

# ALSTERWORTHIA INTERNATIONAL

## THE SUCCULENT ASPHODELACEAE JOURNAL



*Haworthia* 'Baccata' Cultivar Nova. ISI 1567

### Contents

<i>Haworthia</i> 'Baccata' Gordon Rowley. Cultivar Nova. ....	Front cover, 6
The incredible Mucute Mountain. Pedro Capela .....	2-5
The Sedum Society .....	6
Haworthias in cultivation - Conserving names of cultivars. G.D. Rowley .....	7-12, 17-19
Seed list & DVD .....	13-16
Perplexities at Tradouw Pass. Russell Scott.....	20-23
More trenchant botany. M B Bayer.....	21
<i>Aloe mossurilensis</i> Ellert sp.nov. A long-overlooked species from northern Moçambique. ....	24-28

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# THE INCREDIBLE MUCUTE MOUNTAIN

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Fig. 1. Two high peaks in the Mucute range. To find *Aloe canelli*, please try the second one.

The eleven original peaks near the village of Rotanda in Manica province, Mozambique, are singularly beautiful. Together with Zembe and Mawate mountains these three traditional magical places have been the center of coronations for “Shona” queens and kings for centuries. The local wizard insist on praying to the African gods (when he drinks red wine). My employees stay on they knees when I clean my digital camera.

A possible place of reverence only for Jehovah, the God ! Not because one of my personal friends is the crazy rain maker called Chirenge. Not because the African gods didn't exist! But essentially because my favorite speech is the

sermon on the mountain, my favorite reference is Jesus Christ and the revolutionary freedom to choose the more honest way to live and believe. God understands the kingdom of intelligence and beauty and the nature like pantheism of His representation.

The enigmatic local wizard, always very kind to me, suggested an exhaustive, unnatural road to the peak where there were some small and very sweet local fruits. That incentive was some compensation for the strong humiliation of the pain my anti-gravity beautiful body (now with 95 Kg) incurred when climbing. Mr. Gilbert Reynolds writes in his precious bible about aloes, *Aloe canelli* can be found on this

2



Figs 2 to 16. Corresponding with a very specific and indigenous geology there is an amazing flora.



Figs. 5 to 8. Only on the way to the higher peak four different orchids species are to be found!  
What kind of surprises does this mountain reserve for my fragile heart? What kind of African god lives there?  
What kind of tribute does this southern, strange spirit wants from me?



mountain, on the peak from 1500 to 1600 m. altitude. This is not true! We are around 1580 m, the others peaks are lower. With my great admiration for Mr. Reynolds and my prodigious imagination I imagine Gilbert drinking Oporto wine and taking notes at the same time whilst sitting on the mother rock on the top (I smile with irony remembering that I was born in Oporto city in 1963). It's only a literary exercise

One of my employees engages in ardent discussion with the local wizard who seems to be embarrassed. He had received two hundred US dollars as he had said he knew the plant perfectly. I am totally exhausted and only with supreme effort did I stay calm. With my rudimentary Manica dialect I explain to him that the flower (In the Shona & Manica dialect a word for plant does not exist.) is very small. This information seemed to open a gate into his mind. One of my employees attempted a translation of what he said and came up with "cow food". My employee stayed confuse and forgot about the translation. Finally all groups understood! *Aloe canelli* is found on the other peak! I decide split the group and stay with one employee to take photos.

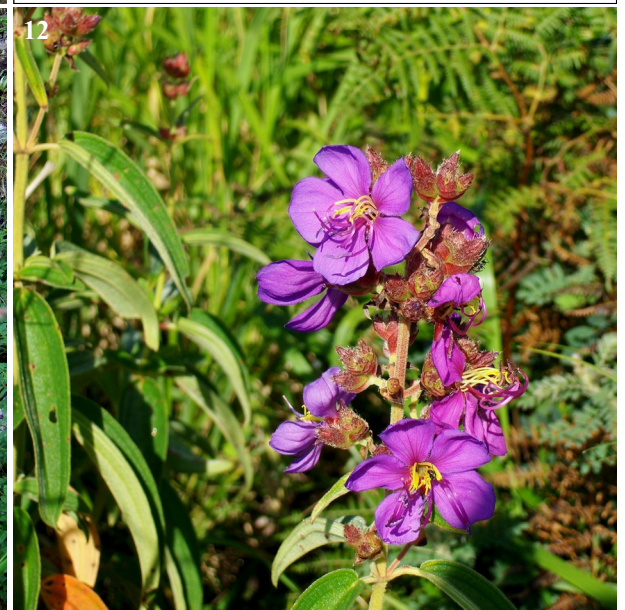
It's now 2pm and Arajú, my good friend and employee encourages me on. We have been walking at high altitude since 6am and between taking photos and near exhaustion I'm thinking about extinction!

In reality, my photos may be considered the last record in pictures. Day after day the forests in Mozambique disappear; the essential shade no longer protects thousands of species of epiphytes, small insects, animals, fungus, birds... The sterilization of life forms has already begun in the last century of this planet! I remember André Malraux and his general theory about the repetition of continuous cycles of life in the planet Earth, but I feel like Tolstoi writing to make "photos" about his époque.

At last we hear the first group screaming on the top of the second peak, which can be considered an excellent signal. *Aloe canelli* is waiting for me? Can it be considered the smallest *Aloe* on the planet? Is it the most beautiful? I don't care! This primitive form of life need to be observed and photographed.

I'm Gulliver observing a Liliput citizen! I really

Figs. 9-11.  
*Aloe* s.p. Mucute with its unexpected flower.  
 Fig. 12. Purple flower of *Tibouchina* s.p.



regretted not accepting a generous offer by one South African friend, of seeds of *Aloe wildii*. Mentally I need a reference, something with which to compare.

Thousands of plants grow mixed up with grasses, brothers and sisters in a long combat against erosion. But *Aloe canelli* is not a specie near to extinction. The old local wizard said to me that the local "It's not visited since final sixties by one with man with a blue/green eyes" (Gilbert Reynolds, Cannel, Raymond Munch, who...?)

So, what can be the source of the information considering *Aloe canelli* to be a species critically endangered? In 1998, hundreds of Cites delegates passed hours in discussion at the Cites conference in Washington, on inconsistent information. A report from Mozambique painted a bleak picture about *Aloe canelli* and its extinction status. In the final report the bureaucrats of the North Hemisphere, drying emotional tears and thanking Dr. Salomão Bandeira, a eminent Mozambique scientist, declared it critically endangered. When I ask if the place was visited in the nineties by Mozambican authorities the local wizard looked at me, eyes to eyes, and said "NO".

Something deeply strange. Fifteenth April 2006 and not a single flower of *Aloe canelli* can be observed. The same happened in 2007, with two exceptions. In my nursery, protected by bamboo shade, more than ten plants began to flower in the firsts days of April. I begin to understand. Significant number of trees have disappeared in the Mucute mountain, year after year, to permit the population to produce that elementary form of energy, charcoal. Without the element of shade the essential biological functions of all fragile organisms are compromised. The dangerous alliance of cut trees and blind fire sterilizes Africa.

In the meantime the Cites secretariat discusses the elephant and ivory control. And create more blind laws and unrealistic prohibitions. In the meantime nature dies! God bless Africa. God bless Mozambique.



Figs. 13-16  
*Aloe canelli* grows on rocks or in zones with significant wet or shade.



## *Haworthia* 'Baccata' (G.G. Smith) ex Gordon Rowley. Cultivar Nova.

Gordon Rowley's article on page 7 et seq resurrects a number of old species names which, for various reasons, have passed into synonymy and/or obscurity. *Haworthia baccata* G.G. Smith is one of these. It now lives on as a cultivar *Haworthia* 'Baccata'.

*Haworthia baccata* G.G. Smith was published in 1944 in the Journal of South African Botany 10:20 with a detailed description and a good black and white photograph, fig. 17. Unfortunately the species became involved in controversy because it could not be located at the recorded type site and there was even a suggestion that it may have been **planted** in the veld.

Breuer records it as *nomen dubium* in The World of Haworthias Volume 1, page 105.

Scott includes it under 'Taxa Excluded or Insufficiently Known' with the comment "It is not possible to match the specimen cited with plants occurring in the wild,...."

Bayer states "The name is confused and it is certain that there is no such species" in *Haworthia Revisited* page 217.

Nevertheless, although the name *Haworthia baccata* has been rejected by many, it has persisted in collections or it has been misnamed as other species such as *H. coarctata*. The ISI actually distributed *Haworthia baccata* in 1985 under number ISI 1567. The stock material had been collected 9 miles SW of Stutterheim, C.P., S.A. by G.G. Smith and recorded under his number 3572. This clone is still in cultivation (front cover) and may now legitimately be referred to as *Haworthia* 'Baccata' - free from controversy as it conforms with the *Haworthia baccata* description and type photograph.

Please rename your plants and records now. It is a simple operation!!!!

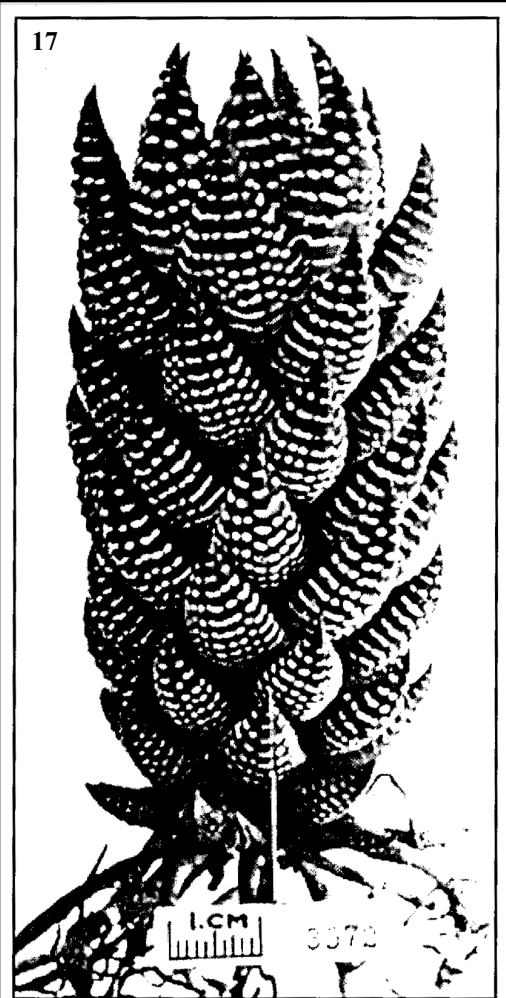
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Scott. The Genus *Haworthia*, page 142.

Bayer. *Haworthia Revisited*, page 217.

Directory of Plants Distributed by International Succulent Introductions 1958-2001 compiled and published by Harry Mays from notes by John Trager et al., page 62.



*H. baccata* Smith 1944  
GGS3572 14 km SW of Stutterheim [3227CB] TYPE-photograph

## THE SEDUM SOCIETY

**Editor:** Ray Stephenson, 8 Percy Gardens, Choppington, Northumberland, NE62 5YH.  
E-mail: ray@sedumray.ndo.co.uk

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# HAWORTHIAS IN CULTIVATION - CONSERVING NAMES AS CULTIVARS

G.D. Rowley

“Botanists have generally neglected cultivated varieties as beneath their notice.” - C. DARWIN in *The variation of animals and plants under domestication* I: 2, 1868.

*Haworthia* has been favoured with a wealth of literature in recent years from popular accounts for collectors to monographic works offering alternative classifications of the whole genus. These range from the extreme splitting of Dr. M. Hayashi, treating every minor variant as a species, to the conservative, recent survey of Bruce Bayer, conveniently available in Vol.1 of the *Illustrated Handbook of Succulent Plants* (Bayer & Jaarsveld 2001). This latter recognised 62 species with 105 subtaxa (nearly all varieties). Of course, revisions and updates are still going on, particularly now that we have data from molecular genetics to support, or destroy, current opinions. However, my concern here is not the ultimate, perfect classification, but the fate of large numbers of botanical names currently confined to synonymy and in danger of being lost and forgotten. But isn't that a good idea for surplus renamings and hairsplits? Not if they are attached to plants perpetuated in cultivation (mostly clonally) and recognisable among connoisseurs for features too small to warrant the attention of botanists, but nevertheless representing shades of variation within this wonderful and many-faceted genus.

It is the restoration and preservation of these orphans that is my concern here. There is a simple solution that removes them from the strife of warring botanists (is this a variety, or a species? a form or a subspecies?) to a system where all are equals and none suffers the fate of Oscar Wilde's Ernest for unfortunately mislaying his parentage. This is the world of the cultivar.

