

ALSTERWORTHIA INTERNATIONAL

THE SUCCULENT ASPHODELACEAE JOURNAL



Gasteria 'Aramatsu' monstrose

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TWENTY FIVE YEARS OF HAWORTHIA STUDY

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My first introduction to plants was with orchids and bromeliads, but I soon became very interested in other groups of plants such as succulents, caudiciforms, cycads and bulbs. My first real introduction to *Haworthia* was from my very good friend Bob Foster. At this time Bob was editor of the Cactus and Succulent Journal along with Charles Glass. They also owned Abbey Garden Nursery in Reseda, California. I greatly admired Bob and his wonderful collection of plants but, at that time, I could not understand why he wanted to grow *Haworthia*. I was more interested in large caudiciforms and felt that plants like *Haworthia* were pretty low class. I mentioned this to Bob and he showed me how *Haworthia* plants were infinitely variable and I developed an interest in them that soon became an obsession.

I soon made contact with other *Haworthia* collectors in the USA and started to build up a large collection. Soon these small plants took up a very large space, but this was not a problem because they do not require a greenhouse in the part of Southern California where I live. I can still remember how excited I was to receive plants in the mail from collectors such as Mary Ann Heacock and Jay Dodson. Mary Ann Heacock was receiving many plants from Bruce Bayer in South Africa and Jay Dodson was in charge of the ISI (International Succulent Institute). As my educational background is in evolutionary biology I wanted collection locality data with all my plants and this was provided with the plants I received from these two people. I also received plants from other notable collectors at that time such as Ann Shein, Vivian Doney and Jack Catlin. It is also notable that at this time, one of my customers was Bob Kent whom Steven Hammer wrote so much about in an earlier issue of *Haworthia Study*. Bob was just starting his vast collection at this time and every time he came to see me, he would also bring his notebook to see to it that he would not purchase something that he already had. Louis Burks, who owned a nursery specializing in *Haworthia* and did live in California at that time, was also one of my earlier customers.

I started corresponding with Bruce Bayer in South Africa and he was very kind and helpful to me. About this time, I became very good friends with Frank Horwood who had come over from England to work at Abbey Garden Nursery. Frank had been to Africa several times before and soon we made plans to go to Africa together. At this time, which was about 1980, I not only had not been out of the USA, I had never even been on a plane. Needless to say, this was all very exciting for me.

We meet Bruce Bayer and went to see *Haworthia granulata* and the *Haworthia* collection at the Karoo Garden in Worcester. At that time Bruce was the

curator there and I was able to see all the plants in his collection. As many of these species were not in cultivation in the USA at that time this was all very interesting. Frank and I went further east a few days later and found *Haworthia habdomadis*, *maughanii* and *truncata*.

I returned to South Africa by myself the following year and stayed with Bruce for about a week. He took me to the habitat of many *Haworthia* species and his son took me to several more. Once we were crawling under some very thick brush to find *Haworthia parksiana* and I found myself nose to nose with a very large dog. I tried to be quiet and slowly started to crawl backwards. I think that I was very lucky because the dog did not follow me. So, *Haworthia parksiana* is one species that I have not seen in habitat.

The following year, I returned to South Africa again, and again I stayed with Bruce Bayer for about a week. Bruce again, very kindly helped me with localities and many other things. The plants which I was receiving from South Africa formed the foundation of the large *Haworthia* collection that I was building up. Bruce came to the USA and helped me with the proper identification of the plants in my collection. Bruce helped me in many other ways and he and I continued to correspond for several years.

When I left Bruce, I went north to Pretoria and the Botanical Research Institute. There I saw David Hardy who was the curator of the succulent collection. He very kindly let me take cuttings for many of their documented *Haworthia* plants. Dave and his wife Pat became very good friends of mine and, sadly, both of them have now died.

The following year, I returned to South Africa again and spent a few weeks with some other very good friends of mine, Bruce and Joan Bursey. We saw many of the *Haworthia* species of the East Cape in habitat. To me, the most interesting of these were *H. sordida* at Kirkwood where there is a very interesting form of *Encephalartos lehmanii* and *H. emelyae* at Zebra. Here the plants are large and the same colour as the reddish soil. This and the fact that the plants grow flush to the ground make them difficult to find. Bruce also took me to see Col. Scott and his haworthias. If you are reading this, then I am sure that you know there was a lot of dissension between Bruce Bayer and Col. Scott. When Col. Scott wrote his book on *Haworthia*, I was asked to write a review for the Journal of the Cactus and Succulent Society of America. My review was not very favourable and I was asked to change it. When I said I would not do this, the editors of the Journal had someone else write a more favourable review and then both reviews were published together.

I then went to see some very good friends in Pretoria, Emdan and Shirley Pienaar. I have known



Gasteria 'Gagyu'



Haworthia picta hybrid from Japan.



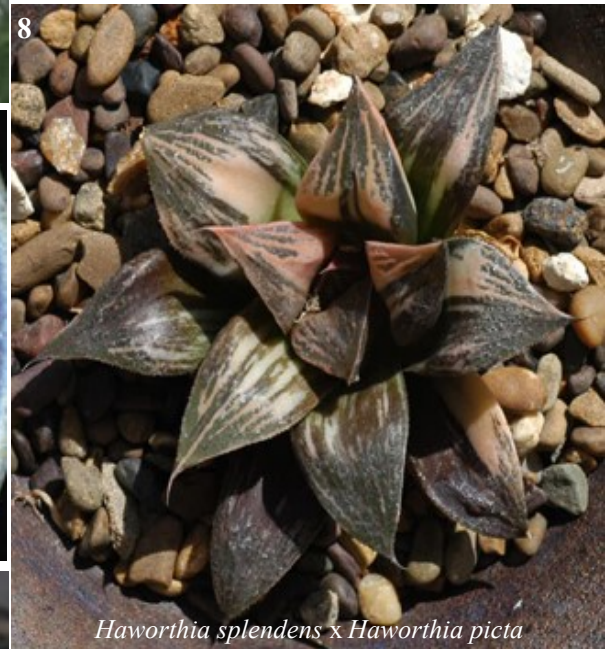
Gasteria nitida v. *armstrongii* 'Yellow Cow'



Haworthia bayeri 'Zaramado Variegated'



Gasteria armstrongii variegated ARM10



Haworthia splendens x *Haworthia picta*



Gasteria armstrongii 'Pearl'



Gasteria pillansii variegated



Gasteria armstrongii collected plant

them both for many years and they have been very good friends. Sadly Emden and Bruce Bursley died not too long after this visit with them. Emden and I went to see Doug McMurtery and then we went to see *Haworthia mcmurtryi* in habitat. The next day we went to see *Haworthia koelmaniorum* in habitat. There were reports of a new species of *Haworthia* growing quite a bit further north and Emden and I went to find it. We looked all day but did not find a thing.

About this time (1983/1984) I started doing a series of articles for the Journal of the Cactus and Succulent Society of America. These were called Comments on the Genus *Haworthia* and talked about *H. sordida*, *arachnoidea*, *habdomadis* and *emelyae/comptoniana*. After these four instalments, I stopped because of lack of time. I also started to work on propagating *Haworthia* from tissue culture which I found worked very well. The main problem was that species that propagated well by other vegetative methods did so with tissue culture and species that did not propagate well with other vegetative methods did not propagate very well with tissue culture either.

