x ?

Comments. The colours are difficult to describe! The leaf is essentially greyish lavender with many fine, coalescing, pale pinkish-white flecks. Some leaves are variegated with pale pink to almost yellow stripes. Lower leaf surface has faint, scattered spots. Yayoi is the name of an ancient age in Japan. Nishiki means variegated.

Propagation. Offsets and leaf cuttings.



Haworthia ‘Yumedono’

Description. In *Alsterworthia International* 3(2)20 it is listed under the formula name of its parents. Dr Hayashi has confirmed that it is the old Japanese cultivar *Haworthia* ‘Yumedono’. Yumedono is a cultivar name, not a name applying to all the progeny of the parental cross.

Parentage. *Haworthia emelyae* v. *major* x *Haworthia bayeri*.

Comments. Rosette compact, low. Leaves green, retuse ends covered with longitudinal rows of white tubercles on a foggy background divided by deep green lines. Growth slow, seldom offsets. Up to 10cm Ø. In full sun turns reddish. In the hottest summer period, it simply stops growing. Its contractile root draws the plant slightly into the soil. “Yumedono” = “Dream Temple”.

Propagation. Leaf cuttings, rarely offsets.



Maughanii and Truncata

Haworthia truncata and *Haworthia maughanii* are treated as separate species by some authors and as varieties of one species by others, *Haworthia truncata* var. *truncata* and *Haworthia truncata* var. *maughanii*. Whichever of these forms you use the cultivar epithet remains the same e.g. *Haworthia truncata* ‘Akakage’ or *Haworthia truncata* var. *truncata* ‘Akakage’ and *Haworthia maughanii* ‘Aurora’ or *Haworthia truncata* var. *maughanii* ‘Aurora’.

Haworthia truncata ‘Akakage’
Harada

Description. *Haworthia* Study 5:5.

Parentage. A selected clone.

Comments. Leaves blackish green. Truncate ends cloudy surrounding blackish or occasionally red centres of variable size, margins lobate, irregular white lines between centre and margins. Akakage = Red shadow.

Propagation. Offsets and leaf cuttings.



Haworthia truncata ‘Aoikage’ Sanekata

Description. *Haworthia* Study 5:5.

Parentage. A selected clone of the species.

Comments. Leaves dark green. Truncate ends diffused milky surrounding dark green centre of variable size all with a bluish shadow, margins more or less straight, Aoikage = blue shadow.

Propagation. Offsets and leaf cuttings.

Haworthia truncata (Sharaku Group)
'Araiso' Sanekata

Description. Haworthia Study 4:16.

Parentage. A selected clone of the species.

Comments. Leaves dark green, truncate ends tuberculate, rugged, densely white with dark green lines, which may turn red in the winter, and spots, occasional central green islands, margins indented. Araiso = rough shore.

Propagation. Offsets and leaf cuttings.



Haworthia truncata 'Ashibiki' Fukuya

Description. Haworthia Study 19:3.

Parentage. A selected form of the species.

Comments. Clone large 9.8cm across, width 3.4cm. Leaf thickness 1cm, greyish green, U-shaped; retuse end white central line with side lines and a tail of feather-like lines. Ashibiki = a Japanese pun on bird's tail.

Propagation. Offsets and leaf cuttings.

Haworthia truncata (Seiryū Group) 'Atsumori' Fukuya

Description. Haworthia Study 19:2.

Parentage. A developed clone of the species..

Comments. Cultivar 8cm across, 3cm wide. Leaves 1.4cm thick, a central restriction creates two loops, dark grey; truncate ends light grey; dragon-like, bluish-grey, central variable markings radiating thick white lines to link and form a white rim. 'Atsumori' = Famous person of Taira family

Propagation. Offsets and leaf cuttings.



Haworthia truncata 'Byakuren Gyokusen' Katsuoka

Description. Haworthia Study 4:15 as *H. 'Byakuren'* not established, duplicate *H. maughanii* 'Byakuren', amended 20.19

Parentage. Developed clone of the species.

Comments. Leaves dark green. Truncate end distinct waist, light greenish-grey, normally dense central white is displaced to the outside half of the truncate end, the other half generally light greyish-green with fine white spots and a small variable number of short white lines.. 'Byakuren Gyokusen' = White Lotus.

Propagation. Offsets and leaf cuttings.

Haworthia truncata 'Dainginga Gyokusen'
Sanekata

Description. *Haworthia* Study 6:16 as *Haworthia truncata* 'Dainginga', amended 20:10.

Parentage. A selection of the species.

Comments. Leaf dark green, windows are bluish with dense white concentrated towards the outside of the leaf with short white projections to the outside edge and longer intertwining white lines to the inner edge and leaf ends. Small scattered white dots appear in the blue background. 'Dainginga Gyokusen' = Great galaxy.

Propagation. Offsets and leaf cuttings.



Haworthia truncata (Sharaku Group)
'Daikoku' Sanekata

Description. *Haworthia* Study 18:2.

Parentage. A selection of the species.

Comments. Cultivar 3.5cm long, 1.9cm wide. Leaves 1cm thick, dark grey, retuse ends somewhat rounded, light grey with variable white centres and scattered black lines. Daikoku = God of wealth.

Propagation. Offsets and leaf cuttings.



Haworthia truncata 'Dai-Sangen' Nishi

Description. *Haworthia* Study 4:3.

Parentage. A selection of the species.

Comments. Leaves darkish grey, thick; retuse ends light grey, scattered, quite dense, fine, white spots, centre lengthwise lines white somewhat irregular, sometimes embracing an oval of darter grey, white lines radiate from the centre terminating just short of the rim. Dai-Sangen = A super score of Mahjong.

Propagation. Offsets and leaf cuttings.



Haworthia truncata 'Fantasia' Ohkubo

Description. *Haworthia* Study 4:12.

Parentage. A selection of the species.