## ABOUT CULTIVARS

Wild plants are the province of botanists who classify and name them using the botanical Code (ICBN) to give names such as *Haworthia venosa* and *H. venosa* ssp. *tessellata*. Horticulturists have their own Code (ICNCP) for plants bred and propagated away from the habitats, and give them cultivar names such as *Haworthia* 'Ivory Tips' or *H.* 'Tessellata'. The two Codes overlap, and all cultivars are assignable to species or hybrids, or at least to genera. Although new names have to be in common language and non-Latinised, botanical epithets long in use can be taken up, as in the case of 'Tessellata' mentioned, above. What is important is the way they are written. Note the three changes: from italic to Roman type, with an initial capital, and enclosed in single (not double) quotes. In default of any of these three, the name is misrepresented under the Code.

This is no place to elaborate on the complicated workings of the Codes or why I support greater use of the ICNCP for labelling and cataloguing the plants in our glasshouses. For a more extended account see Rowley 2007, and for a model treatment (the genus *Lophophora*, with 16 cultivar names replacing 4

botanical categories) see Rowley 2006.

Cultivars are not necessarily born in captivity: some can originally be taken from the wild and named as species or lower categories by botanists, but later banished to synonymy in the light of better understanding of variation in the wild. It is here that we have the means to save names where representative plants are known to be in cultivation or at least presumed so on the basis of recent photographs or accounts in print. It is even possible to take up names that are invalid under the stricter ruling of the ICBN if the plants are recognisable from descriptions and pictures. An example is John Pilbeam's *H. limifolia* v. *striata* which becomes appropriately sanctified as *H. limifolia* 'Striata' (or *H.* 'Striata' for short, or if you don't think it belongs with any named species).

Although the rank of cultivar stands alone below species level, related cultivars can be classed together in Cultivar Groups, as in Joyce Coccozza's Dream Dancer Group for hybrids of *H. magnifica* x *mirabilis*. Hayashi named 10 Cultivar Groups, all within his concept of the species *H. picta*, here treated as a cultivar of *H. emelyae*.

## REGISTER OF NEW CULTIVAR NAMES

The following name list, nearly all newly designated, works as follows. In column 1 'Acuminata' is the proposed cultivar name. Column 2 tells us that it is based on a botanical name now buried in synonymy. You can find all about it in Breuer's Vol.1, with pictures of the botanical types in Vols. II & III. These optionally become the standard for the cultivar: the equivalent of a botanical type as anchor for the name. The asterisk \* indicates this, as distinct from other published illustrations (page numbers in **bold type**, as **72-73** for the unnumbered colour insert in John Pilbeam's book). Identification is by picture-matching and reading descriptions - no easier, or harder, than for wild species. But at least cultivar names can be dropped when obsolete: think of how few rose cultivars of twenty years ago are still found in rose catalogues of today!

Column 3 indicates the assignment of the cultivar to a species under the classification presented by Bayer & Jaarsveld in 2001. In full the name reads *H. mucronata* 'Acuminata'. You may disagree. There is nothing to stop you from calling it *H. bolusii* 'Acuminata' or *H. limpida* 'Acuminata', for example, if that is how you feel. Or even call it just *H.* 'Acuminata' to leave the matter open. But note that it is quite different from *H. magnifica* v. *acuminata*, which remains a recognised botanical variety.

This list is offered as a starting point: it is far from complete and omits many potential candidates for which I can find no evidence of continued cultivation

in the Northern Hemisphere. The ultimate arbiter for all cultivar names is an ICRA: International Cultivar Registration Authority. These exist for many crop and garden plants, from *Iris* to *Rosa*, carnivores to conifers, but unfortunately none yet for succulent plants (IOS, where are you ?).

Acceptance of cultivar names requires a minimum of rewriting labels, makes cataloguing easier, and eliminates doubts over hierarchical ranks in the botanical system. It is no disparagement to give a plant a name in "common language": its status is not demeaned. We are merely accepting that these are the plants familiar in cultivation that may or may not also be part of the grand Linnaean categorization of the natural world outside.

In saying this I do not wish to discredit the value of botanical naming or the work of conservationists.

Plant labels bearing collectors' numbers and field data are as important as ever and should be retained, along with documentation to back up the tagging. We are custodians of wild heritage, and all means of pigeonholing it are valid.

## REFERENCES

### Abbreviation.

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BREUER, I. (1998-2000) The World of Haworthias

Br1 Vol.1 1998

Br2 Vol.11 2000

Br3 Haworthia Photographs 1999

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HM1 Vol.1 1993

HM2 Vol.11 1995

HM5 Vol.111 2005

PILBEAM, J. (1985)

P Haworthia and Astroloba - A Collector's Guide. (Colour plates between pp.72-73 not individually numbered).

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SC1 Succulents - The Illustrated Dictionary. Cassell 1995.

SC2 Succulents II - The New Illustrated Dictionary. Timber Press 2000

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McNEILL, J. et al. Ed. 2006. International Code of Botanical Nomenclature (Vienna Code). Regnum Vegetabile 146.

Alst Alsterworthia International.

Haw Haworthiad.



SYSTEMATIC LIST

<i>H. angustifolia</i>	<i>H. emelyae</i>	'Nitidula'	<i>H. truncata</i>
'Albanensis'	'Picta'	'Poor Relation'	'Crassa'
'Grandis'	<i>H. fasciata</i>	'Pulchritude'	'Tenuis'
'Janseana'	'Browniana'	'Rossouwii'	<i>H. turgida</i>
<i>H. arachnoidea</i>	'Sparsa'	'Rubrodentata'	'Caespitosa'
'Bijliana'	'Subconfluens'	'Willowmorensis'	'Laetevirens'
'Gigas'	? 'Subfasciata'	<i>H. monticola</i>	'Pallidifolia'
'Joubertii'	'Vanstaadensis'	'Divergens'	'Pierrot'
'Longiaristata'	'Variabilis'	<i>H. mucronata</i>	'Suberecta'
'Pellucens'	<i>H. glauca</i>	'Acuminata'	'Subplana'
'Stiemiei'	'Alfred Zahntner'	'Aristata'	'Subproliferans'
'Venteri'	'Armstrongii'	'Bicarinata'	<i>H. venosa</i>
<i>H. attenuata</i>	'Carrissoi'	'Helmiae'	'Distincta'
'Britteniana'	'Depauperata'	'Inermis'	'Engleri'
'Clariperla'	'Eilyae'	'Integra'	'Fatleaf'
'Concolor'	'Jacobseniana'	'Limpida'	'Inflexa'
'Huddle'	'Jonesiae'	'Limpidula'	'Minutissima'
? 'Kuentzii'	<i>H. herbacea</i>	'Mclarenii'	'Oertendahlia'
'Pluriperlata'	'Aegrota'	? 'Overleaf'	'Parva'
? 'Tisleyi'	'Atrovirens'	'Rooibergensis'	'Pseudotessellata'
<i>H. bolusii</i>	'Delicatula'	'Subinermis'	'Velutina'
'Batteniae'	'Luteorosea'	'Unicolor'	'Woerden's Jewel'
'Fergusoniae'	'Pallida'	<i>H. mutica</i>	<i>H. viscosa</i>
'Major'	'Papillosa'	'Otzenii'	'Asperiuscula'
<i>H. chloracantha</i>	'Pearsonii'	<i>H. nigra</i>	'Beanii'
'Liliputana'	? 'Submaculata'	'Angustata'	'Concinna'
<i>H. coarctata</i>	'Translucens'	'Elongata'	'Cordifolia'
? 'Baccata'	<i>H. limifolia</i>	'Nana'	'Cougaensis'
'Bellula'	'Diploidea'	'Pusilla'	'Curta'
'Chalwinii'	'Hans Schuldt'	'Ryneveldii'	'Cute Clumper'
'Committeesensis'	'Keithii'	'Schmidtiana'	'Elite'
'Conspicua'	'Megafila'	<i>H. pygmaea</i>	'Indurata'
'Fallax'	'Pimentelii'	'Asperula'	'Patagiata'
'Fulva'	'Stolonifera'	'Big Dwarf'	? 'Pseudorigida'
? 'Henriquesii'	'Striata'	'Crystallina'	'Pseudotortuosa'
'Huntsdriftensis'	'Tetraploidea'	<i>H. reinwardtii</i>	'Quaggaensis'
'Minor'	<i>H. longiana</i>	'Archibaldiae'	'Subintegra'
'Peacockii'	'Albinota'	'Bellula'	'Subobtusa'
'Riebeekensis'	<i>H. maraisii</i>	'Diminuta'	'Titch'
'Sampaiana'	'Robertsonensis'	'Grandicula'	'Torquata'
'Silvicola'	'Schuldtiana'	'Peddiensis'	? 'Tortella'
<i>H. cooperi</i>	'Subfalcata'	'Pulchra'	'Tortuosa'
? 'Altilinea'	'Sublimpidula'	'Triebneri'	'Viridissima'
? 'Columnaris'	'Whitesloaneana'	'Valida'	
'Joeyae'	<i>H. marginata</i>	<i>H. reticulata</i>	
'Salina'	'Albicans'	'Ambigua'	
'Stayneri'	'Laevis'	'Guttata'	
'Vittata'	<i>H. maxima</i>	'Haageana'	
<i>H. cymbiformis</i>	'Corallina'	'Spearpoint'	
? 'Affinis'	'Margaritifera'	'Subreticulata'	
'Alta'	'Pumila'	<i>H. retusa</i>	
? 'Bilineata'	'Semipapillosa'	'Densiflora'	
'Brevifolia'	<i>H. minima</i>	'Fouchei'	
'Compacta'	'Brevis'	'Geraldii'	
'Exulata'	'Erecta'	'Multilineata'	
'Gracilidelineata'	'Granata'	'Solitaria'	
'Lepida'	'Mutabilis'	<i>H. scabra</i>	
'Multifolia'	'Polyphylla'	'Arrowtip'	
'Obesa'	'Zenigata'	'Smitii'	
'Planifolia'	<i>H. mirabilis</i>	'Smoothie'	
'Subarmata'	'Multituberculata'	'Tuberculata'	
'Sublaevis'	'Mundula'	<i>H. sordida</i>	
'Umbraticola'	'Napierensis'	'Agavoides'	