About this time, I became (or realized that I was) very interested in art and had a number of original paintings of *Haworthia* done for me. Several of these were published on the cover of, or in, the US Journal. I am still very interested in art and have many botanical and other natural history paintings in my collections from world famous botanical artists such as Cythna Letty, Barbara Jeppe, Elaphie Ward, Gil Condy, Rita Weber, etc.

After this period, I became much more interested in other plants such as cycads, caudiciforms and other succulents, rare bulbs, orchids, etc.

I continued to travel in search of rare and interesting plants and eventually made twelve trips to Africa, many to South and Central America, as well as many to Southern Mexico. Just recently, I went to Madagascar and stayed there for a month.

About the year 2002, I became friends with Steven Hammer and with his help became more and more interested in developing a higher level of skill in plant cultivation and propagation as well as more attractive ways to present plants. Steven and I discussed many aspects of plant cultivation and propagation and I am very grateful for all his kind and continuing friendship and assistance. I also heard a lecture on *Haworthia* Cultivation which was given by Bob Kent at one of the CSSA conventions. I had presented a lecture on Winter Rainfall Plants of South Africa and Namibia at the previous CSSA Convention and had also attended three of the previous CSSA Conventions. This lecture that Bob gave really got me thinking on new aspects of plant cultivation, especially that of *Haworthia*. After this, I went to see Bob and his collection again. Bob

was not only very helpful with his suggestions but, seeing his collection, demonstrated that he had achieved a great level of skill in growing these plants.

I have been to Germany many times and a few years ago, I visited Ingo Breuer who is the author of *The World of Haworthias* and *Notes on Haworthia*. Ingo was also very kind with his time and in showing me his plants and answering my questions.

Now, my main interest in *Haworthia* as well as *Gasteria* and small *Agave* plants is in the selections and hybrids made by Japanese growers. The horticultural standards in Japan are very high as evidenced by, among other things, the quality of plants in the Japan Grand Prix International Orchid Festival. Japanese growers have developed a number of very fine quality *Haworthia* plants especially those of *H. truncata*, *maughanii*, *picta* and *correcta*. They have also developed a number of very fine *Gasteria* and miniature *Agave* selections as well as many non-succulent species such as *Rhodia japonica* and various orchids. It never ceases to amaze me how many wonderful plants they turn out. I have had the privilege of being visited by many Japanese nurserymen including Dr. Kobayashi. Earlier this year, I presented two lectures at the CSSA Convention in Phoenix Arizona. One of my presentations featured Japanese succulent plants. I continue to increase my enjoyment of plants with the help and inspiration of all these very talented people.

Figs. 2-17, pages 3 & 5, show a number of the plants in my collection with the names at present applied to them in so far as is known. Some have not been given cultivar names whilst the names of others have not been checked for want of reliable information as to the location of the original descriptions.

Editors note. To be continued.
Photographs by the author.

***Gasteria* 'Aramatsu' Monstrose**

The front cover photograph was kindly provided by Vincenzo, Italy. It is unusual and attractive but we have not been able to verify the name. We are not even certain where it originated. Vincenzo says that propagation is very slow - an occasional offset or a leaf cutting is a possibility. If anyone has come across this cultivar and can shed any light on its ancestry or where the name was published do please let the editor know - hmays@freenetname.co.uk



Aloes with short stems in Botswana

Bruce J. Hargreaves

Principal Curator, National Museum of Botswana.

After describing the three tree aloes of Botswana, it is only logical to move on to the aloes with shorter stems. There are three species alleged to be in Botswana.

Aloe arborescens Mill.

Setshogo 2005 lists this species for Botswana with a question mark, even though he lists Pretoria (PRE) as having a specimen. Upon checking with Pretoria, we found that they do not have a specimen of this species from Botswana. We were puzzled as to the source of this anomaly until we found the entry for this species in the Flora of Southern Africa (Glen & Hardy, 2000). It does, indeed, show a spot in Botswana on its distribution map (along with 92 spots elsewhere) but only five localities are listed (and these do not include Botswana). At the present time we know of no wild population here, although it is commonly found in gardens. It would seem too dry as most of the plants I have seen in the wild (South Africa, Zimbabwe and Malawi) are in moist habitats. It is also reported from Mozambique.

Aloe arborescens is a many branched shrub up to two

or more meters tall. The leaves are clustered at the ends of branches. The red or pink (sometimes turning yellow) flowers come in conical racemes. It blooms from February through June.

Aloe cameronii Hemsley

There is no published record of this species in Botswana. It is, however, cultivated. Specimens were growing in the museum garden when I started work in 1989. I asked where they had come from and was told Mmankgodi, a village south west of Gaborone. I have seen no plants of this there.

I have seen plants of this in Zimbabwe and Malawi and the environment they grow in is much more like Botswana than that of *Aloe arborescens*. It is also found in Mozambique and Zambia. It is a variable species. Generally it is a shrub with shiny leaves which turn bronze-red in the dry season. Some plants are found with just a single stem.

The glossy red flowers are found in racemes in 2 to 3 branched inflorescences. Variety *dedzana* Reynolds of Malawi is said to have longer and narrower racemes. It is apparently absent from the wild where it was last seen in 1980, but is common in cultivation (Msekandiana & Mlangeni, 2002). Variety *bondana* Reynolds is found in Zimbabwe and has yellow to orange flowers which are shorter than typical ones.

Aloe christianii Reynolds

This species is also not recorded in any literature for Botswana. It has, however, been collected at Mpan-damatenga in the north east (Hargreaves 6486, 19 June 1991). It was recollected there in 2003 by Daniel Mafokate and Diphoteng Menyatso. This locality is very close to the Zimbabwe border and the species is widespread in grasslands of Zimbabwe, Mozambique, Zambia, Malawi, Tanzania, Angola and the DRC.

This species usually has a single head and a stem which may be up to a meter high, but is usually shorter. The leaves are bluish-green and the flowers are pinkish and arranged in long cylinders. No local names or uses are recorded for Botswana, but Lane (2004) reports the names Kapingaminga and Pikwe in Malawi and says the stem is burnt and eaten for STDs.

References

- Glen, H.F. & D.S. Hardy 2000. "Aloes" in "Flora of Southern Africa" 5(1) fascicle 1 (first part), NBI, Pretoria.
Msekandiana, G. & E. Mlangeni 2002. "Malawi" in Southern African Plant Red Data Lists, J. Golding ed., SABONET Report 14.
Setshogo, M. 2005. "Preliminary Checklist of the Plants of Botswana", SABONET Report 37.
Lane, S. 2004. The Aloes of Malawi, Umdaus Press, Hatfield, South Africa.

Photographs by the author.



Aloe sp. cf. *A. cameronii*, Manyana, Botswana (just S of Mmankgodi), 23 April 2006.



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Front cover

Haworthia Update

Essays on Haworthia
Volume 3. Part 1.

Bruce Bayer



Haworthia mirabilis MBB7388 Die Kap East.