Comments. Leaves medium grey. The truncate ends bluish-green; central, lengthwise, thick white lines irregular, occasionally light brown; linked down the length of the centre to form a more prominent white patches; radiating lines divide to form linked loops round the circumference of the leaf rim.

Propagation. Offsets and leaf cuttings.



Haworthia truncata 'Fire Dragon' Ohkubo

Description. Haworthia Study 4:2.

Parentage. A selection of the species.

Comments. Leaves blackish-green; truncate ends greyish-green with tricolour markings, lengthwise centres greyish-green, sometimes reddish-brown, ringed by white lines, white lines radiate to the rim, scattered dark red lines. Overall these tricolour markings suggest a fire.

Propagation. Offsets and leaf cuttings.



Haworthia truncata 'Ginryoku' Sato

Description. Haworthia Study 4:7 & 17:2. As this is an old cultivar the original description may pre date these.

Parentage. A selection of the species.

Comments. As for the species, but leaves silver green with a few, short, dark green lines in the windows. Ginryoku = Silver green. This cultivar is regarded as difficult to cultivate.

Mr Fukuya cultivated the plant in the lower photo to 9cm x 3.3cm wide and 1.5cm thick. The sole difference is the colour. It has not been given a cultivar name as far as is known

Propagation. Offsets and leaf cuttings.



Haworthia truncata 'Hakujitsumu' Ohkub

Description. Haworthia Study 4:12. 'Day Dream' is a translation of 'Hakujitsumu' which has priority.

Parentage. A selected clone of the species.

Comments. Leaves medium green, truncate ends misty grey with many irregular white lines, rim entire with occasional indentations.

Propagation. Offsets and leaf cuttings.



Haworthia truncata 'Hakujō Daiya' Ohkubo

Description. Haworthia Study 4:12 as 'Hakujyou Diamond' a translation of above which has priority.

Parentage. A selected clone of the species.

Comments. Leaves grey, truncate ends central white ridge radiating white lines linking at the edges to form a white indented rim.

Propagation. Offsets and leaf cuttings.



Haworthia truncata 'Kôhaku Hige' Ohkubo

Description. Haworthia Study 4:12.

Parentage. A selected clone of the species.

Comments. Similar to 'Kouhaku Madara' but with finer lines and more brown markings. Red and white whiskers

Propagation. Offsets and leaf cuttings.



Haworthia truncata 'Kouhaku Madara' Ohkubo

Description. Haworthia Study 4:12.

Parentage. A selected clone of the species.

Comments. The leaf ends have prominent thick, white line, which cross from edge to edges or loop back to the same edge, on bluish grey windows. As the leaf ends also have brown markings of irregular shape they are tri-coloured.

Propagation. Offsets and leaf cuttings.

Haworthia truncata 'Ôhkubo's Burukon' Ohkubo

Description. Haworthia Study 4:12 corrected 20:10.

Parentage. A selected clone, but the rounded leaf ends suggest it contains *H. maughanii* genes.

Comments. Leaves pale blue, truncate ends rounded, distinctly blue, thick white lines randomly radiate from centre to rim.

Propagation. Offsets & leaf cuttings.



Haworthia truncata 'Pink Scalop' H.C.K. Mak

Description. P.A.S.C. Vol. 3.

Parentage. Variegation in the species from Japan. How the variegation occurred is not known.

Comments. Leaves pink, a few grey-green longitudinal lines on the sides, truncate ends grey-green with a few pink lines and pink rim. Grows slowly.

Propagation. Offsets and leaf cuttings.,

Haworthia truncata (Seiryû Group)
'Seiryû' Kaneko

Description. Haworthia Study 11:15.

Parentage. A selection of the species.

Comments. Leaves green, truncate ends, lightly bluish green centres surrounded by broad side by side opaque loops predominantly white. Seiryû = blue dragon.

Propagation. Offsets and leaf cuttings.



Haworthia truncata 'Syaraku' Katsuoka

Description. Haworthia Study No. 3:16

Parentage. A selected clone of the species.

Comments. Leaves thick, darkish green; truncate ends light (bluish) green, extensive areas of white, interlocking thick white lines and a few random dark green lines, tricoloured.

Propagation. Offsets and leaf cuttings.

Haworthia maughanii (Muraski Group)
'Aka-Murasaki' Sanekata

Description. Haworthia Study 11:6 &20:10

Parentage. A selected seedling of *Haworthia maughanii* 'Murasaki'.

Comments. Leaves blackish-grey, truncate ends divided into loops of grey separated by dark red lines, central areas variously marked white. There is an overall reddish-purple tinge to the truncate ends.

Propagation. Offsets and leaf cuttings.



Haworthia maughanii 'Amaterasu' S. Sakai

Description. Haworthia Study1:20.

Parentage. A selected clone.

Comments. Leaves dark green, truncate ends overall blue, the centre lighter, to some extent with white irregular shapes, remainder darker blue, margins prominently dentate. Amaterasu = A mythical emperor of Japan.

Propagation. Offsets & leaf cuttings.

Haworthia maughanii 'Asuka' Horikawa

Description. Haworthia Study 15.15 a nursery advertisement.

Parentage. A selected form of the species.

Comments. Leaves brown; truncate end centres white in varying shapes and sizes, reddish-brown loops separated by white lines radiate to form a crenulated edge. Asuka = A Japanese old era.

Propagation. Offsets and leaf cuttings.



Haworthia maughanii 'Aurora' Daiku

Description. Haworthia Study 1:20.

Parentage. A selected form of the species.

Comments. Leaves blackish green; truncate ends bluish, centres white from which white lines radiate to, but do not quite reach, the edge.

Propagation. Offsets and leaf cuttings.

Haworthia maughanii 'Byakuren Manzō' Sanekata

Description. Haworthia Study 2:1 as *H. maughanii* 'Byakuren' amended 20:10.

Parentage. A selected clone of the species.