CULTIVAR NAME	DOCUMENTATION	AFFILIATED SPECIES
'Acuminata'	<i>H. altilinea</i> f. <i>acuminata</i> Poelln. Br1:88; Br2: 349-350*; Br3: 17* NON <i>H. magnifica</i> v. <i>acuminata</i>	<i>H. mucronata</i>
'Aegrota'	<i>H. aegrota</i> Poelln. Br1: 85; Br2: 342; Br3: 13*	<i>H. herbacea</i>
'Affinis'	<i>H. affinis</i> Baker. Br1: 85; Br2: 343, 392	? <i>H. cymbiformis</i>
'Agavoides'	<i>H. agavoides</i> Zahntn. & Poelln. Br1: 86, 247; Br2: 344; Br3: 15*; P124; HM2:160	<i>H. sordida</i>
'Albanensis'	<i>H. albanensis</i> Schönk. Br1: 86, 91; Br2: 345; HM2: 144	<i>H. angustifolia</i>
'Albicans'	<i>Aloe albicans</i> Haw. Br1: 86; Br2: 346-347	<i>H. marginata</i>
'Albinota'	<i>H. longiana</i> v. <i>albinota</i> Smith. Br1: 171; Br2: 562-563; P88; HM1: 147	<i>H. longiana</i>
'Alfred Zantner'	<i>H. eilyae</i> var. <i>zantneriana</i> Res. Br1: 137; Br2: 456. Renaming here; NON <i>H. zantneriana</i> Poelln.	<i>H. glauca</i>
'Alta'	<i>H. planifolia</i> f. <i>alta</i> Poelln. Br1: 208; Br2: 630; HM3: 154	<i>H. cymbiformis</i>
'Altilinea'	<i>H. altilinea</i> Haw. Br1: 86; Br2: 347-348; P35	? <i>H. cooperi</i>
'Ambigua'	<i>H. hurlingii</i> v. <i>ambigua</i> Triebn. & Poelln. Br1: 157; Br2: 521	<i>H. reticulata</i>
'Angustata'	<i>H. schmidtiana</i> v. <i>angustata</i> Poelln. Br1: 235; Br2: 719*; Br3 141*; P72-73, 101	<i>H. nigra</i>
'Archibaldiae'	<i>H. reinwardtii</i> v. <i>archibaldiae</i> Poelln. Br1: 219; Br2: 670*-671; Br3: 125*	<i>H. reinwardtii</i>
'Aristata'	<i>H. aristata</i> Haw. Br1: 97; Br2: 362-363; P38-39; HM3: 172	<i>H. mucronata</i>
'Armstrongii'	<i>H. armstrongii</i> Poelln. Br1: 97; Br2: 364-365; Br3 25*; P39-41.	<i>H. glauca</i>
'Arrowtip'	<i>H. tuberculata</i> v. <i>acuminata</i> Poelln. Br1: 267; Br2. 794-795*; Br3 177* Renaming here; NON 'Acuminata'	<i>H. scabra</i>
'Asperiuscula'	<i>H. asperiuscula</i> Haw. Br1; 99; Br2: 366; P139	<i>H. viscosa</i>
'Asperula'	<i>H. asperula</i> Haw. Br1: 99, Br2: 370, SC2: 149; HM1: 148	<i>H. pygmaea</i>
'Atrovirens'	<i>Aloe atrovirens</i> DC. Br1: 100; Br2: 372-373	<i>H. herbacea</i>
'Baccata'	<i>H. baccata</i> Smith. Br1: 105; Br2: 378-379	? <i>H. coarctata</i>
'Batteniae'	<i>H. batteniae</i> Scott. BR1: 105; Br2: 382-383	<i>H. bolusii</i>
'Beanii'	<i>H. beanii</i> Smith. Br1: 106; Br2: 388; P46, 139	<i>H. viscosa</i>
'Bellula'	<i>H. reinwardtii</i> v. <i>bellula</i> Smith. Br1: 219; Br2: 671-672; P52, 55	<i>H. coarctata</i>
'Bicarinata'	<i>H. altilinea</i> v. <i>bicarinata</i> Triebn. Br1: 87; Br2: 349	<i>H. mucronata</i>
'Big Dwarf'	<i>H. pygmaea</i> f. <i>major</i> Pilb. P72-73, 106-107; Br1: 215; Br2: 658-659. NON <i>H.</i> 'Major'	<i>H. pygmaea</i>
'Bijliana'	<i>H. bijliana</i> Poelln. Br1: 107; Br2: 390-391	<i>H. arachnoidea</i>
'Bilineata'	<i>H. bilineata</i> Bak. Br1: 107; Br2: 392; P46; HM3: 151	? <i>H. cymbiformis</i>
'Brevifolia'	<i>H. cymbiformis</i> v. <i>brevifolia</i> Triebn. & Poelln. Br1: 129; Br2: 438; P62; HM3: 156	<i>H. cymbiformis</i>
'Brevis'	<i>H. brevis</i> Haw. Br1: 111; Br2: 400	<i>H. minima</i>
'Britteniana'	<i>H. britteniana</i> Poelln. Br1: 111; Br2: 401*; Br3: 37*; P42; HM3: 149	<i>H. attenuata</i>
'Broteriana'	<i>H. broteriana</i> Res. Br1: 111, Br2: 402-403; Alst 7(2): 19, 2007	Cultigen
'Browniana'	<i>H. browniana</i> Poelln. Br1: 112, H; Br2: 403-404; Br3 39*; P71-72; HM3: 160; SC2: 152	<i>H. fasciata</i>
'Caespitosa'	<i>H. caespitosa</i> Poelln. Br1: 113; Br2: 406-407; Br3: 41*; P133	<i>H. turgida</i>
'Carissoi'	<i>H. carissoi</i> Res. Br1: 113; Br2: 409	<i>H. glauca</i>
'Cassytha'	<i>H. cassytha</i> Bak. Br1: 113; Br2: 410-411; P50; HM1: 141; SC2: 150	Cultigen
'Chalwinii'	<i>H. chalwinii</i> Marl & Berg. Br1; 114; Br2: 411; P52-53	<i>H. coarctata</i>
'Clariperla'	<i>H. clariperla</i> Haw. Br1: 115; Br2: 414-415; P45	<i>H. attenuata</i>
'Coarctatoides'	<i>H. coarctatoides</i> Res. & Viv. Br1: 121; Br2: 421	Cultigen
'Columnaris'	<i>H. columnaris</i> Bak. Br1: 122; Br2: 422	? <i>H. cooperi</i>
'Committeesensis'	<i>H. reinwardtii</i> v. <i>committeesensis</i> Smith. Br1: 220; Br2: 675-676	<i>H. coarctata</i>

CULTIVAR NAME	DOCUMENTATION	AFFILIATED SPECIES
'Compacta'	<i>H. cymbiformis</i> v. <i>compacta</i> Br1: 129; Br2: <b>439</b> ; P62.	<i>H. cymbiformis</i>
'Concinna'	<i>H. concinna</i> Haw. Br1: 121; Br2: <b>425</b> .	<i>H. viscosa</i>
'Concolor'	<i>A. glabrata</i> v. <i>concolor</i> SD. Br1: 147; Br2: <b>485</b> ; HM2: <b>145</b> ; SC1 <b>139</b>	<i>H. attenuata</i>
'Confusa'	<i>H. confusa</i> Poelln. Br1: 122; Br2: <b>426</b>	?
'Conspicua'	<i>H. reinwardtii</i> v. <i>conspicua</i> Poelln. Br: 220; Br2: 676-677; Br3: <b>127*</b> ; P55	<i>H. coarctata</i>
'Corallina'	<i>H. margaritifera</i> v. <i>corallina</i> Bak. Br1: 175; Br2: <b>574</b>	<i>H. maxima</i>
'Cordifolia'	<i>H. cordifolia</i> Haw. Br1: 123; Br2: 428- <b>429</b>	<i>H. viscosa</i>
'Correcta'	<i>H. correcta</i> Poelln. Br1: <b>123</b> , E; Br2: <b>429*</b> ; Br3: <b>43*</b>	?
'Cougaensis'	<i>H. viscosa</i> v. <i>cougaensis</i> Smith. Br1: 277; Br2: 820- <b>821</b>	<i>H. viscosa</i>
'Crassa'	<i>H. truncata</i> f. <i>crassa</i> Poelln. Br1: 267; Br2 : <b>792</b> ; P131	<i>H. truncata</i>
'Crystallina'	<i>H. pygmaea</i> f. <i>cystallina</i> Pilb. P <b>107*</b> ; Br1: 215; Br2: <b>658</b> ; HM1: <b>148</b>	<i>H. pygmaea</i>
'Curta'	<i>H. curta</i> Haw. Br1: 123; Br2: 430- <b>431</b>	<i>H. viscosa</i>
'Cuspidata'	<i>H. cuspidata</i> Haw. Br1: 125; Br2; <b>431</b> ; P60; HM1:144; SC2: <b>150</b>	?
'Cute Clumper'	<i>H. viscosa</i> v. <i>caespitosa</i> Poelln. Br1: 277; Br2: <b>820</b> . NON <i>H. 'Caespitosa'</i>	<i>H. viscosa</i>
'Delicatula'	<i>H. pellucens</i> v. <i>delicatula</i> Berg. Br1: 204, 261; Br2: 623	<i>H. herbacea</i>
'Densiflora'	<i>H. retusa</i> v. <i>densiflora</i> Smith Br1: 229; Br2: <b>702</b>	<i>H. retusa</i>
'Denticulata'	<i>H. denticulata</i> Haw. Br1: 133; Br2: <b>448-449</b>	?
'Depauperata'	<i>H. herrei</i> v. <i>depauperata</i> Poelln. Br1: 157; Br2: <b>517</b> ; Br3: <b>169*</b>	<i>H. glauca</i>
'Diminuta'	<i>H. reinwardtii</i> v. <i>diminuta</i> Smith Br1: 220; Br2: 677-678	<i>H. reinwardtii</i>
'Diploidea'	<i>H. limifolia</i> f. <i>diploidea</i> Res. Br1: 165; Br2: <b>549</b>	Cultigen
'Distincta'	<i>H. distincta</i> N.E. Br. Br1: 135; Br2: 450- <b>451</b>	<i>H. venosa</i>
'Divergens'	<i>H. divergens</i> Bay. Br1: 135; Br2: <b>451</b> ; P68, <b>72-73</b> ; HM3: <b>171</b>	<i>H. monticola</i>
'Eilyae'	<i>H. eilyae</i> Poelln. Br1: 135; Br2: <b>454-455</b> ; Br3: <b>53*</b> ; P69	<i>H. glauca</i>
'Elite'	<i>Aloe tortuosa</i> v. <i>major</i> SD. Br1: 259; Br2: <b>778</b> , 822. NON <i>H. 'Major'</i>	<i>H. viscosa</i>
'Elongata'	<i>H. schmidtiana</i> v. <i>elongata</i> Poelln. Br1: 237; Br2: <b>720*-721</b> ; Br3: <b>143*</b>	<i>H. nigra</i>
'Engleri'	<i>H. engleri</i> Dint. Br1: 138; Br2: 461- <b>462</b> ; HM2: <b>164</b>	<i>H. venosa</i>
'Erecta'	<i>H. erecta</i> Haw. Br1: 138; Br2; <b>463</b>	<i>H. minima</i>
'Exulata'	<i>H. planifolia</i> v. <i>exulata</i> Poelln. Br1: 208; Br2: <b>631</b>	<i>H. cymbiformis</i>
'Fallax'	<i>H. fallax</i> Poelln. Br1: 139; Br2: <b>465</b> ; Br3: <b>59*</b>	<i>H. coarctata</i>
'Fatleaf'	<i>H. tessellata</i> v. <i>obesa</i> Res. & Poelln. Br1: 255; Br2: <b>769</b> . Non <i>H. 'Obesa'</i>	<i>H. venosa</i>
'Fergusoniae'	<i>H. fergusoniae</i> Poelln. Br1: 143; Br2: <b>474*</b> ; Br3: <b>69*</b>	<i>H. bolusii</i>
'Fouchei'	<i>H. fouchei</i> Poelln. Br1: 145; Br2; <b>477*-478</b> ; Br3: <b>73*</b> ; P74, <b>117</b> ; HM2: <b>159</b>	<i>H. retusa</i>
'Fulva'	<i>H. fulva</i> Smith. Br1: 145; Br2: 479- <b>480</b> ; P74	<i>H. coarctata</i>
'Geraldii'	<i>H. geraldii</i> Scott. Br1: 145; Br2: <b>481</b> ; P <b>118</b>	<i>H. retusa</i>
'Giftbergensis'	<i>H. nortieri</i> v. <i>giftbergensis</i> Smith Br1: 197; Br2: <b>603</b>	<i>H. nortieri</i>
'Gigas'	<i>H. gigas</i> Poelln. Br1: 145; Br2: <b>482-483</b> ; HM2: <b>145</b>	<i>H. arachnoidea</i>