Haworthia Update Volume 3 (Parts 1 & 2) Printing about April, 2007

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Back cover



Haworthia W Goudmyn MBB6516.2. F92.



Aloe 'Hardy's Dream' Cultivar nova.

Harry Mays & John Trager.

In "Succulents & Xerophytic Plants of Madagascar" Werner Rauh writes "*Aloe deltoideodonta* is a very polymorphic species....." & "We found an *Aloe* in southern Madagascar, about 30km northeast of Taolanaro which is similar to *A. deltoideodonta* but has larger rosettes and white spotted leaves. It grows in dense xerophytic bush. We call the plant *Aloe deltoideodonta* cv. *Variegata*." The accompanying photograph showed a plant with dark-green leaves and white markings of H and oblong form. This name is invalid under the International Code of Nomenclature for Cultivated Plants.

In 1996 International Succulent Introductions distributed rooted cuttings of an *Aloe* collected by David Hardy near Taolanaro (Ft. Dauphin) Madagascar under the name *Aloe deltoideodonta* 'Variegata', ISI 1996-26 (Fig. 27). This too is invalid.

In The "Illustrated Handbook of Succulent Plants Monocotyledons" *Aloe deltoideodonta* subfa. *variegata* Boiteau ex H. Jacobsen is recorded as nom. inval. and included under *Aloe imalotensis*.

This is by no means the whole story of *Aloe imalotensis* and its varieties, but it is sufficient for our purposes. The *Aloe* collected by Hardy is different as Rauh observed and it has been brought into cultivation and propagated vegetatively. It needs a cultivar name. We have chosen 'Hardy's Dream' after the name of the collector of the ISI distributions and a vague reference to its then inclusion with *Aloe deltoideodonta*. We opt for neither species name at the moment because of uncertainty of the species, but, if you wish to opt for one or the other of the above species names, the cultivar name will still be valid with the insertion of the species name!

Aloe 'Hardy's Dream' has dark-green leaves heavily-spotted with both H and oblong white-markings. It offsets freely. One under stress (lack of water, high temperature) may well have a more

Fig. 27. John Trager. Fig. 28. Harry Mays.

closed rosette but one grown with consideration will have an open rosette. Propagation is by offsets.



Aloe 'Hardy's Dream' ISI 1996-26



Aloe 'Hardy's Dream' growing SW of Tolaniaro

Haworthia 'Sandra' Cultivar Nova.

Cok Grootcholten

Haworthia 'Sandra', fig. 29, is a selected clone from the hybrid [*Haworthia magnifica* v. *major* (Garcia Pass) x *Haworthia pygmaea* (crystalline form from Klein Brack)] x [*Haworthia truncata* x *Haworthia maughanii* (Oudtshoorn)].

It has a compact rosette, chunky leaves, rounded, dark green with shiny-white tubercles and coalescing tubercles. Leaf margins and keels are lined white. The margins have small teeth. Propagation is by leaf cuttings, as it offsets rarely.

From 1994 I sold this cultivar as a hybrid, but in 1996 I listed it as *Haworthia* 'Sandra' after my eldest daughter. It is now being named in accordance with the ICNCP in preparation for the forthcoming *Alsterworthia* International Special Issue on cultivars.



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2763. Aloe ankabarensis JL79 (also 50/500 seeds) NEW SPECIES !