Comments. Leaves black, truncate ends more or less triangular with white centres from which white lines radiate and fork to just short of the edge. Byakuren Manzō' = White lotus.

Propagation. Offsets and leaf cuttings.



Haworthia maughanii 'Cinderella' Sanekata

Description. Haworthia Study 5:1.

Parentage. A selected clone of the species.

Comments. Leaves dark green. Truncate ends light grey, cloudy white with radiating white lines which loop to enclose light grey areas and form a white crenulated edge. Said to be reminiscent of Cinderella's white dress and therefore named for her.

Propagation. Offsets and leaf cuttings.

Haworthia maughanii 'Dainginga Manzō' Sanekata

Description. Haworthia Study 7:5 as *Haworthia* 'Dainginga' invalid as name previously published for *H. truncata* 'Dainginga'. Revised 20:10.

Parentage. A selected clone of the species.

Comments. Leaf colour grey-green. Truncate ends lightly bluish dark green, centres white, radiating loops enclose bluish dark green or generally these areas cloudy with many dense, small white spots. Leaf edge crenulated.

Propagation. Offsets and leaf cuttings.



Haworthia maughanii 'Dragon' S. Sakai

Description. Haworthia Study 2:23 & 5.5.

Parentage. A *H. maughanii* 'Inazuma' seedling.

Comments. The leaves medium green with fine white spots which provide a faint white sheen along the leaf sides. Thick, truncate ends covered in small, white spots therefore somewhat cloudy; centre lengthwise bold white line from which radiate white lines occasionally forking all terminating just short of the finely dentate edge.

Propagation. Offsets and leaf cuttings.



Haworthia maughanii 'Genjitsu' Sanekata

Description. Haworthia Study 13:2.

Parentage. A selection of the species.

Comments. Leaves light blackish-grey; truncate end light grey, large parhelion (spot of intensified light) in the centre with radiating white lines looping at the ends to outline a crenulated leaf edge. The combination of a light-grey truncate end overlain with white produces a hazy effect.

Propagation. Offsets and leaf cuttings.



Haworthia maughanii 'Manzo Nishiki'

Description. Variegated plants in color.

Parentage. Variegation in the species.

Comments. Leaf sides dark green with pale yellow longitudinal stripes variable in width and length and a few yellow spots. Truncate ends dark green with variable numbers of yellow spots which produce a thin cloud when concentrated, a few pale yellow lines radiate from the centre to the edge. Origin Japan. Manzo Nishiki means "Million Elephant Brocade"

Propagation. Offsets and leaves.



Haworthia maughanii 'Millennium' Tsukahara

Description. Haworthia Study No. 3:1.

Parentage. *Haworthia maughanii* 'Ryūmon x *Haworthia maughanii* 'Shunrai'?

Comments. Leaves green; truncate ends slightly rough, light green with irregular, brilliant-white centres and radiating lines occasionally bifurcate, edge lightly crenulate.

Propagation. Offsets and leaf cuttings.



Haworthia maughanii 'O Shiragiku' Sanekata

Description. Haworthia Study 4:16 as *H. maughanii* 'Ohsiragiku' amended 20:16 to *H. maughanii* 'O Shiragiku'

Parentage. A selected clone of the species.

Comments. Leaves green. Retuse end white overall with interconnecting white lines, margin distinctly crenulate.

Propagation. Offsets and cuttings.

Haworthia maughanii 'Sanekata Henmoku' Sanekata

Description. Haworthia Study 4:13.

Parentage. A selected clone of the species.

Comments. Leaves green. Truncate ends bluish-green with tiny, scattered white spots giving a soft, white sheen, white lines run from various points in the centre indiscriminately interconnecting, an occasional short independent dark blue line, edge finely crenulate. Sanekata Henmoku' = Sanekata's odd markings.

Propagation. Offsets and leaf cuttings.



Haworthia maughanii (Muraski Group) 'O Murasaki' Okano

Description. Haworthia Study 5:5 as *H. maughanii* 'Ohmurasaki' amended 20:10.

Parentage. A selected clone of the species.

Comments. Leaves green. Truncate end light blue with many tiny white spots; centres white, variable in shape with a few attached lines, a few short white lines near the edge of the leaf, a variable number of bold purplish lines run from the leaf centre to the edge, dividing the light blue tip to give a molar like edge. O Murasaki = Large purple.

Propagation. Offsets and leaf cuttings.



***Haworthia maughanii* 'Shirotae' Yamamoto**

Description. *Haworthia* Study 4:1.

Parentage. *H. maughanii* 'Hoeowe' x *H. truncata* v. *maughanii* 'Inazuma'. Hoeowe = Phonix, Inazuma' = Lightning.

Comments. Leaves dark grey-green; truncate ends lighter grey, centres bright white in various shapes, radiating, thick, interconnected white lines, leaf edge highlighted with a dark rim and dentate endings to the truncate lighter grey. Shirotae = white dress.

Propagation. Offsets and leaf cuttings.

***Haworthia maughanii* 'Shishigami' Yamamoto**

Description. *Haworthia* Study 3:2 as *H. maughanii* 'Sisigami' amended 20:10.

Parentage. A selected clone of the species.

Comments. Leaves dark green, spotted white, distinct dark line of demarcation between the side and truncate end. Truncate end bluish green, scattered fine white spots, centre white patches and linking heavy white lines, branching white lines radiate to terminate just short of the leaf edge. The truncate end lines are said to resemble the "Lion God" in "Princes Mononoke", an animation.

Propagation. Offsets and leaf cuttings.



Index of Cultivar Names & their Associated Invalid Names.