CULTIVAR NAME	DOCUMENTATION	AFFILIATED SPECIES
'Gracilidelineata'	<i>H. gracilidelineata</i> Poelln. Br1: 150; Br2: 491; P62-63, 77	<i>H. cymbiformis</i>
'Granata'	<i>Apicra granata</i> Willd. Br1: 151; Br2: 496	<i>H. minima</i>
'Grandicula'	<i>H. reinwardtii</i> v. <i>grandicula</i> Smith. Br1: 221; Br2: 679	<i>H. reinwardtii</i>
'Grandis'	<i>H. angustifolia</i> v. <i>grandis</i> Smith. Br1: 91; Br2: 354-355; P36; HM3: 147	<i>H. angustifolia</i>
'Guttata'	<i>H. guttata</i> Uit. Br1: 153; Br2: 503; P78; HM3: 162	<i>H. reticulata</i>
'Haageana'	<i>H. haageana</i> Poelln. Br1: 154; Br2: 504-505; Br3: 79*; P78	<i>H. reticulata</i>
'Hans Schuldt'	<i>H. limifolia</i> f. <i>schuldtiana</i> Res. Br1: 167; P86. NON <i>H. 'Schuldtiana'</i>	<i>H. limifolia</i>
'Helmiae'	<i>H. helmiae</i> Poelln.. Br1: 155; Br2: 511, F; Br3: 83*; SC2: 154	<i>H. mucronata</i>
'Henriquesii'	<i>H. henriquesii</i> Res. Br1: 156; Br2: 513; P81	? <i>H. coarctata</i>
'Hilliana'	<i>H. hilliana</i> Poelln. Br1: 157; Br2: 518-519; Br3: 85*	<i>H. cymbiformis</i>
'Huddle'	<i>H. fasciata</i> v. <i>caespitosa</i> Berg. Br1: 143; Br2: 470-471; P43-44; HM1: 140 NON <i>H. 'Caespitosa'</i>	<i>H. attenuata</i>
'Huntsdriftensis'	<i>H. reinwardtii</i> v. <i>huntsdriftensis</i> Smith Br1: 221; Br2: 680-681	<i>H. coarctata</i>
'Hybrida'	<i>Aloe hybrida</i> SD. Br1: 158; Br2: 521-522; P82	?
'Icosiphylla'	<i>H. icosiphylla</i> Bak. Br1: 158; Br2: 522; P82	?
'Incrassata'	<i>H. planifolia</i> v. <i>incrassata</i> Poelln. Br1: 209; Br2: 632*; Br3: 119*	<i>H. cymbiformis</i>
'Indurata'	<i>H. indurata</i> Haw. Br1: 159; Br2: 524	<i>H. viscosa</i>
'Inermis'	<i>H. inermis</i> Poelln. Br1: 159; Br2: 525*; Br3: 91*	<i>H. mucronata</i>
'Inflexa'	<i>H. tessellata</i> v. <i>inflexa</i> Bak. Br1: 255; Br2: 768	<i>H. venosa</i>
'Integra'	<i>H. integra</i> Poelln. Br1: J, 159; Br2: 526, G; P82; HM3: 163; Haw 14(4): 125*-127, 2000	<i>H. mucronata</i>
'Jacobseniana'	<i>H. jacobseniana</i> Poelln. Br1: 161; Br2: 532; P77, 82; HM2: 150	<i>H. glauca</i>
'Janseana'	<i>H. janseana</i> Uit. Br1: 161; Br2: 533-534; P82	<i>H. angustifolia</i>
'Joeyae'	<i>H. joeyae</i> Scott Br1: 161; Br2: 535	<i>H. cooperi</i>
'Jonesiae'	<i>H. jonesiae</i> Poelln. Br1: 161; Br2: 536-537; P77, 82	<i>H. glauca.</i>
'Joubertii'	<i>H. bijliana</i> v. <i>joubertii</i> Poelln. Br1: 107; Br2: 391	<i>H. arachnoidea</i>
'Keithii'	<i>H. limifolia</i> v. <i>keithii</i> Smith Br1: 167; Br2: 553; P86; HM2: 152	<i>H. limifolia</i>
'Kewensis'	<i>H. kewensis</i> Poelln. Br1: 163; Br2: 538; P82; HM2: 143	Cultigen
'Krausii'	<i>H. coarctata</i> v. <i>krausii</i> Res. Br1: 119; Br2: 418; HM3: 143	<i>H. coarctata</i>
'Laetevirens'	<i>H. laetevirens</i> Haw. Br1: 163; Br2: 542-543; P84	<i>H. turgida</i>
'Laevis'	<i>H. laevis</i> Haw. Br1: 163; Br2: 543-544	<i>H. marginata</i>
'Lepida'	<i>H. lepida</i> Smith Br1: 165; Br2: 547; HM2: 152	<i>H. cymbiformis</i>
'Liliputana'	<i>H. angustifolia</i> v. <i>liliputana</i> . Uit. Br1: 93; Br2: 356	<i>H. chloracantha</i>
'Limpida'	<i>H. limpida</i> Haw. Br1: 169; Br2: 558	<i>H. mucronata</i>
'Lisbonensis'	<i>H. lisbonensis</i> Res. Br1: 170; Br2: 558-559; P87	Cultigen
'Longiaristata'	<i>H. longiaristata</i> Poelln. Br1: 171; Br2: 564*; Br3: 99*	<i>H. arachnoidea</i>
'Luteorosea'	<i>H. luteorosea</i> Uit. Br1: 171; Br2: 566; P88; HM3: 163	<i>H. herbacea</i>
'Major'	<i>H. blackbeardiana</i> v. <i>major</i> Poelln. Br1: 109; Br2: 394; Br3: 33*	<i>H. bolusii</i>
'Margaritifera'	<i>H. pumila</i> v. <i>margaritifera</i> L. Br1: 175, M, N; Br2: 653-654	<i>H. maxima</i>
'Mclarenii'	<i>H. mclarenii</i> Poelln. Br1: 184; Br2: 582*; Br3: 103*; P95	<i>H. mucronata</i>
'Megafyle'	<i>H. limifolia</i> f. <i>major</i> Res. Br1: 169; Br2: 556; P84, 86 NON <i>H. 'Major'</i>	<i>H. limifolia</i>
'Minor'	<i>H. greenii</i> f. <i>minor</i> Res. Br1: 153; Br2: 500-501	<i>H. coarctata</i>
'Minutissima'	<i>H. minutissima</i> Poelln. Br1: 185; Br2: 586	<i>H. venosa</i>

Continued on page 17.



- 50 seeds)  
L08-97. Aloe microstigma JL121 et al. (also 50/500/5000 seeds)  
L08-98. Aloe microstigma JAA266+549 (Worcester, RSA)#  
L08-99. Aloe microstigma JAA648 (Karooport, RSA)# (also 50/500 seeds)  
L08-100. Aloe millotii JL122+JCD (also 50 seeds)  
L08-101. Aloe mudenensis AJ (Muden, Natal, RSA)# (also 50/500/5000 seeds)  
L08-102. Aloe munchii J. Miller  
L08-103. Aloe mutabilis PR  
L08-104. Aloe ngobitensis GC  
L08-105. Aloe niehburiana JL127 (Al Barh, Yemen)#+JAA (also 50/500 seeds)  
L08-106. Aloe ortholopha COR (Zimbabwe) (50/500 seeds)  
L08-107. Aloe parvibracteata AJ  
L08-108. Aloe parvula JL5900 et al. **CITES 1** (also 50 seeds)  
L08-109. Aloe peglerae DS (also 50/500 seeds)  
L08-110. Aloe pictifolia J.Miller+PG  
L08-111. Aloe plicatilis COR  
L08-112. Aloe pluridens COR (also 50/500 seeds)  
L08-113. Aloe pratensis J.Miller  
L08-114. Aloe pretoriensis COR  
L08-115. Aloe rauhii JL132 (Madagascar)# **CITES1** (artificially propagated) (also 50/500 seeds)  
L08-116. Aloe reynoldsii JL999 (also 50/500 seeds)  
L08-117. †Aloe cf. rigens Lavr.232602 (N. Somalia)#  
**L08-118. NEW!** †Aloe rubroviolacea PR  
L08-119. Aloe aff. rubroviolacea ? NK  
L08-120. Aloe sabaea PEL+JL134 (Karia, Yemen)# (also 50/500 seeds)  
L08-121. Aloe saponaria JL136 et al. (also 50 seeds)  
L08-122. Aloe secundiflora JL125 (Aloe grey, superb spines) (Namanga, Kenya)# (also 50/500 seeds) RARE Introduction in by Cactus-Aventures  
L08-123. Aloe sinkatana JL137+PR (small, f. yellow) (also 50/500 seeds)  
L08-124. †Aloe somaliensis JL975  
L08-125. Aloe spectabilis KV (also 50 seeds)  
L08-126. Aloe speciosa COR (also 50/500 seeds)  
L08-127. Aloe spicata PR  
L08-128. Aloe striata JL128 et al. (also 50/500/5000 seeds)  
L08-129. Aloe suarezensis JAA668+BUG+PR (Montagne des Français, Diego Suarez, Madagascar)#  
**L08-130. NEW!** †Aloe suarezensis JAA884 (Cap d'Ambre, Madagascar)#  
L08-131. Aloe succotrina JL140 (possible par 50 seeds)  
L08-132. †Aloe suprafoliata JCD  
L08-133. Aloe tenuior JAA  
L08-134. Aloe thraskii PEL+JCD+PR (Mkambuki, Natal)# (also 50/500 seeds)  
L08-135. Aloe tugenensis aff. ? JL141 (not spotted, not cespitoux), (Nakuru, Kenya)# (also 50/500 seeds) découverte J. L.  
L08-136. Aloe umfoloziensis JL143 (also 50 seeds)  
L08-137. Aloe vaombe GO+BUG +JCD+PR (Madagascar)# (also 50/500 seeds)  
L08-138. Aloe vaombe JAA (W. Behara, Madagascar)#  
L08-139. Aloe vaombe JAA (E. Tranoroa, Madagascar)#  
L08-140. Aloe variegata JL144 (also 50/500 seeds)  
L08-141. Aloe vera (= A. barbadensis) JL67  
**L08-142. NEW!** †Aloe vera var. PA  
**L08-143. NEW!** †Aloe vera aff. fl. rouges JL  
L08-144. Aloe zebrina JL139 (Kalahari 1978, Botswana)# (also 50 seeds)  
L08-145. Aloe sp Nakuru JL76/2 sp. nova (also 50/500 seeds) discovered by Joël Lodé, not described yet.  
L08-146. Aloe aff. dawei AJ (fl. jaunes)  
L08-147. Aloe aff. globuligemma KHE (also 50/500 seeds)  
L08-148. Aloe aff. greenwayi AJ (Tanzania)# fl. yellow also 50/500 seeds)  
L08-149. Aloe sp KHE (also 50 seeds)  
L08-150. Aloe descoingsii X rauhii JL97 (superb hybrid!) (also 50/500 seeds)  
L08-151. Aloe globuligemma X variegata JAA (also 50 seeds)  
L08-152. Aloe Xspinosissima (= humilis x arborescens) JCD  
L08-153. Aloe striata x saponaria JCD  
L08-154. †Aloe sp res. sabaea JL  
L08-155. †Aloe x bolleyi X parvula JAA  
L08-156. Aloe globuligemma X variegata BUG (also 50/500 seeds)  
L08-157. Aloe x jacksonii GX  
L08-158. Aloe jucunda x humilis GX (also 50 seeds)  
L08-159. Aloe jucunda x variegata GX
- ASPHODELUS** (Liliaceae)  
L08-160. Asphodelus microcarpus (Masca, Tenerife)#
- ASTROLOBA** (Liliaceae)  
L08-161. Astroloba pentagona JL157 (also 50 seeds)
- BOWIEA** (Liliaceae)  
L08-162. Bowiea volubilis ND+BUG
- BULB** sp (Liliaceae/Iridaceae/Hyacinthaceae)  
L08-163. †Bulbe sp JL3857 (N. Kommagas, RSA)#  
L08-164. Bulbe sp JL (Masca, Tenerife)#  
L08-165. †Bulbe sp 'strelitzioides' (N. Kommagas, RSA)#  
L08-166. Bulbe sp JAA555 (E. Lambert's Bay, RSA)#  
L08-167. Bulbe sp BEY (Iridaceae)
- BULBINE** (Liliaceae / Asphodelaceae)  
L08-168. Bulbine alooides JAA (also 50 seeds)  
L08-169. Bulbine annua ND+EA (also 50 seeds)  
L08-170. †Bulbine caulescens GX (yellow-orange fl.)  
L08-171. †Bulbine frutescens JCD  
L08-172. Bulbine lagopus JAA  
L08-173. †Bulbine sedifolia JAA234 (Carolusberg, RSA)#  
**L08-174. NEW!** †Bulbine semibarbata AH  
L08-175. Bulbine vitrea JL2985 (Carolusberg, RSA)#  
L08-176. Bulbine sp JL S. Calvinia (RSA)#  
L08-177. †Bulbine ? sp JAA640 Nuwerus (RSA)#  
L08-178. Bulbine sp Koegab, (RSA)# BEY
- CYRTANTHUS** (Amaryllidaceae)  
**L08-179. NEW!** Cyrtanthus brachyscyphus BUG
- DIPCADI** (Liliaceae/Hyacinthaceae)  
L08-180. Dipcadi serotinum ssp. fulvum JL8923 (Arrieta, Lanzarote)# (also 50 seeds)  
L08-181. Dipcadi viride BEY (RSA)#  
L08-182. Dipcadi sp JE
- ERIOSPERMUM** (Liliaceae)  
L08-183. Eriospermum ? sp JL2983 (Carolusberg, RSA)#
- GASTERALOE** (Liliaceae)  
L08-184. Gasteraloe bicolor x viguieri JAA
- GASTERIA** (Liliaceae)  
L08-185. Gasteria acinacifolia JL5937 (géante!) (also 50 seeds)  
L08-186. Gasteria (nitida v.) armstrongii JL366+JAA (also 50 seeds)  
L08-187. Gasteria (bicolor v.) liliputana JL373+GX (also 50 seeds)  
L08-188. Gasteria (bicolor v.) caespitosa JL368  
L08-189. Gasteria candicans v. glabrata JL370  
L08-190. Gasteria conspicua JL369 (also 50 seeds)  
L08-191. Gasteria ellaphiae JAA +AS (Paul Sayer Dam, Type location)# (also 50 seeds) RARE  
L08-192. Gasteria ellaphiae EJV11150 (Kouga Dam, RSA)# (also 50 seeds) RARE  
L08-193. Gasteria excelsa JAA (also 50 seeds)  
**L08-194. NEW!** Gasteria glauca JAA  
L08-195. Gasteria glomerata PR+BUG (also 50 seeds)  
L08-196. Gasteria pillansii JAA+JL (Bullhouer, RSA)# (also 50 seeds)  
L08-197. Gasteria pulchra JL+PR  
L08-198. Gasteria pulchra JAA (E. Hankey, RSA)#  
L08-199. Gasteria trigona JL378 (also 50/500 seeds)  
L08-200. Gasteria (carinata) v. verrucosa JL379 (also 50 seeds)  
L08-201. Gasteria (carinata) v. verrucosa f. major JL380 (50 seeds)  
L08-202. Gasteria vlokii JAA  
L08-203. Gasteria sp JL01/364 (almost glabrous)  
L08-204. Gasteria bicolor X excelsa JAA (also 50 seeds)  
L08-205. Gasteria excelsa X bicolor JAA  
L08-206. Gasteria Xverrucosa GX (also 50/500 seeds)
- L08-207. HAWORTHIA** (Liliaceae) (possible, involuntary hybridization, from hundred years old collection, Botanical Garden of Nantes, France from the plants with JL access code. However pure clones of the plants – and more species not listed here- maybe obtained through KAKTITOS at the <http://cactus-aventures.com>