2764. Aloe arborescens cv. JL968

2765. Aloe aristata JL82 hardy to -10°C

2766. Aloe asperifolia AJ (Khorixas, Namibia)#

2767. Aloe asperifolia AJ (Outjo, Namibia)# (also 50 seeds)

2768. NEW! Aloe austroarabica J.Miller (Wadi Muraba, Saudi Arabia)#

2769. Aloe bakeri JL84 (also 50 seeds)

2770. Aloe bellatula JL85+PR CITES1 (récolté en serre/artificially propagated) (also 50 seeds)

2771. NEW! Aloe betsileensis J.Miller (E. Ihosy, Madagascar)#

2772. Aloe branddraaiensis AJ (Branddraai, Transvaal)# (also 50 seeds)

2773. Aloe brevifolia JL87 (also 50/500 seeds)

2774. Aloe brevifolia v. depressa JL934 (also 50 seeds)

2775. Aloe broomii COR (also 50 seeds)

2776. Aloe buhrii KV+COR (also 50/500 seeds)

2777. Aloe cameronii v. dedzana AJ (also 50/500 seeds)

2778. Aloe capitata PR

2779. Aloe capitata v. gneissicola COR (also 50 seeds)

2780. Aloe capitata v. quartzitica JL974

2781. Aloe castanea GC (also 50 seeds)

2782. Aloe chabaudii JL962+JCD (also 50/500 seeds)

2783. Aloe ciliaris GC+PR (also 50 seeds)

2784. Aloe claviflora REY (South Africa)#+PR (also 50 seeds)

2785. Aloe commixta JL DSCF4143 (ex Worcester)#

2786. Aloe comosa KV (also 50 seeds)

2787. Aloe comptonii JL91+BUG (also 50/500 seeds)

2788. Aloe confusa JL83

2789. Aloe conifera JL738

2790. Aloe cremnophila JL93 (also 50/500 seeds)

2791. Aloe cryptopoda JCD

2792. Aloe X delaetii JL95 (also 50/500 seeds)

2793. Aloe deltoideodonta JAA

2794. Aloe deltoideodonta v. candicans JCD

2795. Aloe desertii JL98

2796. Aloe dhufarensis COR

2797. Aloe dichotoma JAA228 (Upington) +REY+KV (SWA)#

2798. Aloe dichotoma JAA453 (Gamsberg Crater, RSA)#

2799. Aloe distans JL767 (also 50 seeds)

2800. Aloe divaricata JAA734 (N. Tular, Madagascar)#

2801. Aloe dumetorum JL100 (Kenya)# (also 50/500 seeds)

2802. Aloe dyeri JCD ex AJ98

2803. Aloe elegans JCD

2804. Aloe ellenbeckii x greatheadii JAA

2805. NEW! Aloe erythrophylla J.Miller (S. Col d'Itremo, Madagascar)#

2806. Aloe falcata KV

2807. Aloe ferox KHE+MB (also 50/500 seeds)

2808. Aloe ferox JAA269 (near Stormulei, RSA)#

2809. Aloe fosteri JL106 (also 50/500 seeds)

2810. Aloe gariensis JL3309 (Umdaus, RSA)# (also 50 seeds)

2811. Aloe gariensis REY+PR (Orange River, South Africa)# (also 50 seeds)

2812. Aloe gariensis JAA249 (Beauvallon, Richtersveld)#

2813. Aloe gariensis JAA608 (Warmbad, Namibia)#

2814. Aloe globuligemma JCD+KHE (also 50/500 seeds)

2815. Aloe graminicola exNakuru JL83/1 (caespitose, compact (Kenya)# (also 50/500 seeds) introduction Joël Lodé

2816. Aloe grandidentata JL110 et al. (also 50/500 seeds)

2817. Aloe greatheadii PR+JAA (also 50 seeds)

2818. Aloe greenii JL111 (also 50 seeds)

2819. Aloe helenae TIN+JCD CITES 1 (also 50 seeds)

2820. Aloe hereroensis JL101 (also 50/500 seeds)

2821. Aloe hereroensis JAA227 (150 km E. Upington)#

2822. Aloe hereroensis AJ (Zarishoogte, Namibia)# (also 50 seeds)

2823. Aloe humilis JL113+COR (also 50 seeds)

2824. Aloe imalotensis COR (also 50 seeds)

2825. Aloe jucunda JL114+GX (also 50 seeds)

2826. †Aloe juvenna (=sugarrosa) JL115

2827. Aloe karasbergensis AG+COR (also 50 seeds)

2828. Aloe khamiesensis JL3114+JAA614 (Carolusberg, RSA)# (also 50/500 seeds)

2829. Aloe khamiesensis JL3800 (Okiep, RSA)# (also 50 seeds)

2830. Aloe khamiesensis JL3942 (S. Steinkopf, RSA)# (also 50/500 seeds)

2831. Aloe kilifiensis Lavr.12298 (Kilifi, Kenya)# (also 50

- seeds)
2832. Aloe krapohlina BUG+COR (in-situ, RSA)# (also 50/500 seeds)
2833. Aloe krapohlina JAA569 (E. Lloingras, RSA)#
2834. Aloe laeta COR (also 50/500 seeds)
2835. Aloe littoralis AJ (S. Etosha, Namibia)# (also 50/500 seeds)
2836. NEW! †Aloe lineada v. muirii JL725 (PV944)#
2837. Aloe longistyla COR (also 50 seeds)
2838. NEW! Aloe macrosiphon J. Miller
2839. Aloe maculata AJ (RSA)# (also 50/500 seeds)
2840. Aloe marlothii KHE (clone magnifique fl. oranges) (also 100/1000/10.000 seeds)
2841. Aloe marlothii JCD (also 50 seeds)
2842. Aloe marlothii JL119 (also 50 seeds)
2843. Aloe melanacantha REY (South Africa)# (also 50/500 seeds)
2844. Aloe melanacantha JL3808 (Rd Springbok-Kleinsee, RSA)# (also 50 seeds)
2845. Aloe melanacantha JL3839 (N. Kommagas, RSA)# (also 50 seeds)
2846. Aloe microstigma JL121 et al. (also 50/500 seeds)
2847. Aloe microstigma JAA266+549 (Worcester, RSA)#
2848. Aloe microstigma JAA648 (Karooport, RSA)# (also 50/500 seeds)
2849. Aloe millotii JL122+JCD (also 50 seeds)
2850. †Aloe mubendiensis JL124
2851. Aloe mudenensis AJ (Muden, Natal, RSA)# (also 50/500 seeds)
2852. NEW! Aloe munchii J. Miller
2853. NEW! Aloe musapana J. Miller
2854. Aloe mutabilis PR
2855. NEW! †Aloe myriacantha JAA
2856. Aloe ngobitensis GC
2857. Aloe niehburiana JL127 (Al Barh, Yemen)# +JAA (also 50 seeds)
2858. Aloe ortholopha COR (Zimbabwe) (also 50/500 seeds)
2859. Aloe parvibracteata AJ
2860. Aloe parvula JL5900 et al. CITES 1 (also 50 seeds)
2861. Aloe peglerae DS (also 50/500 seeds)
2862. NEW! Aloe pictifolia J. Miller
2863. Aloe plicatilis COR (also 50/500 seeds)
2864. Aloe pluridens COR (also 50/500 seeds)
2865. NEW! Aloe pratensis J. Miller
2866. Aloe pretoriensis COR
2867. Aloe rauhii JL132 (Madagascar)# CITES1 (récolté en serre/artificially propagated) (also 50/500 seeds)
2868. Aloe reynoldsii JL999 (also 50/500 seeds)
2869. †Aloe cf. rigens Lavr.232602 (N. Somalia)#
2870. Aloe aff. rubroviolacea ? NK
2871. Aloe sabaea PEL+JL134 (Karia, Yemen)# (also 50 seeds)
2872. Aloe saponaria JL136 et al. (also 50 seeds)
2873. †Aloe scobinifolia Lavr. (Erigavo, Somalia)#
2874. Aloe secundiflora JL125 (grey Aloe, superb spines) (Namanga, Kenya)# (also 50/500 seeds) RARE Introduction in 1983 by J. Lodé
2875. Aloe sinkatana JL137+PR (petit Aloe à jolies f. jaunes) (also 50/500 seeds)
2876. Aloe somaliensis JL975
2877. Aloe spectabilis KV (also 50 seeds)
2878. Aloe speciosa COR (also 50/500 seeds)
2879. Aloe spicata PR
2880. Aloe striata JL128 et al. (also 50/500 seeds)
2881. Aloe suarezensis JAA+BUG+PR (Montagne des Français, Diego Suarez, Madagascar)#
2882. Aloe succotrina JL140 (also 50 seeds)
2883. †Aloe suprafoliata JCD
2884. Aloe tenuior JAA
2885. Aloe thraskii PEL+JCD (Mkambuki, Natal)# (also 50/500 seeds)
2886. Aloe tugenensis ? JL141 (not spotted, non-caespitose), (Nakuru, Kenya)# (also 50/500 seeds) discovery J. L.
2887. Aloe umfoloziensis JL143
2888. Aloe vaombe GO+BUG +JCD+PR (Madagascar)# (also 50 seeds)
2889. Aloe vaombe JAA (W. Behara, Madagascar)#
2890. Aloe vaombe JAA (E. Tranoroa, Madagascar)#
2891. Aloe variegata JL144 (also by 50/500 seeds)
2892. †Aloe vera (= A. barbadensis) JL67
2893. NEW! †Aloe vossii J. Miller (N. Middleslopes Soutpansberg, RSA)#
2894. NEW! †Aloe wildii J. Miller (Chimanimani Mts, Zimbabwe)#
2895. Aloe zebrina JL139 (Kalahari 1978, Botswana)# (also by 50 seeds)
2896. Aloe sp Nakuru JL76/2 (also 50/500 seeds) discovered by Joël Lodé
2897. Aloe aff. dawei AJ (fl. jaunes)
2898. Aloe aff. globuligemma KHE (also 50/500 seeds)
2899. Aloe aff. greenwayi AJ (Tanzania)# fl. yellow (also 50/500 seeds)
2900. †Aloe sp Kenya JL (floers salmon)# discovered by Joël Lodé
2901. Aloe sp KHE (also 50 seeds)
2902. Aloe descoingsii x rauhii JL97 (superbe hybride !) (also 50/500 seeds)
2903. Aloe globuligemma x variegata JAA (also 50 seeds)
2904. Aloe *spinosissima (= humilis x arborescens) JCD
2905. Aloe striata x saponaria JCD
2906. Aloe sp res. sabaea JL
2907. Aloe x bolleyi x parvula JAA
2908. †Aloe bowiea x humilis GX (Aloe nain/Dwarf aloe)
2909. Aloe globuligemma x variegata BUG (also 50 seeds)
2910. Aloe humilis x rugosa GX
2911. Aloe x jacksonii GX
2912. Aloe jucunda humilis GX (also 50 seeds)
2913. Aloe jucunda x variegata GX
2914. NEW! Aloe parvula myriacantha JAA
2915. NEW! Aloe rugosa x humilis GX
2916. Aloe spinosissima x humilis GX
2917. Aloe mix (also 100/1000 seeds)
- ASPHODELUS** (Liliaceae)
2956. †Asphodelus fistulosus JAA223 (W. Hellin Spain, RSA)#
2957. Asphodelus microcarpus (Masca, Tenerife)#
- ASTROLOBA** (Liliaceae)
2959. Astroloba pentagona JL157 (also 50 seeds)
- BULBINE** (Liliaceae / Asphodelaceae)
2984. Bulbine alooides JAA
2985. Bulbine annua ND+EA (also 50 seeds)
2986. †Bulbine caulescens GX
2987. †Bulbine frutescens JCD
2988. Bulbine lagopus JAA
2989. NEW! †Bulbine sedifolia JAA234 (Carolusberg, RSA)#
2990. Bulbine vitrea JL2985 (Carolusberg, RSA)#
2991. Bulbine sp JL S. Calvinia (RSA)#
2992. †Bulbine ? sp JAA640 Nuwerus (RSA)#
2993. NEW! Bulbine sp Koegab, (RSA)# BEY
- GASTERALOE** (Liliaceae)
3253. Gasteraloe bicolor x viguieri JAA
- GASTERIA** (Liliaceae)
3254. Gasteria acinacifolia JL5937 (large!) (also 50 seeds)
3255. Gasteria (nitida v.) armstrongii JL366+JAA (also 50 seeds)
3256. Gasteria (bicolor v.) liliputana JL373+GX (also 50 seeds)