'Abokyu'	3	'Bononi Monat'	11	'Down-under'	26
'Albinusta'	3	'Bunraku'	11	'Dream Walk'	19
'Alligator'	3	'Byakko'	11	'Ebisu Nishiki'	19
'Alligator Pair'	3	'Caramel Sensation'	12	<i>emelyae</i> v. <i>comptoniana</i> 'Genesis'	19
'Aluminum Star'	4	'Cassiopeia'	12	<i>emelyae</i> v. <i>emelyae</i>	
'Amra Bengali'	4	'Cat's Tongue'	12	'Chocolate Stripes'	19
'Anitra'	4	'Chock Wonder'	13	<i>emelyae</i> v. <i>emelyae</i> 'Super Reticular' ...	20
'Aranami'	4	<i>ciliate</i> 'Day Dream'	12	<i>fasciata</i> 'Schizophrenia'	20
'Arati'	5	<i>cooperi</i> v. <i>pilifera</i> 'Milky Cloud'	13	'Fouras'	20
'Atlantis'	5	'Crackling Rosy'	13	'Frosty Cream'	20
<i>attenuata</i> 'Golden Arrow'	6	'Crocodile Rock'	13	'Frosty Morn'	21
<i>attenuata</i> 'Ground Yellow'	7	'Crocodile Skin'	14	'Frosty Tips'	21
<i>attenuata</i> 'Hakucho'	5	'Crystal Eye'	14	'Funny Guys'	21
<i>attenuata</i> 'Junimo-Hikari'	5	× <i>cuspidata</i>	14	'Garasu'	24
<i>attenuata</i> 'Little Lemon'	5	× <i>cuspidata</i> 'Yellow Lotus'	16	'Gekkō'	22
<i>attenuata</i> v. <i>radula</i> 'Matsunoshimo-		<i>cymbiformis</i> 'Frog Mouth'	14	'Gerald Barad'	22
Nishiki'	6	<i>cymbiformis</i> 'Garakuden Shirofu'	16	'Gessekai'	22
<i>attenuata</i> v. <i>radula</i> 'White Arrow'	6	<i>cymbiformis</i> 'Lo Bing'	16	'Gian-A'	22
<i>attenuata</i> 'Shiricho'	7	<i>cymbiformis</i> var. <i>obtusata</i>		'Giant Panda'	23
<i>attenuata</i> 'White Butterfly'	5	'Chik-chun Mak'	15	'Giga-pulchella'	23
<i>attenuata</i> 'Wide-Band-Nishiki'	6	<i>cymbiformis</i> 'Rose'	15	'Ginga Tetsudō'	23
'Baccata'	7	<i>cymbiformis</i> 'Takaragusa'	16	'Ginrei'	23
<i>badia</i> 'Bacchus'	7	<i>cymbiformis</i> 'Takaragusa-Nishiki'	16	'Ginsekai'	24
<i>badia</i> 'Frosty'	8	<i>cymbiformis</i> 'Yu-Hung Luk'	14	'Gintejō'	24
<i>bayeri</i> 'Zaramado Variegated'	8	'Cynara'	15	'Gipsy Rose'	24
<i>bella</i> 'Aoi Yōsei'	8	'Daiginjoh'	16	'Glass Compto'	24
'Benitei'	8	'David Grisgby'	17	'Glass Emblem'	25
'Bird's Tail'	9	'Debashis-Samarpita'	18	'Gojunotou-Nishiki'	25
'Black Knight'	9	'Debidas'	17	'Golden Drum'	54
'Black Mask'	9	<i>decipiens</i> (Crown Group) 'Crown' ...	17	'Golden Goat'	27
'Blue Haze'	10	<i>dekenahii</i> 'Sanekata's Nishiki'	18	'Golden Tongue'	25
'Bristle Tip'	10	'Delight'	18	'Gothlet'	25
'Brocco'	10	'Diana'	18	'Green Gem'	25