- website) (see also end of list)
- L08-208. †Haworthia altilinea JL409 ONLY ONE PACKET!
- L08-209. Haworthia asperula JL411 (the real one!) (collected about 1850)
- L08-210. Haworthia attenuata v. britteniae JL414 (also 50 seeds)
- L08-211. Haworthia attenuata v. clariperla JL415
- L08-212. †Haworthia bolusii v. blackbeardiana JAA (S.E. Cathart, RSA)#
- L08-213. Haworthia chloracantha v. denticulifera JL418 (also 50 seeds)
- L08-214. Haworthia cooperi GX+ JAA
- L08-215. Haworthia cymbiformis v. compacta JL427
- L08-216. Haworthia emelyae JAA
- L08-217. NEW!** †Haworthia fasciata JL
- L08-218. Haworthia fasciata v. browniana JL435 (also 50 seeds)
- L08-219. †Haworthia fasciata v. concolor JL5938
- L08-220. Haworthia glabrata JL436 (also 50 seeds)
- L08-221. Haworthia glauca v. armstrongii JL437
- L08-222. NEW!** †Haworthia herbacea JL
- L08-223. Haworthia X kuentzii JL442 (also 50 seeds)
- L08-224. NEW!** †Haworthia limifolia JL ONLY ONE PACKET!
- L08-225. Haworthia marumiana v. batesiana JL416 (also 50 seeds)
- You want to know how the plants look? No problems, get the Cactaceae & Succulentae Encyclopaedia DVD!*
- L08-226. Haworthia minima (margaretifera f.) JL448 (also 50 seeds)
- L08-227. NEW!** †Haworthia mirabilis v. mundula JL
- L08-228. Haworthia mucronata v. habdomadis RB23-2 (also 50 seeds)
- L08-229. Haworthia pumila JAA (Bonniesvale, RSA)#
- L08-230. †Haworthia pygmaea JL569 TRES PETITE QUANTITE
- L08-231. Haworthia reticulata v. hurlingii JL469 (also 50 seeds)
- L08-232. Haworthia subrigida JL475 (also 50 seeds)
- L08-233. Haworthia translucens JL479 (also 50 seeds)
- L08-234. †Haworthia turgida JL640
- L08-235. Haworthia venosa (tessellata) JL
- L08-236. Haworthia venosa (tessellata) v. parva JL477 (50 seeds)
- L08-237. Haworthia sp JL401/03 (aff. fasciata, light green yellowish leaves)
- L08-238. Haworthia sp JL403/05
- L08-239. Haworthia sp JL406/08 (aff. fasciata)
- HOMERIA** (Iridaceae)
- L08-240. Homeria (Moraea) ochroleuca BEY (RSA)# (also 100 seeds)
- L08-241. Homeria aff. schlechteri JL3450 (5km E. Alexander Bay, RSA)#
- LACHENALIA** (Liliaceae/Hyacinthaceae)
- L08-242. Lachenalia alba BEY (RSA)# (also 50 seeds)
- L08-243. †Lachenalia hirta BEY
- L08-244. Lachenalia liliiflora BEY
- L08-245. Lachenalia matthewsii BEY (RSA)#
- L08-246. Lachenalia namaquensis BEY (RSA)#
- L08-247. Lachenalia orchioides v. glaucina JAA
- L08-248. †Lachenalia purpureo-coerulea BEY (RSA)#
- L08-249. Lachenalia reflexa BEY (also 50 seeds)
- L08-250. Lachenalia roodeae KV
- L08-251. Lachenalia rubida JE
- L08-252. Lachenalia undulata KV
- L08-253. Lachenalia sp JL (Carolusberg, RSA)# (also 50 seeds)
- L08-254. Lachenalia sp JAA639 (O. Calvinia, RSA)# (also 50 seeds)
- L08-255. Lachenalia sp JL (E. Beauvallon, RSA)# (also 50 seeds)
- LOMATOPHYLLUM** (Liliaceae)
- L08-256. Lomatophyllum citreum JL436+PR (also 50 seeds)
- L08-257. Lomatophyllum occidentale PR (also 50 seeds)
- L08-258. Lomatophyllum prostratum GH (ex Uhlig)
- L08-259. Lomatophyllum tormentorii AJ+Lavr. (Ile Maurice)
- MASSONIA** (Liliaceae)
- L08-260. Massonia depressa JAA243 (Lekkering, RSA)#
- L08-261. Massonia depressa JL+BEY (Nigramoep, RSA)# (also 50 seeds)
- L08-262. NEW!** Massonia depressa JAA907 (10km. N. Clanwilliam, RSA)# (also 50 seeds)
- L08-263. NEW!** Massonia depressa JAA942 (Nieuwoudwille, RSA) #
- ORNITHOGALUM** (Liliaceae)
- L08-264. Ornithogalum caudatum JL586 (Also 50 seeds)
- L08-265. Ornithogalum graminifolium DMC9802 (S.E. Stutterheim, RSA)#
- L08-266. Ornithogalum longibracteatum PFO (also 50 seeds)
- L08-267. Ornithogalum maculatum KV
- L08-268. †Ornithogalum suaveolens BEY (Langebaan, RSA)#
- L08-269. Ornithogalum thyrsoides KV
- SCILLA** (Liliaceae)
- L08-270. Scilla latifolia (fl. violettes) (San Andres, Tenerife)#
- L08-271. Scilla pauciflora BUG
- VELTHEIMIA** (Liliaceae)
- L08-272. Veltheimia bracteata BUG+COR (also 50/500 seeds)
- WHITEHEADIA** (Liliaceae)
- L08-273. †Whiteheadia bifolia BS (RSA)#
- TROPICAL PLANTS, EXOTICS, BULBS...**
- Many exotic species are also pictured in the DVD Cactaceae & Succulentae Encyclopaedia (23,000 photos!)**
- L08-274. Agapanthus africanus JL+GX fl. mauve (Liliaceae) (also 100 seeds)
- L08-275. Agapanthus praecox ssp. minimus AJ (also 100 seeds)
- L08-276. †Agapanthus umbellatus ND (Liliaceae)
- L08-277. Anomatheca laxa BEY (RSA)# (Iridaceae) red fl.
- L08-278. Asphodelus aestivus JL (Cuevas del Almanzora, Spain)# (Asphodelaceae = Liliaceae)
- L08-279. Asphodelus tenuifolius JL (Cuevas del Almanzora, Spain)# (Asphodelaceae = Liliaceae)
- L08-280. Asphodelus tenuifolius ND (Asphodelaceae = Liliaceae)
- L08-281. †Babiana rubrocyanea BEY (RSA)# (Iridaceae)
- L08-282. Cyrtanthus mackenii AJ+JE (Natal, Transkei)# (Amaryllidaceae)
- L08-283. Diets grandiflora AJ (Iridaceae)
- L08-284. Diets iridioides AJ (Cape, RSA)# (Iridaceae) (also 100/1000 seeds)
- L08-285. Eucomis bicolor ND (Liliaceae) "Plante ananas" (also 100 seeds)
- L08-286. Galtonia candicans ND (Liliaceae)
- L08-287. Geissothiza imbricata BEY (RSA)# (Iridaceae)
- L08-288. Gladiolus carneus BEY (RSA)# (Iridaceae)
- L08-289. Hedychium gardnerianum JE (Liliaceae)
- L08-290. Hippeastrum hybride GX (Amaryllidaceae) (also 50/500 seeds)
- L08-291. †Homeria ochroleuca BEY (RSA)# (Iridaceae)
- L08-292. †Homeria sp blue fl. BEY (RSA)# (Iridaceae) (also 100 seeds)
- L08-293. Ipheion uniflorum 'Froyle Mill' JE (Liliaceae)
- L08-294. Iris sibirica JL (Cuevas del Almanzora, Spain)# (Iridaceae)
- L08-295. Kniphofia uvaria DS (Liliaceae)
- L08-296. Lapeirousia sp JB (RSA)# (Iridaceae)
- L08-297. Littonia modesta JE (Liliaceae) (also 50 seeds)
- L08-298. Pancratium maritimum JL (Cabo de Gata, Spain)# (also 50 seeds)
- L08-299. †Romulea khamiesensis BEY (RSA)# (Iridaceae)
- L08-300. Sandersonia aurantiaca JE (Liliaceae)
- L08-301. Schizostylis coccinea 'Professor Barnard' JE (Liliaceae) (also 50 seeds)
- L08-302. †Sparaxis bulbifera BEY (RSA)# (Iridaceae)
- L08-303. NEW!** Stenomesson coccineum MCA (San Jeronimo de Surco, Peru)# (Amaryllidaceae) fl. orange
- L08-304. Synnotia bicolor BEY (RSA)# (Iridaceae)
- L08-305. Urginea maritime JL (Cuevas del Almanzora, Spain)# (Liliaceae) (also 100 seeds)
- L08-306. †Vallotia purpurea JL (Liliaceae)
- L08-307. †Veltheimia bracteata BUG (Liliaceae) (miniature)
- L08-308. Veltheimia capensis JE (Liliaceae)
- RARE or CITES 1: 1,50Euros 10 seeds.**  
**The CITES 1 seeds are by artificial propagation)**
- ALOE** (Liliaceae)
- L08-309. †Aloe austroarabica J.Miller (Wadi Muraba, Saudi Arabia)#
- L08-310. †Aloe betsileensis J.Miller (E. Ihosy, Madagascar)#
- L08-311. Aloe bowiea JL86 et al. (Port Elizabeth, RSA)# + JAA
- L08-312. NEW!** †Aloe descoingsii JL CITES1
- L08-313. Aloe erythrophylla J.Miller (S. Col d'Iremo, Madagascar)#
- L08-314. Aloe haworthioides GX
- L08-315. NEW!** †Aloe musapana J. Miller
- L08-316. NEW!** †Aloe porphyrostachys ssp. koeneni (Petra,

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L08-317. †Aloe scobinifolia Lavr. (Erigavo, Somalia)#  
L08-318. †Aloe wildii J. Miller (Chimanimani Mts, Zimbabwe)#