3257. *Gasteria* (bicolor v.) caespitosa JL368
 3258. *Gasteria* candicans v. glabrata JL370
 3259. NEW! †*Gasteria* carinata v. schweickertiana JL
 3260. *Gasteria* conspicua JL369 (also 50 seeds)
 3261. *Gasteria* ellaphiae JAA +AS (Paul Sayer Dam, Type location)# (also 50 seeds)
 3262. *Gasteria* ellaphiae EJV11150 (Kouga Dam, RSA)# (also 50 seeds)
 3263. *Gasteria* excelsa JAA (also 50 seeds)
 3264. *Gasteria* glomerata PR+BUG (also 50 seeds)
 3265. *Gasteria* minuscula JL374
 3266. *Gasteria* pillansii JAA (Bullhouer)# (also 50 seeds)
 3267. *Gasteria* pulchra JL+ JAA (E. Hankey, RSA)#
 3268. *Gasteria* trigona JL378 (also 50 seeds)
 3269. *Gasteria* (carinata) v. verrucosa JL379 (also 50 seeds)
 3270. *Gasteria* (carinata) v. verrucosa f. major JL380 (also 50 seeds)
 3271. *Gasteria* vlokii JAA
 3272. *Gasteria* sp JL01/364 (almost glabrous)
 3273. NEW! *Gasteria* bicolor x excelsa JAA
 3274. NEW! *Gasteria* excelsa x bicolor JAA
 3275. *Gasteria* xverrucosa GX
 3276. *Gasteria* mix (includes non-listed species) (also 50 seeds)
GASTROLEA (Correct name = GASTERALOE)
 3277. †*Gastrolea* beguinii JL381
HAWORTHIA (Liliaceae) (possible, involuntary hybridization, from hundred years old collection, Botanical Garden of Nantes, France) see also end of list
 3306. *Haworthia* altilinea JL409
 3307. *Haworthia* asperula JL411 (the real one!)
 3308. *Haworthia* attenuata v. britteniae JL414 (also 50 seeds)
 3309. *Haworthia* attenuata v. clariperla JL415
 3310. †*Haworthia* bolusii v. blackbeardiana JAA (S.E. Cathart, RSA)#
 3311. *Haworthia* chloracantha v. denticulifera JL418 (also 50 seeds)
 3312. †*Haworthia* coarctata v. adelaidensis
 3313. *Haworthia* cooperi GX
 3314. *Haworthia* cymbiformis v. agavoides JL426
 3315. *Haworthia* cymbiformis v. compacta JL427
 3316. †*Haworthia* emelyae JAA
 3317. *Haworthia* fasciata v. browniana JL435 (also 50 seeds)
 3318. †*Haworthia* fasciata v. concolor JL5938
 3319. *Haworthia* glabrata JL436 (also by 50 seeds)
 3320. *Haworthia* glauca v. armstrongii JL437
 3321. NEW! †*Haworthia* herbacea JL440
 3322. *Haworthia* xkuentzii JL442 (also 50 seeds)
 3323. *Haworthia* marumiana v. batesiana JL416 (also 50 seeds)
 3324. *Haworthia* maughanii BUG
 3325. *Haworthia* minima (margaretifera f.) JL448 (also 50 seeds)
 3326. *Haworthia* mucronata v. habdomadis RB23-2 (also 50 seeds)
 3327. *Haworthia* pumila JAA (Bonniesvale, RSA)#
 3328. †*Haworthia* pygmaea JL569
 3329. *Haworthia* reticulata v. hurlingii JL469 (also 50 seeds)
 3330. *Haworthia* subrigida JL475 (also 50 seeds)
 3331. *Haworthia* tortuosa JL478
 3332. *Haworthia* translucens JL479 (also 50 seeds)
 3333. †*Haworthia* truncata BUG+JAA
 3334. NEW! †*Haworthia* turgida JL640
 3335. *Haworthia* venosa (tessellata) JL
 3336. *Haworthia* venosa (tessellata) v. parva JL477 (also 50 seeds)
 3337. *Haworthia* sp JL401/03 (aff. fasciata, leaves yellow-bright green)
 3338. *Haworthia* sp JL403/05

3339. *Haworthia* sp JL406/08 (aff. fasciata)
 3340. *Haworthia* mix (includes non-listed species) (also 100/1000 seeds)

LOMATOPHYLLUM (Liliaceae)

3537. *Lomatophyllum* citreum JL436+PR (also 50 seeds)
 3538. *Lomatophyllum* occidentale PR (also 50 seeds)
 3539. *Lomatophyllum* prostratum GH (ex Uhlig)
 3540. *Lomatophyllum* tormentorii AJ+Lavr. (Ile Maurice)
 3541. *Lomatophyllum* sp nova La Réunion JL629

RARE OR CITES 1: 1,50Euros, normally 10/12 seeds. CITES 1 seeds are artificially propagated.

CITES 1 permit ref KOY 10828 delivered in France on 10/10/94

CITES 2 permit ref KOY8241/8242/8243/8244

ALOE (Liliaceae)

4262. *Aloe* bowiea JL86 et al. (Port Elizabeth, RSA)# + JAA
 4263. *Aloe* haworthioides GX
 4264. NEW! †*Aloe* musapana JAA (5 graines/seeds per packet)
 4265. NEW! †*Aloe* parallelifolia JAA (5 graines/seeds per packet)
 4266. *Aloe* polyphylla COR (also 50 seeds = 6 Euros) (from cultivated plants in New-Zealand)
HAWORTHIA (Liliaceae)
 4272. NEW! †*Haworthia* graminifolia JAA (5 graines seeds par paquet)

This list is not valid after December 2007

Cactaceae & Succulentae Encyclopaedia DVD

Most of the species on this list are illustrated in the Cactaceae & Succulentae Encyclopaedia DVD. 23,000+ photos! **47Euros PP. Order from Joël Lodé with your seeds. When ordering state language required - English, French, Spanish.**

New

Beautiful Succulents - Haworthia. Takashi Rukuya

A beautiful and well produced book, printed on very thick gloss art paper, which could well be considered as thin card. Hard bound. 64 pages, 297mm x 210mm. 750g.