'Green Gyokusen'	26	'Partha'	44	'Yayoi'	65
'Green Ice'	26	'Pearl'	44	'Yayoi Nishiki'	65
'Green Sword'	26	'Pearl of Dew'	45	'Yumendo'	65
'Grey Salt'	26	<i>picta</i> (Dairi Group) 'Aogitsune'	45	'Yushijo'	34
'Hakuginjo'	27	<i>picta</i> 'Chocolate'	45	'Yushijo Nishiki'	34
'Hakuginjoh'	27	<i>picta</i> 'Daisekkei'	45	<i>truncata</i> 'Akakage'	65
'Hakuma'	27	<i>picta</i> 'Dairi'	46	<i>truncata</i> 'Aoikage'	65
'Hakuteijo'	27	<i>picta</i> (Galaxy Group) 'Daisetsu'	46	<i>truncata</i> (Sharaku Group) 'Araiso'	66
'Hakuyokyu-Nishiki'	27	<i>picta</i> (Dali Group) 'Gingitsune'	46	<i>truncata</i> 'Ashibiki'	66
'Harikishan'	28	<i>picta</i> (Galaxy Group) 'Horikawa Pikuta'	46	<i>truncata</i> (Seiryū Group) 'Atsumori'	66
'Hari Mushiro'	28	<i>picta</i> (Moegi Group)		<i>truncata</i> 'Byakuren Gyokusen'	66
'Indira Priodarshini'	28	'Mr. K. Ohkuwa's Silver Green'	47	<i>truncata</i> 'Dainginga Gyokusen'	66
'Jaydip'	30	<i>picta</i> (Royal White Group) 'Meiro'	47	<i>truncata</i> (Sharaku Group) 'Daikoku'	67
'JOY'	29	'Pink Nebula'	48	<i>truncata</i> 'Dai-Sangen'	67
'Joy Bubbles'	29	'Pongo'	48	<i>truncata</i> 'Fantasia'	67
'Kaikatei'	30	'Prodigy'	48	<i>truncata</i> 'Fire Dragon'	68
'Kamen Butōkai'	30	'Protorose'	49	<i>truncata</i> "Green"	26
'Karakusa'	30	'Pulin-Supravha'	49	<i>truncata</i> 'Ginryoku'	68
'Kent's Wonder'	31	<i>pumila</i> 'Dots-n-Streaks'	50	<i>truncata</i> 'Hakujitsumu'	68
'Kouyou'	31	<i>pygmaea</i> 'Fan of Woodstock'	50	<i>truncata</i> 'Hakujō Daiya'	68
'Kuroshima'	31	<i>pygmaea</i> 'Pink Beauty'	47	<i>truncata</i> 'Kōhaku Hige'	69
<i>laeta</i> (Jupiter Group) 'Arowana'	31	<i>pygmaea</i> 'Rosepollux'	50	<i>truncata</i> 'Kouhaku Madara'	69
<i>laeta</i> 'Daikokuten'	32	'Raja'	51	<i>truncata</i> 'Lime Green'	26
<i>laeta</i> (Tokuami Group) 'Chō-ami'	32	'Rasper'	51	<i>truncata</i> 'Ōhkubo's Burukon'	69
<i>laeta</i> 'Jupiter'	32	'Renjaku'	51	<i>truncata</i> 'Pink Scalop'	69
'Lady Lai Kuen'	32	<i>retusa</i> v. <i>acuminata</i> 'White Ghost'	62	<i>truncata</i> (Seiryū Group) 'Seiryū'	70
'Linda-Steve'	33	'Rose Green'	51	<i>truncata</i> 'Syaraku'	70
'Little Cup'	33	'Ruby Star'	52	<i>maughanii</i> (Muraski Group)	
<i>limifolia</i> 'Makiruriden'	34	'Sago Jelly'	52	'Aka-Murasaki'	70
<i>limifolia</i> 'Ruriden Nishiki'	34	'Saikat'	53	<i>maughanii</i> 'Amaterasu'	70
<i>limifolia</i> 'Ruriden-no-Hikari'	34	'Sandra'	54	<i>maughanii</i> 'Asuka'	71
<i>limifolia</i> v. <i>schuldtiana</i> , 'Sekkanjō'	34	'Seiko'	54	<i>maughanii</i> 'Aurora'	71
<i>limifolia</i> 'Sekkanden'	34	'Seiko - Nishiki'	54	<i>maughanii</i> 'Byakuren Manzō'	71
<i>limifolia</i> 'Stripes'	34	'Shadow Dancer'	52	<i>maughanii</i> 'Cinderella'	71
<i>limifolia</i> 'Yushijo'	34	'Shankar'	55	<i>maughanii</i> 'Dainginga Manzō'	72
<i>limifolia</i> 'Yushijo Nishiki'	34	'Shinsekai'	55	<i>maughanii</i> 'Dragon'	72
'Lombard Star'	33	'Shishi Ryu'	52	<i>maughanii</i> 'Genjitsu'	72
'Love Me Once'	35	'Sibashis'	60	<i>maughanii</i> 'Manzo Nishiki'	72
'Lussi'	35	'Sijima'	53	<i>maughanii</i> 'Millennium'	73
'Maboroshi-no-Tou'	35	'Sikinjoh'	55	<i>maughanii</i> 'O Shiragiku'	73
'Maju-E-Mallika'	36	'Silver Bug'	55	<i>maughanii</i> 'Sanekata Henmoku'	73
'Malachite'	36	'Silver Thunder'	56	<i>maughanii</i> 'Ohmurasaki'	73
'Mamata'	36	'Silver Winning'	56	<i>maughanii</i> (Muraski Group) 'O Murasaki'	73
'Mangala'	37	'Simee'	56	<i>maughanii</i> 'Shirotae'	74
<i>margaritifera</i> 'LSD'	38	'Sisinden'	57	<i>maughanii</i> 'Shishigami'	74
<i>marginata</i> 'Kin Orizuru'	37	'Sneha-Neer'	57		
'Marilyn'	37	'Snehanuv'	57		
'Maugan'	37	'Someno'	58		
<i>maxima</i> 'Chō-kyodai Doughnut'	38	'Soumyajit'	58		
<i>maxima</i> 'Cuban Doughnut'	38	'Spetter'	57		
'Meera Ajoy'	38	<i>splendens</i> 'Murasaki-Sikibu'	59		
<i>minima</i> 'Doughnut Fuyu no Seiza'	39	<i>splendens</i> 'Silver King'	58		
<i>mirabilis</i> v. <i>beukmannii</i>		<i>splendens</i> 'Toffee'	58		
'Emerald Giant'	39	× <i>subattenuata</i> 'Kinjoh'	59		
<i>mirabilis</i> ssp. <i>mundula</i> 'Batwings'	39	<i>sucinea</i> 'Benizakura'	59		
<i>mirabilis</i> v. <i>triebneriana</i> 'Creamy Stick'	40	'Three-Cornered Hat'	60		
'Mirror Ball'	39	'Three Sisters'	60		
'Mori-no-Sono'	16	'Toff-O-Lux'	61		
'Morning Dew'	40	<i>translucens</i> ssp. <i>tenera</i> 'Anenome'	61		
'Munna'	40	'Triple B'	61		
<i>mutica</i> 'Drew White'	40	<i>turgida</i> 'Milky Wonder'	62		
<i>mutica</i> 'Lemon Cream'	41	<i>turgida</i> 'Shukuem'	62		
<i>mutica</i> 'Robert Rodin'	41	<i>turgida</i> 'Yellow Crystal'	62		
<i>mutica</i> 'White Widow'	41	'Uzushio'	62		
'Nilotpal'	42	<i>viscosa</i> 'Ryujo Nishiki'	63		
'Nirmal'	42	<i>vitris</i> 'Chandelier'	62		
<i>obtusa</i> 'Emperor'	43	'VIVI-DR'	63		
'Ollason's Pride'	43	'Water Color'	59		
'Oni Hitode'	42	'White Star'	35		
'Pale Peace'	43	'Wonder Park'	63		
<i>parksiana</i> 'Muresame Nishiki'	44	'Whirlpool'	64		

Some Notes on Names

A cultivar's name is made up by adding the cultivar epithet, determined under the provisions of the International Code of Nomenclature for Cultivated Plants (ICNCP), to the scientific name for that cultivar, determined under the provisions of the International Code of Nomenclature” (ICN). In itself, this is quite simple, but in practice it is not quite so.