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CULTIVAR NAME	DOCUMENTATION <i>Continued from page 12.</i>	AFFILIATED SPECIES
'Montana'	<i>H. nortieri</i> v. <i>montana</i> Smith. Br1: 197; Br2: <b>604</b>	<i>H. nortieri</i>
'Multifolia'	<i>H. cymbiformis</i> v. <i>multifolia</i> Triebn. Br1: 131; Br2: <b>440; P62-63</b>	<i>H. cymbiformis</i> .
'Multilineata'	<i>H. retusa</i> v. <i>multilineata</i> Smith Br1: 229; Br2: <b>703-704; P119; SC2: 155</b>	<i>H. retusa</i>
'Multituberculata'	<i>H. triebneriana</i> v. <i>multituberculata</i> Poelln. Br1: 265; Br2: <b>785*</b> ; Br3: <b>171*</b>	<i>H. mirabilis</i>
'Mundula'	<i>H. mundula</i> Smith Br1: 192; Br2: N; <b>0; 594-595; P72-73</b> , 99; SC1: <b>140</b>	<i>H. mirabilis</i>
'Musculina'	<i>H. musculina</i> Smith Br1: 193; Br2: <b>596</b> ; P99; HM2: <b>156</b>	<i>H. coarctata</i>
'Mutabilis'	<i>H. mutabilis</i> Poelln. Br1: 193; Br2: <b>597*-598</b> ; Br3: <b>107*</b>	<i>H. minima</i>
'Nana'	<i>H. schmidtiana</i> f. <i>nana</i> Poelln. Br1: 237; Br2: 720; <b>P101</b>	<i>H. nigra</i>
'Napierensis'	<i>H. triebneriana</i> v. <i>napierensis</i> . Triebn.& Poelln. Br1: 265; Br2: 785; <b>P72-73, 98</b>	<i>H. mirabilis</i>
'Nitidula'	<i>H. nitidula</i> Poelln. Br1: 197; Br2: <b>601</b>	<i>H. mirabilis</i>
'Obesa'	<i>H. cymbiformis</i> v. <i>obesa</i> . Poelln. Br1: 131; Br2: <b>440-441; P64-65</b> ; HM2: <b>148</b>	<i>H. cymbiformis</i>
'Oertendahlii'	<i>H. venosa</i> v. <i>oertendahlii</i> Hjelm. Br1: 273; Br2: 812- <b>813</b>	<i>H. venosa</i>
'Otzenii'	<i>H. otzenii</i> Smith Br1: 201; Br2: <b>609</b> ; P103	<i>H. mutica</i>
'Overleaf'	<i>H. polyphylla</i> Bak. Br1: 210; Br2: <b>639</b> . NON <i>H. granata</i> v. <i>polyphylla</i> ; <i>H. 'Polyphylla'</i>	? <i>H. mucronata</i>
'Pallida'	<i>H. pallida</i> Haw. Br1; 201; Br2: <b>610-611</b> ; P103	? <i>H. herbacea</i>
'Pallidifolia'	<i>H. turgida</i> v. <i>pallidifolia</i> Smith Br1: 271; Br2: <b>798</b> ; P133; HM1: <b>150</b>	<i>H. turgida</i>
'Papillosa'	<i>Aloe papillosa</i> SD. Br1: 202; Br2: <b>611</b> ; SC1: <b>141</b>	<i>H. herbacea</i>
'Parva'	<i>H. parva</i> Haw. Br1: 203; Br2: <b>616-617</b> ; <b>P136</b>	<i>H. venosa</i>
'Patagiata'	<i>H. asperiuscula</i> v. <i>patagiata</i> Smith Br1: 99; Br2: <b>367-368</b>	<i>H. viscosa</i>
'Peacockii'	<i>H. peacockii</i> Bak. Br1: 204; Br2: 619; P103	<i>H. coarctata</i>
'Pearsonii'	<i>H. pearsonii</i> Wright Br1: 204; Br2: <b>620</b> ; P104; HM3: <b>175</b>	<i>H. herbacea</i>
'Peggiensis'	<i>H. reinwardtii</i> v. <i>peggiensis</i> . Smith. Br1: 223; Br2: <b>686-687</b>	<i>H. reinwardtii</i>
'Pellucens'	<i>H. pellucens</i> Haw. Br1: 204; Br2: 359, <b>622</b>	<i>H. arachnoidea</i>
'Perviridis'	<i>H. rugosa</i> v. <i>perviridis</i> SD. Br1: 232; Br2: <b>486</b> , 711- <b>712</b> ; P120	Cultigen
'Picta'	<i>H. picta</i> Poelln. Br1: 205; Br2: <b>Q, R, 624*-625</b> ; Br3: <b>117*</b> ; P104; HM3: <b>158</b> ; SC2: <b>156</b>	<i>H. emelyae</i>
'Pimentelii'	<i>H. limifolia</i> f. <i>pimentelii</i> Res. Br1: 169; Br2: 557; P87	<i>H. limifolia</i>
'Planifolia'	<i>H. planifolia</i> Haw. Br1: 207; Br2: <b>628; P65</b> , 104; HM3: <b>155</b>	<i>H. cymbiformis</i>
'Pluriperlata'	<i>H. radula</i> v. <i>pluriperlata</i> Haw. Br1: 216; Br2: <b>662-663</b>	<i>H. attenuata</i>
'Polyphylla'	<i>H. granata</i> v. <i>polyphylla</i> Haw. Br1: 151; Br2: 498	<i>H. minima</i>
'Poor Relation'	<i>H. triebneriana</i> v. <i>depauperata</i> Poelln. Br1: 263; Br2: <b>783</b> NON 'Depauperata'	<i>H. mirabilis</i>
'Pseudocoarctata'	<i>H. reinwardtii</i> v. <i>pseudocoarctata</i> Poelln Br1: 223; Br2: <b>687-688</b>	<i>H. coarctata</i>
'Pseudogranulata'	<i>H. pseudogranulata</i> Poelln. Br1: 211; Br2: <b>642</b>	?
'Pseudorigida'	<i>H. pseudorigida</i> SD. Br1: 211; Br2: 642- <b>643</b> ; HM2: <b>161</b>	? <i>H. viscosa</i>
'Pseudotessellata'	<i>H. pseudotessellata</i> Poelln. Br1: 211; Br2: 643-644	<i>H. venosa</i>
'Pseudotortuosa'	<i>Aloe pseudotortuosa</i> SD. Br1: 211; Br2: <b>645</b> ; <b>P140</b> ; HM3: <b>187</b>	<i>H. viscosa</i>
'Pulchra'	<i>H. reinwardtii</i> v. <i>pulchra</i> Poelln. Br1: 224; Br2: <b>688</b> ; Br3: <b>129*</b>	<i>H. reinwardtii</i>
'Pulchritude'	<i>H. triebneriana</i> v. <i>pulchra</i> Poelln. Br1: 265; Br2: <b>786</b> NON <i>H. 'Pulchra'</i>	<i>H. mirabilis</i>
'Pumila'	<i>Aloe pumila</i> L. p.p. Br1: 212; Br2: <b>650-651; P72-73</b> , 105- <b>106</b> ; HM3: <b>176</b> ; SC2: <b>156</b>	<i>H. maxima</i>
'Pusilla'	<i>H. schmidtiana</i> v. <i>pusilla</i> Poelln. Br1: 237; Br2: <b>721*</b> ; Br3: <b>145*</b>	<i>H. nigra</i>
'Quaggaensis'	<i>H. viscosa</i> v. <i>quaggaensis</i> Smith. Br1: 279; Br2: <b>822</b>	<i>H. viscosa</i>
'Recurva'	<i>Aloe recurva</i> Haw. Br1: 217; Br2: <b>665-666</b> ; P108	<i>H. venosa</i>

CULTIVAR NAME	DOCUMENTATION	AFFILIATED SPECIES
'Resendeana'	<i>H. resendeana</i> Poelln. Br1: 225; Br2: 695, <b>696*</b> , <b>697</b> ; Br3: <b>131*</b> ; <b>P113-114</b>	Cultigen
'Revendettii'	<i>H. revendettii</i> Uit. Br1: 230; Br2: <b>706-707</b> ; <b>P119</b>	Cultigen
'Riebeekensis'	<i>H. reinwardtii</i> v. <i>riebeekensis</i> Smith Br1: 224; Br2: <b>689</b>	<i>H. coarctata</i>
'Rigida'	<i>Aloe cylindrica</i> v. <i>rigida</i> Lam. Br1: 230; Br2: <b>433</b> ; P87, 120	Cultigen
'Robertsonensis'	<i>H. schuldtiana</i> v. <i>robertsonensis</i> Poelln. Br1: 239; Br2: <b>727*</b> ; Br3: <b>151*</b>	<i>H. maraisii</i>
'Rooibergensis'	<i>H. mucronata</i> v. <i>rooibergensis</i> . Est.& Batt. Br2: <b>592-595, P</b>	<i>H. mucronata</i>
'Roussouwii'	<i>H. roussouwii</i> Poelln. Br1: 231; Br2: 707- <b>708</b> Br3: <b>135*</b> ; P120	<i>H. mirabilis</i>
'Rubrobrunea'	<i>H. rubrobrunea</i> Poelln. Br1: 231; Br2: <b>709-710</b> ; <b>P120</b>	Cultigen
'Rubrodentata'	<i>H. triebneriana</i> v. <i>rubrodentata</i> Triebn. & Poelln. Br1: 265; Br2; <b>787*</b> ; Br3: <b>173*</b> ; <b>P72-73; 97</b> ; HM2: <b>155</b>	<i>H. mirabilis</i>
'Rugosa'	<i>Aloe rugosa</i> SD. Br1: 231; Br2: <b>710</b> ; P120	? <i>H. attenuata</i>
'Ryderiana'	<i>H. ryderiana</i> Poelln. Br1: 233; Br2: <b>713</b> ; Br3: <b>137*</b> ; <b>P120</b> ; HM2: <b>159</b>	Cultigen
'Ryneveldii'	<i>H. ryneveldii</i> Poelln. Br1: 233; Br2: <b>714-715</b>	<i>H. nigra</i>
'Salina'	<i>H. stayneri</i> v. <i>salina</i> Poelln. Br1: 249; Br2: <b>746*</b> ; Br3: <b>159*</b>	<i>H. cooperi</i>
'Sampaiana'	<i>H. coarctata</i> v. <i>sampaiana</i> Res. Br1: 120; Br2: <b>419-420</b> ; <b>P121</b>	<i>H. coarctata</i>
'Schmidtiana'	<i>H. schmidtiana</i> Poelln. Br1: 235; Br2: <b>717*-718</b> ; Br3: <b>139*</b>	<i>H. nigra</i>
'Schuldtiana'	<i>H. schuldtiana</i> Poelln. Br1: 237; Br2: 722- <b>723</b> ; Nr3: <b>149*</b> P122; HM2: <b>160</b>	<i>H. maraisii</i>
'Semiglabrata'	<i>H. semiglabrata</i> Haw. Br1: 240; Br2: <b>729-730</b>	?
'Semipapillosa'	<i>H. papillosa</i> v. <i>semipapillosa</i> Haw. Br1: 202; Br2: <b>613</b>	<i>H. maxima</i>
'Sessiliflora'	<i>H. sessiliflora</i> Bak. Br1: 243; Br2: <b>734</b> ; P123	?
'Silvicola'	<i>H. greenii</i> v. <i>silvicola</i> Smith Br1: 153; Br2: <b>502</b>	<i>H. coarctata</i>
'Smitii'	<i>H. smitii</i> Poelln. Br1: 245; Br2: <b>738-739</b> ; Br3: <b>155*</b> P123; HM3: <b>181</b>	<i>H. scabra</i>
'Smoothie'	<i>H. tuberculata</i> v. <i>sublaevis</i> Poelln. Br1: 269; Br2: <b>796*</b> ; Br3: <b>181*</b> NON <i>H.</i> 'Sublaevis'	<i>H. scabra</i>
'Solitaria'	<i>H. retusa</i> v. <i>solitaria</i> Smith. Br1: 230; Br2: <b>705</b> ; HM3: <b>180</b>	<i>H. retusa</i>
'Sparsa'	<i>H. fasciata</i> f. <i>sparsa</i> Poelln. Br1: 141; Br2: 467- <b>468</b> ; Br3: <b>61*</b> ; <b>P72-73</b>	<i>H. fasciata</i>
'Spearpoint'	<i>H. reticulata</i> v. <i>acuminata</i> Poelln. Br1: 227; Br2: <b>699</b> ; Br3: <b>133</b> . NON <i>H.</i> 'Acuminata'	<i>H. reticulata</i>
'Standeri'	<i>H. integra</i> v. <i>standeri</i> Est. Br2: <b>527-528</b>	<i>H. mucronata</i>
'Stayneri'	<i>H. stayneri</i> Poelln. Br1: 249; Br2: 745	<i>H. cooperi</i>
'Stiemiei'	<i>H. stiemiei</i> Poelln. Br1: 249; Br2: <b>748*</b> ; Br3: <b>161*</b> ; P125	? <i>H. arachnoidea</i>
'Stolonifera'	<i>H. limifolia</i> v. <i>stolonifera</i> Res. Br1: 168; Br2: 554- <b>555</b> ; P86	<i>H. limifolia</i>
'Striata'	<i>H. limifolia</i> v. <i>striata</i> Pilb. P87, <b>85*</b> , <b>72-73</b> ; Br1: 169; Br2: 557- <b>558</b> ; HM3: <b>164</b>	<i>H. limifolia</i>
'Subarmata'	<i>H. cymbiformis</i> f. <i>subarmata</i> Poelln. Br1: 129; Br2: <b>438*</b> ; Br3: <b>47*</b>	<i>H. cymbiformis</i>
'Subattenuata'	<i>Aloe subattenuata</i> SD. Br1: 250; Br2: 750- <b>751</b> ; <b>P72-73, 125-127</b>	?
'Subconfluens'	<i>H. fasciata</i> v. <i>subconfluens</i> Poelln. Br1: 143; Br2: <b>473*</b> ; Br3: <b>67*</b>	<i>H. fasciata</i>
'Suberecta'	<i>H. turgida</i> v. <i>suberecta</i> Poelln. Br1: 271; Br2: <b>V, 800</b> ; <b>P133</b> ; HM3: <b>185</b>	<i>H. turgida</i>
'Subexpansa'	<i>H. tuberculata</i> v. <i>subexpansa</i> Poelln. Br1: 269; Br2: <b>796</b> ; Br3: <b>179*</b> ; HM2: <b>163</b>	<i>H. scabra</i>
'Subfasciata'	<i>Aloe subfasciata</i> SD. Br1: 250; BR2: <b>752-753</b> ; P127	? <i>H. fasciata</i>