The book is primarily a photographic reference work of selected Haworthia species and Japanese cultivars. There are 105 photographs of high quality. There are no small photos, typical of some books. Generally there are three to a page (fig. 30), occasionally four, and quite frequently one only. All, therefore, show great detail.

Text is in Japanese, but there is little of it, only two pages plus photograph captions. When known, captions do include in English the names of the locations from which species came and the names of the breeders of cultivars and parentage. Unfortunately cultivar names do not always comply with the ICNCP. The index is in Japanese and English.

Price £29.50 plus postage. **Member's price £24** plus standard uninsured postage. UK £3.00, EU £4.00, Others £4.50.

30 *H. hybrid "Sikinjou"*
新金城
Mr. Ookuwa seedling H.splendens X H. "Kotohime"
大森氏実生のスプレンドゥス系の交配種。緑褐色の不規則幅広模様
が特徴。これはとくに模様幅が広い個体（枝変わり?）。

H. hybrid "Silver nutica"
シルバーナムチカ
no data
由来不明の大型交配種。製造に白雲を背景とする緑褐色の線模様
が美しい。ただし、相当大きくならないとこの写真のような顔にならない。西雅基氏撮影。

H. hybrid "Syougai"
生蓮
Mr. Ookuwa seedling H. maxima X H. bruinsii
天蓮（『ハオルシア研究 Haworthia Study』No.6 P.8の
写真）の兄弟株であるが、真っ白なツツツ模様
が美しい。天蓮をもじって、西氏が命名。マキシマ
（マルガリティア）とプリンジーの交配種。大森氏実生。
西雅基氏撮影。

H. hybrid "Wimdens"
ウイムデンス
H. wimii X H. splendens?
ツツツの白雲に茶色の線模様。

New

International Code of Botanical Nomenclature 2006

A tome of 568 pages, 156mm x 235mm, hard bound. 1.450Kg. The previous Code, 1994, had only 389 pages.

The ICBN contains all the rules and recommendations for naming wild plants and hybrids adopted by the Seventeenth International Botanical Congress, Vienna in 2005. These must be followed exactly if published names are to be accepted by the scientific community. Digressions render names invalid. It is then open to the author or others to publish correct names.

Much of the 2006 Code will be familiar to those who have the 1994 version, but amendments and addition make it necessary to have a copy if you are naming wild plants or their hybrids or if you wish just to understand how wild plants and their hybrids are named and the rules which govern the naming process.

Price £49.50 plus postage. **Member's price £38** plus standard uninsured postage. UK £6, EU£7.50, Others £9.00.

Please make all payments for books direct to Harry Mays, Woodsleigh, Moss Lane, St Michaels on Wyre, Preston, PR3 0TY, UK by cheque/bank draft drawn on a UK bank or by PayPal. Please see page 12 of the November, 2006 Alsterworthia International for full details of payments by PayPal.

× *Gasterhaworthia* Guillaumin

David M. Cumming

Few ×*Gasterhaworthia* have been published, Rowley lists only five with no increase in this number being recognised in the new Illustrated Handbook of succulent plants, in fact it only mentions that there are five and does not bother listing them. Perhaps the lack of interest lies in the fact that those recognised, with the exception of 'Royal Highness', have little appeal and from those seen, they appear to be of parentage other than that recorded, if indeed they are in fact ×*Gasterhaworthia*. This may have been, of course, due to the commercial sources of the plants observed.

Though the crossing of *Haworthia* with *Gasteria* presents few barriers it does require patience and persistence. The only data available on hybrids produced are those of Jean-Andre Audissou and of the present author. It is interesting that Audissou used *Haworthia longiana* as the seed plant in three crosses listed.

From experiments I carried out using three field collected specimens of *H. longiana*, crossing these as the seed parent with *Gasteria ellephiae*, *G. glomerata*, *Poellnitzia rubriflora*, *Chortilirion angolense* and *Haworthia tessellata*, resulted in no seed being set. This is of course strange in itself but may be explained by the environmental conditions existing at the time. This then is another supposition for which some observations have been noted. In Australia it was found on a number of occasions that intergeneric hybrids would produce viable pollen when grown under light shade cloth, 30% shade, where as if grown under a covered plant house in more shaded conditions the quantity and no doubt the quality of pollen produced was diminished. The previous crosses with *H. longiana* were carried out during a prolonged period of misty, rainy weather when the light intensity was low with only one sunny day over a three week period. A control run at the same time, crossing of two *Gasterias* also supported this finding in that no seed were set.

Only two months ago it was noted that, on plants brought into an insect free environment, seed was only set for the first three to four days after which no seed were set although the plants were placed in a position where they received

morning sun from 0900 onwards. It would therefore seem a reasonable conclusion that light intensity does play an important role in the fertility/viability of *Aloeacea* if not most plants.

Audissou states, personal correspondence, that he believes that success in intergeneric hybridisation is dependant on using pollen donors that present copious quantities of pollen. This would certainly increase the possibility of success.

For the crosses published in this article, pollen from *Gasteria bicolor* v. *liliputana* was used in the majority of the crosses. It appears that certain plants are, for whatever reasons, more capable of overcoming any incompatibility mechanisms between *Gasteria* and *Haworthia* than others. In other words if one has six *Gasteria bicolor* v. *liliputana*, all different clones, it could be that only one plant will successfully hybridise with haworthias and the rest will not, under the same set of conditions.

The following are descriptions of ×*Gasterhaworthias* that I have selected over the last fifteen years for formal recognition. It should, however, be noted that the measurements given are for plants growing under a certain set of conditions, lots of light & sun, but no fertiliser. For example ×*Gasterhaworthia* 'Fandango' is for the author a small plant, however, plants seen at Ingo Breuer's Nursery in Germany are more than twice the size.

To be continued July 2007

Photographs: David Cumming.

Gasteria 'Little Warty' D. Cumming. *Gasteria* 'Limeade' H.C.K. Mak.

Harry Mak & Harry Mays

31



Whilst material was being prepared for Volume 1 of Hybrids and Cultivars both Harry Mak and Harry Mays independently came to the conclusion that these names had both been applied to the same cultivar. Accordingly *Gasteria* 'Little Warty' D. Cumming, fig. 31, which was originally published in David Cumming's 1982 plant list, has priority over *Gasteria* 'Limeade', which was originally published in *Photo Album of Succulents in Color - Vol. 3* page 136 in 2003. Limeade is now an invalid name.

Please amend your labels and plant lists as necessary and pass this information on to other interested parties, including editors & nurseries.

×*Gasterhaworthia* ‘Granlill’ D.M. Cumming.

Hybridist: D.M. Cumming.