The ICN lays down the rules for naming a species, but it does not lay down the rules for determining exactly what a species is - a controversial subject in itself. Thus each author determines his own species definition (concept if you wish) and then, in the vast majority of cases, names them under the provisions of the ICN. In the case of haworthias, Bruce Bayer rejects the ICN. Notwithstanding this, he occasionally produces a list of species which do comply with the ICN, but more frequently he produces tripartite names (*Haworthia retusa 'turgida'*) under his own system, which do not comply with the ICN. Only names published under the ICN are acceptable for inclusion in cultivar names.

Given that authors have different species definitions, different species names, all valid under the ICN, can be available for some species. To which do you add the cultivar epithet? The choice is yours. In practice Dr Hayashi's species find popular acceptance in the Far East which is not surprising given that he lives in Japan. Ingo Breuer's species (Germany) are popular in Europe and elsewhere and Bruce Bayer's species (South Africa), which have been published under the ICN, have followings in a number of countries, but his names not in accordance with the ICN are just ignored.

It is, of course, possible for an editor to decide which author's species classification to accept for cultivar names, but, given that different species names not only find favour with different people world wide and that regional followings are significant, it would be entirely inappropriate for an editor of a book intended for world markets to favour any one classification and offensive to many people in different parts of the world if he did. I have, therefore adopted the practice of using the species names used by the authors of the cultivar names when published. You are at liberty to substitute species names from other classification for the ones used by the authors of their cultivar names if you wish. For haworthias, the subject of this book, the cultivar epithets will remain the same whoever's species names you adopt. It is just the scientific name which changes.

Under no circumstances should species epithets be added to Bruce Bayer's tripartite species names as they do not comply with the ICN. These should be regarded as Bruce's proposals for the ICN to be replaced with his alternative and different suggested system. Division III of the ICN details the provisions for amending the ICN, but I know of no evidence to suggest that Bruce Bayer has attempted to persuade the scientific community to adopt his system and change the provisions of the ICN through the appropriate channels. We can all, therefore, accept that the ICN remains the reference work for naming species and the ICNCP for naming cultivars - both to be followed by all who wish to be taken seriously and certainly by those who name cultivars.

The purpose of the ICN is to provide an acceptable standard world wide for naming species. It succeeds in promoting a standard naming system for species but, in the absence of a universally accepted species definition, it fails to promote one universally accepted list of species names. This we have to live with, at least for the time being, until a universal acceptance of a common standard surfaces (if ever).

Not only does the ICNCP provides rules for correctly naming cultivars, but also for how a cultivar is defined. This contrast with the ICN, which provides only rules for correctly publishing species names, but none for defining a species.

Thus, the ICNCP appears to be better placed to bring about order in names. Alas that is not so in practice. The cultivar fraternity lacks cohesion, being fragmented throughout the world. It contains many serious individual amateurs and many nurseries who experiment in the production of hybrids and cultivars. The more that can be produced the greater the variety of cultivars that can be offered for sale. The cultivar fraternity does contain scientists, but their concentration on species largely results in the ICNCP being ignored. This is unfortunate because the ICNCP provides, under precise circumstances, for species names to be used as cultivar group names or cultivar epithets as an alternative to passing into obscurity by being regarded as synonyms of a species or by retaining some controversial identity as a variety or other species subgroup. What makes matters even worse is that there is no central authority for some genera (one is *Haworthia*), which registers cultivar names that can be consulted by individuals and organisations in order to avoid using existing cultivars names for new cultivars and to ensure names are published in accordance with the ICNCP.

The reality, at least for haworthias, is that cultivar names are being published all over the world in different languages, in a wide variety of publication and on many web sites, some in accordance with the ICNCP and some not. There is no central record of cultivars, though trade in haworthias is international requiring only phytosanitary certificates, not CITES documentation. Unregulated confusion seems to be standard. In the absence of any apparent efforts to overcome this, I set up the Cultivar Project, the object of which is to collect as many cultivar names world wide as possible for the succulent genera of the Asphodelaceae, locate where the names were published and check that the publications are in accordance with the ICNCP. Dr Hayashi is taking similar action for Japanese cultivars. We have both found that it is time-consuming, frustrating work and sometimes impossible to trace the original publications for haworthias.

An interesting problem, which has been highlighted, is the multiple names given to some Japanese cultivars. Japanese cultivars have found their way into many parts of the world, but, as it has appeared that they have not been given names under the ICNCP, their new owners have given them cultivar names. In some cases the original Japanese publication of a Japanese name has been traced making subsequent names duplicates and invalid. In other cases the original publications have not been traced, but their propagators have been and it has been established that he/she has given the cultivar a preferred name. Under the ICNCP a cultivar cannot be given names contrary to the propagator's wishes, so names given by foreigners are invalid.

In cooperation with Japanese nurseries, Dr Hayashi has already published a provisional list of Japanese cultivar names. He and his colleagues continue to seek out old publications, including nursery catalogues and sales lists, which include haworthias, and to verify that they have been published correctly. He expects to produce a book on Japanese cultivars in due course.

Progress has also been slow and difficult with the Cultivar Project, but Volume 1, Hybrids and Cultivars of the Succulent Asphodelaceae, covering aloes, astrolobas, bulbines, gasterias and nothogenera has already been published

In Volume 2, this volume, haworthias are dealt with.

Volume 3 is in preparation, but it has not yet been completed. It will contain information about cultivars of the different genera obtained subsequent to the publication of volumes 1 & 2 .