CULTIVAR NAME	DOCUMENTATION	AFFILIATED SPECIES
'Subinermis'	<i>H. setata</i> v. <i>subinermis</i> Poelln. Br1: 245; Br2: 737-738*; Br3: 153*	<i>H. mucronata</i>
'Subintegra'	<i>H. asperiuscula</i> v. <i>subintegra</i> Smith Br1; 99; Br2: 369	<i>H. viscosa</i>
'Sublaevis'	<i>H. planifolia</i> v. <i>sublaevis</i> Poelln. Br1: 209; Br2: 635	<i>H. cymbiformis</i>
'Sublimpidula'	<i>H. sublimpidula</i> Poelln. Br1: 251; Br2: 754; Br3: 163*; P127	<i>H. maraisii</i>
'Submaculata'	<i>H. submaculata</i> Poelln. Br1: 251; Br2: 756-757; Br3: 165*, P128	? <i>H. herbacea</i>
'Subobtusa'	<i>H. viscosa</i> v. <i>subobtusa</i> Poelln. Br1: 281; Br2: 823-824; P140	<i>H. viscosa</i>
'Subplana'	<i>H. caespitosa</i> f. <i>subplana</i> Poelln. Br1: 113; Br2: 408	<i>H. turgida</i>
'Subproliferans'	<i>H. caespitosa</i> f. <i>subproliferans</i> Poelln. Br1: 113; Br2: 408	<i>H. turgida</i>
'Subreticulata'	<i>H. haageana</i> v. <i>subreticulata</i> Poelln. Br1: 154; Br2: 505*; Br3: 81*	<i>H. reticulata</i>
'Subrigida'	<i>Aloe subrigida</i> Roefm.& Schult. Br1: 251; Br2: 759	?
'Subulata'	<i>Aloe subulata</i> SD. Br1: 252; Br2: 760; P128	<i>H. attenuata</i>
'Tauteae'	<i>H. tauteae</i> Arch. Br1: 252; Br2: 761; P128	?
'Tenuis'	<i>H. truncata</i> f. <i>tenuis</i> Poelln. Br1: 267; Br2: 792; P131	<i>H. truncata</i>
'Tetraploidea'	<i>H. limifolia</i> f. <i>tetraploidea</i> Res. Br1: 167; Br2: 550	<i>H. limifolia</i>
'Tisleyi'	<i>H. tisleyi</i> Bak. Br1: 257; Br2: 774-775; P128	? <i>H. attenuata</i>
'Titch'	<i>H. beanii</i> v. <i>minor</i> Smith Br1: 107; Br2: 389, 822 NON <i>H. 'Minor'</i>	<i>H. viscosa</i>
'Torquata'	<i>H. torquata</i> Haw. Br1: 257; Br2: 775; P141	<i>H. viscosa</i>
'Tortella'	<i>H. tortella</i> Haw. Br1: 257; Br2: 776	? <i>H. viscosa</i>
'Tortuosa'	<i>Aloe tortuosa</i> Haw. Br1: 259; Br2: 777; P128-129	<i>H. viscosa</i>
'Translucens'	<i>Aloe translucens</i> Haw. Br1: 261; Br2: 779-780; P129	<i>H. herbacea</i>
'Triebneri'	<i>H. reinwardtii</i> v. <i>triebneri</i> Res. Br1: 224; Br2: 691-692	<i>H. reinwardtii</i>
'Tuberculata'	<i>H. tuberculata</i> Poelln. Br1: 267; Br2: 793; Br3: 175*; HM3: 181	<i>H. scabra</i>
'Uitewaaliana'	<i>H. uitewaaliana</i> Poelln. Br1: 271; Br2: 803; Br3: 183*; P134	Hybrid
'Umbraticola'	<i>H. umbraticola</i> Poelln. Br1: 271; Br2: 805; Br3: 185*; HM1: 145; HM2: 149; P66-67	<i>H. cymbiformis</i>
'Unicolor'	<i>H. unicolor</i> Poelln. Br1: 272; Br2: 806-807; Br3: 187*; P134; HM2: 163	<i>H. mucronata</i>
'Valida'	<i>H. reinwardtii</i> v. <i>valida</i> Smith Br1: 225; Br2: 693	<i>H. reinwardtii</i>
'Vanstaadensis'	<i>H. fasciata</i> f. <i>vanstaadensis</i> Poelln. Br1: 141; Br2: 468-469; Br2: 63*	<i>H. fasciata</i>
'Variabilis'	<i>H. fasciata</i> f. <i>variabilis</i> Poelln. Br1: 141; Br2: 469*-470; Br3: 65*	<i>H. fasciata</i>
'Velutina'	<i>H. tessellata</i> v. <i>velutina</i> Res.& Poelln. Br1: 257; Br2: 773	<i>H. venosa</i>
'Venteri'	<i>H. venteri</i> Poelln. Br1: 275; Br2: 814-815	<i>H. arachnoidea</i>
'Viridissima'	<i>H. viscosa</i> v. <i>viridissima</i> Smith. Br1: 281; Br2: 824-825; HM2: 164	<i>H. viscosa</i>
'Vittata'	<i>H. vittata</i> Bak. Br1: 281; Br2: 826; P59, 142; HM1: 143	<i>H. cooperi</i>
'Whitesloaneana'	<i>H. whitesloaneana</i> Poelln. Br1: 281; Br2: 827	<i>H. maraisii</i>
'Willowmorensis'	<i>H. willowmorensis</i> Poelln. Br1: 281; Br2: 828; Br3: 189*	<i>H. mirabilis</i>
'Woerden's Jewel'	<i>H. tessellata</i> v. <i>elongata</i> Woerd. Br1: 254; Br2: 766. NON <i>H. 'Elongata'</i>	<i>H. venosa</i>
'Zenigata'	<i>H. zenigata</i> Hay. Alst.3(l): 4, 2003; Haw 15(l):18, 2001	<i>H. minima</i>

## Perplexities at Tradouw Pass

Russell Scott.

Many, if not all *Haworthia*, can be quite attractive and their great variability means that rarely are two the same. This is fortunate for the collector and plant sellers as the variability generates a plethora of names and forms to collect. It also generates considerable continuing interest and debate about what species pigeonholes the plants fit into.

Their typically non-assuming size, and for many their ease of growth, also makes them good plants to have, particularly if room is at a premium. This means they are quite collectable, which is the whole point of specialist journals such as this. However, *Haworthia* is a bit of a mystery for me. The mystery? Well this falls into two parts.

Firstly, unlike the large brightly coloured flowers of *Gasteria* and *Aloe*, *Haworthia* typically has small white unassuming flowers. They are generally too small to be planted in the garden, but many are relatively common roadside inhabitants and many form large mats of hundreds of heads. However, inexplicably, even these common and weedier plants are cherished.

Secondly, whilst I can enjoy the many forms and variation, I am at a complete loss to identify many of these plants. The reason for my difficulties was eloquently and quite pointedly made plain by Bruce Bayer as we examined the *Haworthia* growing in Tradouw Pass.

Tradouw Pass is around 4-5 km long (longer if you include the entry roads) and provides quite spectacular scenery. It follows the valley gorge of the Buffeljags River and traverses typical fynbos vegetation. Its southern entry point is about half way between Swellendam and Heidelberg with the pass running roughly in a north-south direction with Barrydale being almost directly at the northern end. Once through the pass the road heads north to Ladismith and the Little Karoo.

The name of the pass comes from the San words 'Tarras' (footpath) and 'Doas' (girls). The two words are combined to create the word Tradouw. Apparently, the pass was called this because the path of the pass is believed to have been created by the San. The original road through the pass was started in 1873 and completed in 1877 by Thomas Bain. The current road endeavours to preserve the old dry-stone retaining walls. Stone/concrete barriers are used to blend in with the natural surroundings and preserve the natural look.

At the southern entrance of the pass, there are a number of bright red clumps of *Haworthia turgida* precariously clinging to rocky cliffs perhaps 10-15

meters above the road. These form great masses of plants with perhaps hundreds of heads in each clustered mass. These masses are easily visible from the road, but require binoculars or a good telephoto lens to see up close.

As we travelled along the pass, Bruce pointed out some nice *Haworthia*. These were typical forms of *H. arachnoidea*, having flattened incurved leaves bearing soft translucent spines. Many have dark coloured leaves (therefore, these would get the moniker *H. arachnoidea* var. *nigricans*).

Moving northwards through the pass the *H. arachnoidea* start to lose their spination. Spines become shorter, some plants become pale green in colour (although some spine challenged plants retain a dark red/brown colour). Leaves become less incurving. Finally, on some plants leaf spines become non-existent (however, plants with spines still grow beside plants with no spines). This range of spined and spine-less haworthias still fit the description of *H. arachnoidea*.

Now, change one single parameter. This time I start my trip through Tradouw pass in reverse, moving from the north to the south. The first plant I encounter has no spination and soft, pale-green, relatively upright (rather than incurving) leaves. Given this information, I would most likely call it *H. mucronata*.

Not being a *Haworthia* person, there would be no reasonable grounds for me to consider it to be *H. arachnoidea*. As a simple matter of face validity - it has no spines! The presence of spines is the first naive observer's rule of thumb when considering a plant to be *H. arachnoidea* or not. More importantly, most of these plants have translucent margins and keels, which is the key characteristic of *H. mucronata* that separates it from *H. Arachnoidea*.

Looking around a bit, I then spot similar looking plants, but these had short spines. This is still OK. *H. mucronata* is allowed, under the species definition, to have spines provided translucent margins are present. Anyway, the plants are all growing within a few meters of each other, so I am confident that this is simply a variable population. So far, my mental model for *H. mucronata* is intact.

However, moving a bit further south I start to encounter, what for me represents typical *H. arachnoidea*. These plants have robust spines and darker coloured incurving leaves. It was not until some time later when I was examining my photos that it became clear that many (but not all) of these

plants had translucent margins. Therefore, some of these at least fit the species description of *H mucronata*.

In this population, there are plants with spines/no spines, with pale green/red brown leaves, with translucent margins and keels or no translucence. The plants here have characteristics that seem to fit quite neatly into two different species depending which plant you choose. Perhaps, in this case the naming of the species possibly depends on whether you are driving north or south when they are first encountered!

If these plants were sitting on a collector's bench far away from the pass, then it would be easy to say that the one with lots of spines and dark leaves is one species and the one with no spines and pale green leaves is a different species. It would be difficult to argue otherwise based on these observed characteristics. Knowing a bit more

about their location and proximity, perhaps they could be elevated to different forms of the same species. What species, I don't know.

This is why *Haworthia* are a mystery to me. I thank Bruce for stopping along this very nice pass and spending a bit of time to point out these plants and the problem they present.

Photographs pages 22-23.

## More trenchant botany.

M B Bayer.