Parentage: *Haworthia granulata* Marloth x *Gasteria bicolor* v. *liliputana* (von Poellnitz) van Jaarsveld.

Description: Plant: rosette, 35mm diameter, 30mm high, offsetting. Leaf: number 8, 20mm long, 8 mm wide, dark green with finely serrated edge. Fig. 32.

Representative Specimen: DMC (Gra).

Etymology: the cultivar name consists, in part, of portions of the parent species names.



×*Gasterhaworthia* ‘Sligrival’ D. M. Cumming.

Hybridist: D. M. Cumming.

Parentage: (*Haworthia granulata* Marloth x *Gasteria bicolor* v. *liliputana* (von Poellnitz) van Jaarsveld) x *Haworthia viscosa* (Linne) Haworth. DMC 9060.

Description: Plant: rosette, diameter 30mm, 40mm high, offsetting. Leaf: number 7, 15 mm long x 12 mm wide, dark green. Fig. 33.

Note: the *H. viscosa* used was a more compact plant than that used in the cross ‘Villonis’

Representative Specimen: DMC(Gra).

Etymology: the name is an anagram of the first three letters of the names of the parents.



×*Gasterhaworthia* ‘Black Chap’ D. M. Cumming.

Hybridist: D. M. Cumming.

Parentage: *Haworthia nigra* (Haworth) Baker x *Gasteria bicolor* v. *liliputana* (von Poellnitz) van Jaarsveld

Description: Plant: rosette, diameter, 40 mm, 30mm high. Leaf: number 8, 30mm long, 15 mm wide, dark green to black/green, rough warty, angular with sharp keel, acute, tip offset as in some forms of *Gasteria bicolor* v. *liliputana*. Fig. 34.

Representative Specimen: DMC (Gra).

Etymology: the cultivar name refers to the very dark colouration



35



×Gasterhaworthia 'Black Lad'

D. M. Cumming.

Hybridist: D.M. Cumming.

Parentage: ×Gasterhaworthia 'Black Chap' Cumming x *Gasteria baylissiana* Rauh.

Description: Plant: rosette 40mm diameter, distichous when young, 20mm high. Leaf: number 8, 25 mm long, 15 mm wide, blunt, warty, almost black. Note: easily propagated from leaves. Fig. 35.

Representative Specimen: DMC (Gra).

Etymology: the cultivar name refers to the very dark colouration.

×Gasterhaworthia 'Fandango'

D. M. Cumming.

Hybridist: D. M. Cumming.

Parentage: ×Gasterhaworthia 'Granlill' Cumming x *Gasteria batesiana* G. D. Rowley.

Description: Plant: Rosette, Diameter 75 mm, 40 mm high, offsetting. Leaf: number 12, 45 mm long, 15 mm wide, dull green with white spots, warty with finely serrated edge. Fig. 36.

Note: Prolific grower, easy from leaves.

Representative Specimen: DMC (Gra).

Etymology: the cultivar name 'just happened'

36



×Gasterhaworthia 'Ripsnorter'

D. M. Cumming.

Hybridist: D. M. Cumming.

Parentage: ×Gasterhaworthia 'Granlill' Cumming x *Gasteria batesiana* G. D. Rowley.

Description: Plant: rosette, Diameter 130 mm, 50 mm high. Leaf: number 12, 60 mm long, 17 mm wide shiny green with paler green spots, rough serrated edge. Fig. 37.

Note: Larger but not as prolific as sister plant 'Fandango'

Representative Specimen: DMC (Gra).

Etymology: the cultivar name refers to the general appearance of the plant when compared to its sister plant.

37



A new *Aloe* species in Manica province, Mozambique?

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In June 2006, when hiking in one of the many mountains in Manica province of central Mozambique, a limited number of strange *Aloe* plants were observed by the Plantas de Moçambique team, growing on almost barren granite or gneissic rock on the top of the mountain, at an altitude of about 800 meters. These plants did not fit into any of the descriptions of *Aloe* species in this part of Africa (references 1-9). Plants form large, single rosettes with a creeping stem of up to 50 mm in diameter. The leaves of adult plants are unspotted, long and glaucous-green and have the tendency to grow curly, like an incomplete spiral (figure 38). Marginal teeth are clearly present on the leaves, but are very soft. The inflorescences were seen only in the bud stage. Figure 40 shows that in time it will develop into an extremely branched and complex inflorescence with an enormous amount of densely flowered racemes.

Other *Aloe* species, which were found lower down on this mountain, were *A. cameronii* and *A. chabaudii* (Figs. 42 - 45), presenting remarkable variations in vegetation, colour and form of flowers, clear evidence of a strong endemism.

One can only speculate about the nature of this new (?) species. Its asymmetrical rosettes, soft teeth and glaucous leaves, and the densely flowered racemes are somewhat reminiscent of the South African *A. speciosa*. However, this species has tall erect stems and unbranched inflorescences. The recently described *A. pseudorubroviolacea* from Saudi Arabia seems to belong to the same group of aloes and has a many-branched inflorescence, but has hard marginal teeth (Newton, 2001).

Do we have a new *Aloe* species restricted to a single mountaintop in Mozambique? It has happened before, as shown by the examples of *A. cannelli* and *A. decurva* that are each limited to a single mountaintop in Manica Province, Mozambique. The area in Mozambique where these strange *Aloe* plants are found is part of the mountain range between Zimbabwe and Mozambique and a well-known centre of plant endemism. The genus *Aloe* is well represented here, with no less than 13 endemic species, as listed in the table below.

With such a tremendous variability in the genus it is perhaps no wonder that new *Aloe* species are found in this region, especially on the Mozambique side of the border. This part of the world has been virtually isolated from the scientific community during a long period of civil unrest and, furthermore, it still has a very limited research capacity.

Grass fires caused by slash-and-burn agricultural practices and by traditional hunting practices frequently scorch the mountain[#] where this particular *Aloe* grows. Adding up to its vulnerability is the observation that only 12 plants were counted on this mountain. Is not this the fate of so many undescribed plant species: nameless and already an endangered species that faces a high risk of extinction?

References.

Carter, S., 1994. ALOACEAE. In: Pollhill, R.M. (ed.): Flora of Tropical East Africa. Balkema, Rotterdam, The Netherlands. 60 pp.

(Continued on page 21)

Table 1. List of endemic *Aloe* species in the Zimbabwe/Mozambique mountain range (source: Carter, 2001).

* Informal groups according to Wyk & Smith, 2005.

Species	Informal group*	Altitude (m.)	Country
<i>A. ballii</i>	Grass Aloes	370-900	Mozambique, Zimbabwe
<i>A. cannelli</i>	Grass Aloes	1500	Mozambique
<i>A. carnea</i>	Spotted Aloes	900-1375	Mozambique, Zimbabwe
<i>A. collina</i>	Spotted Aloes	1980-2200	Zimbabwe
<i>A. decurva</i>	Stemless Aloes	915-1030	Mozambique
<i>A. hazeliana</i>	Grass Aloes	1200-2300	Mozambique, Zimbabwe
<i>A. inyangensis</i>	Grass Aloes	1220-2560	Zimbabwe (Mozambique?)
<i>A. munchii</i>	Multi-stemmed Aloes	1525-2135	Mozambique, Zimbabwe
<i>A. musapana</i>	Grass Aloes	1900-2060	Zimbabwe
<i>A. plowesii</i>	Grass Aloes	1370-1770	Mozambique, Zimbabwe
<i>A. rhodesiana</i>	Grass Aloes	1200-2100	Mozambique, Zimbabwe
<i>A. swynnertonii</i>	Spotted Aloes	340-1800	Mozambique, Zimbabwe
<i>A. wildii</i>	Grass Aloes	1350-2135	Mozambique, Zimbabwe



Figures 38-40.