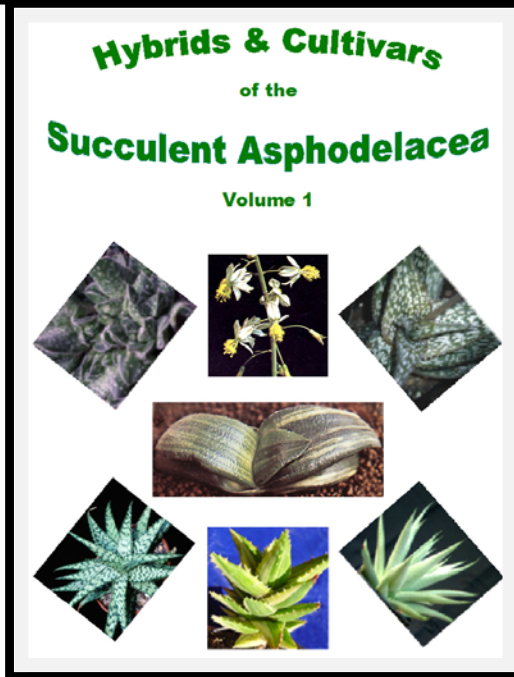
The editor, page 2, < hmays@freenetname.co.uk > would appreciate assistance to trace original cultivar de-

scriptions world wide from any source including nurseries, botanical gardens and individuals, particularly the offer of photographs and copies of old publications. Please do not hesitate to contact him with whatever information you may have. It will be most welcome and will help to produce lists and information about cultivars of use to any International Registration Authority set up in the future.

80 A4 gloss pages

over 200 colour photographs

publication reference
parentage
description
colour photograph
for each cultivar.



RRP £29.50

Alsterworthia
International
member's price
£19.00
+
Postage
Europe £3.00
Others £ 4.50

Contents.

Editorial Observations.....	2-3
The Creation & Naming of Cultivars.....	4-6
Validly Published Nothogenera Names.....	5
Gene Flow For Nothogenera	6
Propagation & Cultivation	7-18
Book offer - International Code of Nomenclature for Cultivated Plants*	18
Aloe cultivars.....	19-40
Hybrids with formula names.....	41-42
Astroloba cultivar	43
Bulbine cultivars	44
Nothogenera cultivars.....	45-59
Gasteria cultivars	60-74
Plant index	75-76
Acknowledgement	77
Alsterworthia International.	78-79
Haworthia Study.	80

Payment may be made by PayPal to < alsterworthia@freenetname.co.uk >
Please add 4% to compensate Alsterworthia International for the deduction made by PayPal

***Please note that the
International Code of Nomenclature for Cultivated Plants
may now be downloaded free of charge from
http://www.actahot.org/chronica/pdf/sh_10.pdf**



Alsterworthia International

Policy - to promote and facilitate the publication of information for the Alooiidae (Asphodelaceae) without favour. The main genera covered are Haworthia, Gasteria, Aloe, related smaller genera and Nothogenera.

Both species and cultivars are embraced.

Journal - March, July and November, free to members.

Seed list - Jöel Lodé's extensive seed list for Cacti and Other Succulents is available on line.

Special Issues - published from time to time. These are available from selected book dealers. Members are entitled to discounts on Special Issues (one per member), provided they are ordered direct from Alsterworthia International.

Books - a variety of books are available including those published by Umdaus Press, South Africa. Members are entitled to a discount on books ordered from Alsterworthia International.

Haworthia Study - Journal of the Japanese Haworthia Society. Available to both members and non-members at favourable prices - please see page 79.

Annual subscription for Alsterworthia International
 UK = £12, EU = £14, rest of the world £17 ordinary mail, £19 premium mail.

Methods of Payment

World wide by PayPal, the money transmission service available to everyone. The quickest payment method. Please add 4% to cover PayPal deductions.

Cheque/bank draft for British pounds drawn on a UK bank.

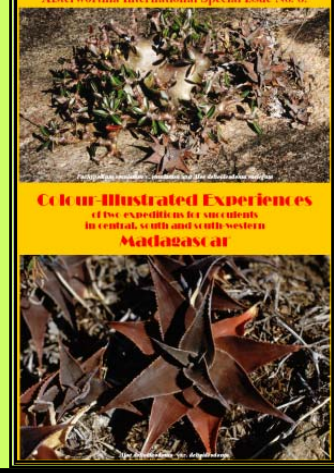
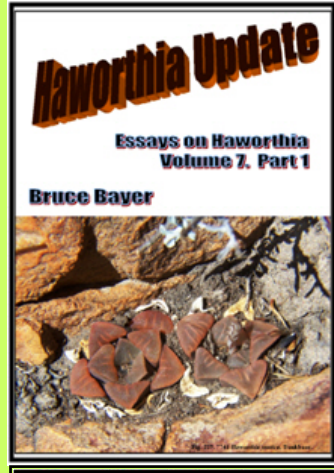
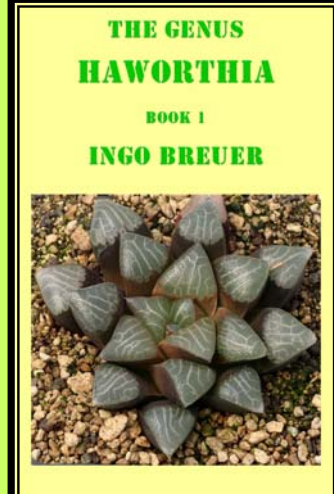
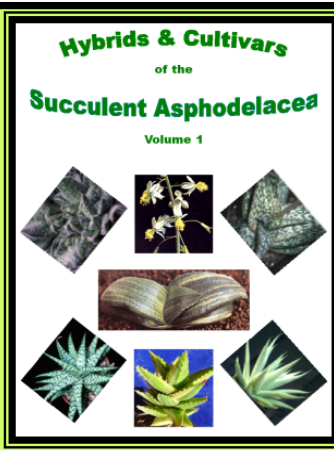
Cheque in local currency drawn on a bank in the country in which an Alsterworthia International Representative lives.

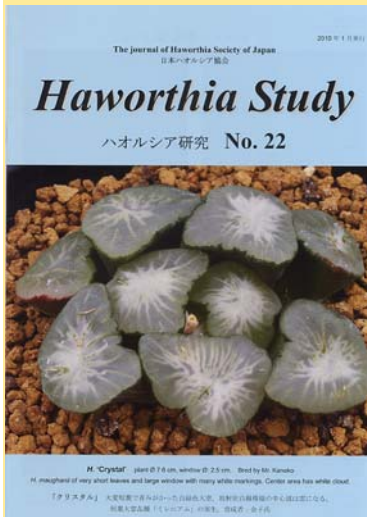
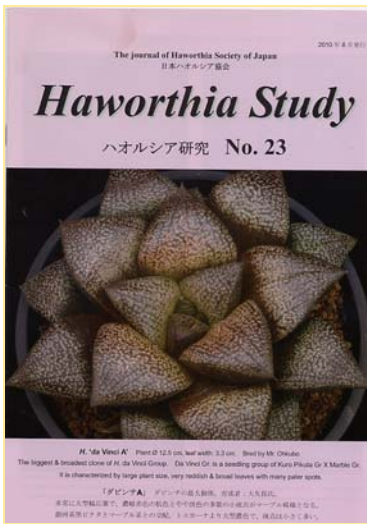
Alsterworthia International has 15 representatives.

For further information please contact the editor

Harry Mays,
 Woodsleigh, Moss Lane, St Michaels on Wyre,
 Preston, PR3 0TY, UK

hmays@freenetname.co.uk
 www.cactusmall.com/alsterworthia/index.html





Haworthia Study. Journal of the Japanese Haworthia Society.

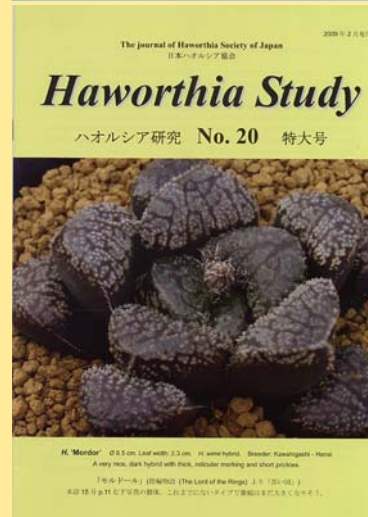
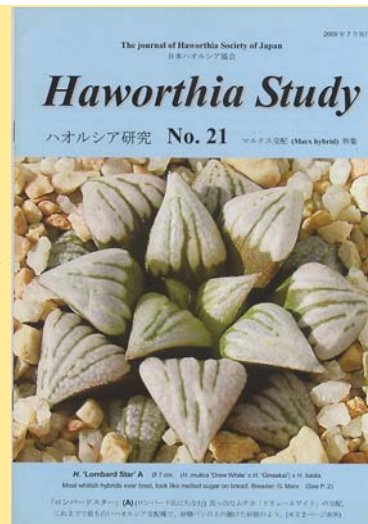
Published in Japanese and English in June and November. The journals, two per year, are available world wide through Alsterworthia International at an annual subscription of £20.00 per year (volume) plus postage for all years.

Current year subscriptions.

1. UK Alsterworthia International members.
£20.00 + £2.00 p&p = £22.00.
2. Rest of the World Alsterworthia International members.
£20.00 + £4.50 p&p = £24.50.
3. UK non-Alsterworthia International members.
£20.00 + £4.00 p&p = £24.00.
4. Rest of the world non-Alsterworthia International members.
£20.00 + £6.00 p&p = £26.00.

The journals have extensive coverage of outstanding Japanese hybrids and cultivars, contributions on Haworthia classification by Dr. Hayashi and other Haworthia articles.

Please note that, in order to keep down costs, current year Haworthia Study are sent to Harry Mays in bulk and distributed by him to both members and non-Alsterworthia International members world wide.



Back issues are

available for £20 per year
(volume) plus postage direct
from Japan.

Postage will be quoted when an order is received
and
despatched when payment has been made.

Methods of payment.

5. By PayPal in Japanese Yen for back issues only. Further details will be advised when back issue orders are placed with Harry Mays.

All enquiries should be directed to:
Harry Mays
Woodsleigh, Moss Lane,
St Michaels on Wyre,
Preston, PR3 0TY,
UK

hmays@freenetname.co.uk

Haworthia Study
No. 23 (2010 8)

関東系銘品紹介 East Japan Cultivars By Mr. Tsuchiya
関東の趣味家が育成・選抜した銘品。写真と解説は土屋氏。

①ブルーダイヤモンド ダルマ葉に複雑な太線が入る。今までにない葉自体。作・川東氏、育成：池田氏。H. 'Blue Diamond' Rough, roundish leaves with complicated dark lines. Bred by Mr. Ikeda.

②ホワイトフォックス 丸葉で長い毛が全体を覆う。H. pygmaea x venusta 選抜。作・命名・育成：土屋 H. 'White Fox' Long white hairs cover whole turgid leaves. Breeder: Mr. Tsuchiya.

③クリスタルシュガー 全体がガラス状の表面も綺麗な個体。橘貴妃や阿修羅と兄弟。作・育成：明賀氏。H. 'Crystal Sugar' A clone of round leaves covered with crystal papillae. Bred by Mr. Myoga.

④大黒天 亀甲状葉脈が顕著な H. tessellata x koelmannorum の紫色個体。作：土屋、育成：明賀氏。H. 'Daikokuten' A dark, purplish clone with tessellate markings. Bred by Mr. Tsuchiya & Myoga.

⑤毘沙門天 葉面のつぶつぶが顕著な大黒天の紫色兄弟。作：土屋、育成：明賀氏。H. 'Bishamonten' A purplish brother of 'Daikokuten' with rough tubercles. Bred by Mr. Tsuchiya & Myoga.



John Trager & the inflorescence of *Haworthia* 'Three-Cornered Hat'