Three photographs of the unidentified *Aloe* plants as they grow in their natural habitat, May-July 2006, Manica Province.

Fig. 38: rosette with long, glaucous leaves growing in a spiral.

Fig. 40: plant with intensely branched inflorescence.





Fig. 41.
Buds of the unidentified *Aloe*,
May-July 2006, Manica



Figures 42 & 43.
Examples of *Aloe chabaudii* vegetative
variation on the lower mountain.



44



45



Figure 44 & 45.

Examples of colours and different forms of inflorescences of *Aloe cameronii* growing on the lower slopes of the mountain.

(Continued from page 18)

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Lane, S.S., 2004. The Aloes of Malawi. Umdaus Press. Hatfield, South Africa. 56 pp.

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The exact location of the mountain is not disclosed here in order to prevent illegal plant collecting.

Photographs by the authors.

Haworthia mertonii I. Breuer spec. nov.

A new species of the subgenera *Robustipedunculares* from the Western Cape.

Ingo Breuer

Introduction.

Exploration in South Africa has resulted in the location of many new localities for haworthias in recent times. Some of them have provided new records for known taxa, others could be immediately recognised as new taxa. These must be observed in cultivation for some time to decide if they are new or just new records of known taxa. Most of the new items are from the larger subgenus *Haworthia*, which is not surprising given that it seems to be the youngest taxonomic unit in *Haworthia* in evolutionary terms and has the largest area of distribution. On the other hand the subgenus *Robustipedunculares* is restricted to the karoo areas of the southwestern part of the Western Cape, mainly from Riversdale in the East to Robertson in the West. The coastal areas from Bredasdorp and further to the southwest are not very well explored for haworthias, because people just did not expect to find any there. David Cumming, however, is methodically exploring South African for haworthias and other plants and, because he has an intuition for the 'right places' where haworthias are likely to grow, he finds new taxa. The history of the discovery of this new taxa in David's own words is as follows:

"In 1998 while taking George & Sonia Fricker on a tour we stopped north of Bredasdorp to look at some *Glottiphyllum*, also finding some *Anacampteros*. In late 2002 I took Jack van Thiel, an *Anacampteros* aficionado, there to look at the *Anacampteros*. While searching further afield I found two small plant of a *Haworthia*

which resembled what one would expect from a hybrid of *H. marginata* and *minima*, however, there was no sign of either putative parent.

"In early 2005 I again visited this site and conducted a more extensive search. A large number of plants were found at some distance from the original plants. These formed large clumps and were in seed. Unfortunately I did not have a camera with me and made plans to revisit the population later in 2005 when taking Harry Mays on a tour. The outcome was that during the seven

months all the plants had been removed except for one plant. Figs. 46-48."

No records have been found to indicate that this plant has been discovered before and as it is distinctive I have decided to name it as a new taxon.

Haworthia mertonii I. Breuer spec. nov.

Latin Diagnosis

Acaulis, e basi proliferans. Rosula circa 100 mm Ø. Forma foliorum et habito aliquantum intermedia ad speciebus *H. marginata* et *H. minima*.

Origin.

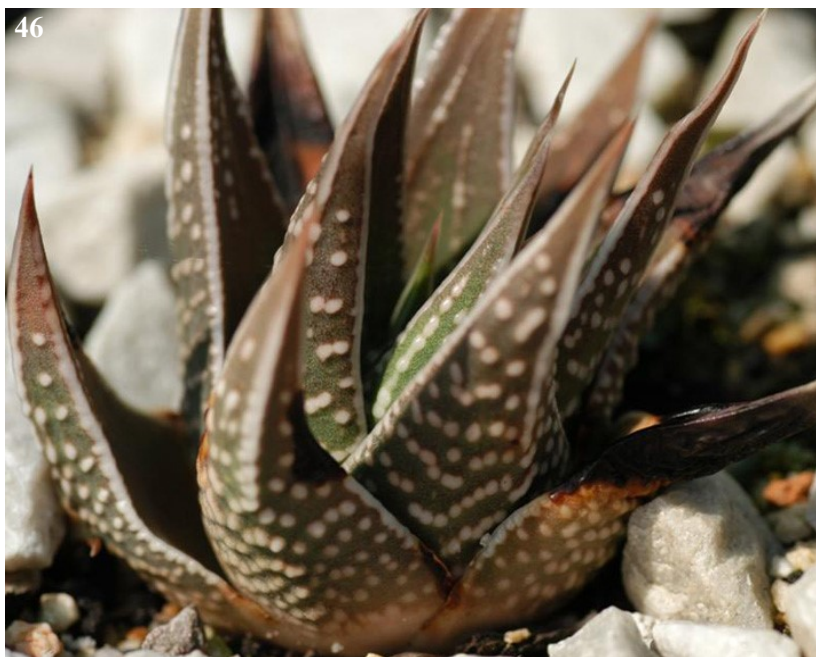
WESTERN CAPE [3420AC]: N of Bredasdorp, ex David M. Cumming [= DMC10485].

Type.

DMC10485. Holo in [GRA].

Description

Plant proliferous from the base, forming clumps of 10-20 heads. Rosette: acaulescent, 80-100 mm Ø, number of leaves, 25-40, erect, acuminate, slightly incurved, 50-85 mm long, 25-40 mm broad, 4-5 mm thick. Leaf-colour: opaque, dark dull green with purplish tips in direct sunlight), with a few faint tubercles up to numerous, white, tubercles 1-2 mm Ø. Margins: smooth, whitish. Back with a pronounced raised, abaxial, whitish keel, 20-30 mm long. Inflorescence: branched 300-350 mm long. Flowering time November –



Haworthia mertonii

December.

Remarks:

This new taxon is named after its discoverer David Morton Cumming.

Plants which were distributed under the collection number MBB6633 from N of Bredasdorp are also this new taxon.

Photographs. D.M. Cumming.



The habitat of *Haworthia mertonii* where the one surviving plant was found on the bank.
The main population had been over the fence in a rocky outcrop covered with bushes.
The surrounding area is mainly agricultural land devoted to Marino sheep and grain crops.

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Aloe parvidens Ø10 6,50 €
Aloe ruffingiana 6,50 € JAA 438 Ambatomena, S. Amboasary,
Madagascar.
Aloe thorncroftii 7,50 € Barberton, RSA
Aloe viguieri 6,50 € Cap St Augustin, Sud Tuléar,
Madagascar
Gasteria pendulifolia sp. nova 6,50 € Mamba Valley
Haworthia cummingii DMC 11214 Tyefu, Albany € 6,50
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Bonnievale.
Haworthia nortieri v. nortieri 9,50 € Giftberg

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