I recently received e-mail from two taxonomists who refer to the many new "species" that have appeared in the literature. Neither botanist expresses much confidence in the authors and only by virtue of addressing themselves to me, grudgingly suggest that I might be able to provide an opinion (of doubtful merit as it appears). When I showed out by my inability to support any of the new names in my personal account of *Haworthia*, the response was just what is to be expected in the climate of botanical taxonomy. Neither writer can believe that in that plethora of new names, somehow the authors have not succeeded in pinning at least some tails correctly on the donkey.

The one writer comments (albeit not directly to me as the intent was to secure higher intellectual ground by devaluing my opinion to a third party) "It is interesting that all of the 'new' discoveries (e.g. *H. cummingii* to name one) must be forced into the existing classification". The "existing classification" is of course mine. The second writer, after expressing severe doubts about the competence of the authors of all the new names is "disappointed" because I uphold none.

Whatever worth my contribution has been, the problem my correspondents have is inherent in taxonomy because botanists are conditioned to accept "species" on the basis of validity of publication, adherence to the requirements of the nomenclatural creed and by the volume of verbiage and mensurational detail. Without a definition of species linked to at least a slightly holistic view that species are more than a name and an herbarium specimen, these writers simply

have no measure of validity outside their treasured stable data.

A further problem is just the egocentric one which cannot concede that anyone may actually have sufficient knowledge of the plants concerned that they themselves do not possess to authoritatively deal with them. Evidence of this is also in one writer's denouement of one of the new names. By apparently averaging the great detail in the original descriptions accompanying two names now in synonymy, it is possible to state that the third is also synonymous. The irony is that the details of the first descriptions are by no means indicative of the relationships of those two elements. This is particularly ironic because the writer worries that I have generally ignored flower detail in my classification when in this instance the difference in flowers of the two elements is greater than between any other two species in the sub-genus.

This is all grist for an overworked mill about classification being art or science. The fact seems to be that taxonomy is simply a sociological necessity. The system works because it provides the necessary names by which people organise and communicate their thoughts. The fact that they may not agree because the system is faulty, may be irrelevant because individuals create their own realities and require these to be different?

18



*Haworthia turgida* Tradouw Pass South.

19



*Haworthia arachnoidea*. Spiny form from Tradouw Pass South. No translucent margins/keels.

20



*Haworthia arachnoidea* = *Haworthia mucronata*. Spiny form from Tradouw Pass South. Translucent margins & keels.

21

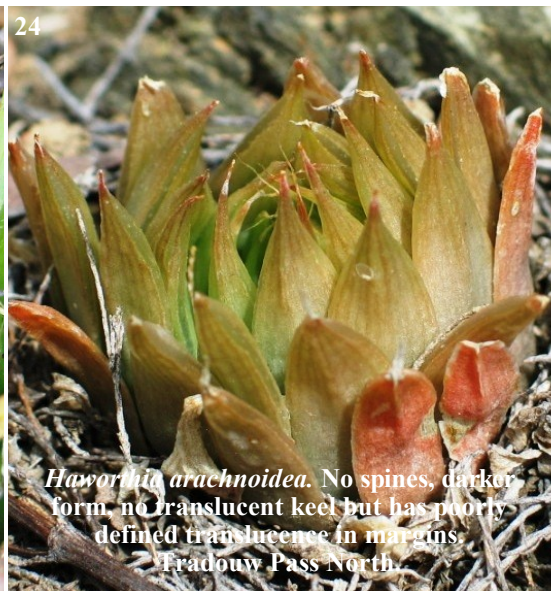


*Haworthia arachnoidea*. Spiny form from Tradouw Pass South. No translucent margins/keels.

22



*Haworthia arachnoidea* Tradouws Pass South. Both "arachnoidea" and "mucronata" can be found in this group.



***Aloe mossurilensis* Ellert sp.nov.**  
**A long-overlooked species from northern Moçambique.**

Anthon Ellert  
4433 West Pyracantha, Tucson, Arizona 85741, USA

*The sands of time run very slowly, the hourglass is huge with the sand trickling out at a very slow rate. - Anon*  
*Whatever mercies come your way be grateful for them. -Anon*

Photographs 1-6 by the author, 7-8 Alexandre Viossat

**Discussion.**

At some time during the early 1960's, that prodigious and intrepid plant explorer and collector, Larry Leach, visited what was then a fairly remote part of the coast of northern Moçambique in East Africa, Mossuril Bay, in Nampula Province, and brought back to his home in Salisbury, Rhodesia, (now Harare, Zimbabwe) live material of an aloe which until the present time has remained undescribed.

From the original date of collection during the 1960's through to the 1990's, material of this aloe had only flowered once or perhaps twice in cultivation, but for some unknown reason a specimen was never prepared to enable a description to be made of this plant as a new species. (In a paper by Larry Leach on the identity of *Aloe vituensis* published in 1970 he compares that species to the Mossuril plant as being equally "difficult" in cultivation).

I was fortunate enough to be given an offset of this problematic plant at some stage during the 1970's, and have kept the plant in cultivation ever since. Fortunately this taxon suckers very readily so many separate plants could be cultivated. Of course, all the plants that I have are of the same clone.

During the winter of 1994 in Zimbabwe (May/ June/ July) a large, many-suckered plant that I had in cultivation in Bulawayo was about to flower, but that year unexpected plant-killing frosts occurred with temperatures dropping to minus 17° centigrade. Again no flowers were available for a description to be made, and indeed a substantial part of my succulent plant collection perished that year. Fortunately a few suckers of the large plant did survive. I was able to keep the aloe cultivated, even after moving to Tucson, Arizona in 2001. In January-March 2005 one of the plants sent up a viable inflorescence allowing a preliminary specimen to be made, and a formal description was started. It seemed unusual for a species to have been in cultivation for so many years, 1960's- 2000's, before it could be described, but apparently it has happened before with other plants (Len Newton pers. communication).

I decided to let another year elapse in the hopes that with a second flowering more material would be available for the description. In March 2006 three inflorescences were produced. The plan was also to endeavour to stimulate fruit which would ripen and produce seeds to complete the description. However.... though many aloes hybridise with other species and readily accept pollen from any aloes growing nearby ..... during this second flowering many species were tried repeatedly and it began to look like none of them was acceptable for the reluctant plant. Luckily at last, one was and a single fruit did form. Unfortunately

the fruit aborted before it could develop fully, so no seeds, but at least a fruit could be added to the description.

This new species most closely resembles, but differs from *Aloe vituensis* Baker, in having upright and not decumbent stems, being a heavily branched plant as opposed to the sparingly branched habit of *A. vituensis*, having more and larger leaves per stem, having an inflorescence which is very noticeably densely covered with small whitish dots, blotches or lines and which is up to seven-branched as opposed to simple in *A. vituensis*, having laxly flowered racemes as opposed to sub-densely flowered as in *A. vituensis*, with longer pedicels and slightly larger noticeably dotted and blotched perianths. Of the other 31 species of aloe known to occur in Moçambique only *Aloe suffulta* bears a slight resemblance to the Mossuril plant in that both species have relatively long slender inflorescences and pinkish perianths. Elsewhere in Africa, *A. parvidens*, and *A. deserti*, could perhaps be said to have a superficial resemblance to this new species.

**Diagnosis and Description:** *Aloe mossurilensis* Ellert sp. nov.

*A. vituensis* nem.....in mentem vocans, sed ab illa habitu valde sobolifera, caulibus erectis, haud decumbentibus, foliis pluribus maioribusque, inflorescentia usque septem-ramosa, non simplici, pedunculo dense maculis lineisque dense decorato, racemis laxifloris, pedicellis longioribus, perianthiis leviter maioribus, notabiliter maculatis et punctatis distinguenda.

**Type Locality.**

Mossuril Bay at or near sea level in Nampula Province of Northern Moçambique, approximately 15° S and 40° 43' E in coastal woodland.

**Holotype.** Ellert 43, UA

Specimen prepared from plants of the same clone March, 3-5 2005, March 30, 2006 and April 5, 2006.

**Description.**

Based on plants of the same clone cultivated in Bulawayo, Zimbabwe, Tucson Arizona, and in Port Edward, South Africa. A succulent herb forming clumps with 50-60 heads. **Stem** caulescent, erect 40-60 cm, 1-4cm diam. suckering from the base at or below ground level. **Leaves** smooth to the touch 25-50 per rosette and stems foliate 30-40 cm, appearing from the centre of the rosette fairly tightly clustered, older leaves becoming separated down the stem as plant



elongates; leaf bases becoming more or less amplexicaul, internodes 2-3 cm apart, base of leaf clasping stem pale green to pale pinkish-brown with green or pale pinkish-brown stripes, leaves lanceolate attenuate 30-40 cm long and 3-5cm at the widest point, held erect to spreading and only becoming slightly decumbent with age; upper surface flat, concave or mostly convex, becoming slightly canaliculate towards the apex, green/olive-green to pinkish-brown with linear to narrowly elliptic pinkish-white to whitish-green blotches arranged in irregular bands or groups; lower surface mostly more markedly convex than upper surface with similar markings to upper surface but noticeably much paler and less prominent; leaf margin pale green to whitish-pink or red-brown, sinuate dentate or the interspaces straight; teeth curved upwards, pungent, deltoid or uncinata, brownish-red or pinkish-white, not orange-brown, 3-5 mm long, 6-15 mm apart; leaf apex coming to a sharp point tipped with one or two brownish-red teeth. In the resting stage leaves become very markedly dark pinkish-brown to dark brown with dark pinkish white markings. Leaf exudate clear, drying to dull yellow-green. **Inflorescence** produced singly, erect up to 160 cm tall, with up to seven branches 2-10 cm apart, each branch subtended by a roughly rectangular prominent bract; peduncle up to 106 cm long very slender +/-12 mm in diameter, somewhat flattened up to the first bract about  $\frac{2}{3}$  up the inflorescence, with the angles more or less acute or narrowly wing-like, thereafter more or less terete, pale greenish at the very base but soon becoming pinkish-brown in colour and heavily covered with small whitish dots, blotches and lines; raceme laxly 35-40 flowered, cylindric, +/-9 cm x +/-6 cm diam. (2-6 sterile bracts are present below the first flower on each raceme); buds pinkish-brown with yellow and greyish-blue tips erect to suberect, open flowers nutant; bracts broadly ovate acute, sometimes with a small tooth on one or both sides, +/-17 mm long, up to 12 mm wide, appearing to be fleshy from being markedly convex, (initially completely concealing the pedicels) pale yellowish-green to greyish-blue, with +/-8 initially green, becoming brown to blackish veins folded into the bract and a thin whitish margin. The sterile bracts can have more numerous veins, are less markedly convex and somewhat larger, the lowest +/-35 mm x 25 mm, veins are more prominent on the inner surface of the bract; pedicel +/-16 mm long pinkish-brown with whitish dots and blotches, with age becoming dull yellowish. **Perianth** coral-pink/very pale pinkish-brown, +/-30 mm long cylindric trigonous and slightly curved, +/-8 mm diam. over the ovary, constricted to about 5 mm above the ovary and expanding to 12-13 mm at the wide open mouth; outer segments joined to about  $\frac{2}{3}$  from the base, obscurely 1-2 nerved from the tip to about  $\frac{1}{4}$  of their length down towards the base; inner segments with a prominent midvein from the base to very near the tip; filaments whitish-pink; anthers pale yellowish with orange pollen, exerted 5-6 mm; ovary 8-9 mm long x 2-3 mm wide more or less lanceolate, lemon-green, surface very slightly verrucose; style slightly yellowish-pink; stigma white, exerted 1-2 mm; capsule (not fully ripe)

lime-green, smooth, ellipsoid, 28 mm x 14 mm.

#### Acknowledgements.

The author would like to thank John Lavranos for the Latin diagnosis, Professor Len Newton of Kenyatta University, Nairobi, for copies of photographs of *Aloe vituensis* and both for their continued encouragement and advice on many matters botanical; Dr Dave Palzkill of Tucson for supplying greenhouse space especially during the winter; and Alexandre Viossat for photographs of *Aloe mossurilensis* growing in his collection in Port Edward in South Africa, and obviously growing much better back in Africa in the coastal climate, helping to make the description more complete.

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#### Glossary.

- amplexicaul** stem-clasping as when the base of the leaf is dilated and embraces the stem.  
**attenuate** tapering gradually.  
**canaliculate** channelled or grooved.  
**caulescent** producing a stem above ground.  
**decumbent** reclining towards the horizontal but with end curving upwards.  
**lanceolate** widest nearer the base.  
**peduncle** stem of an inflorescence.  
**perianth** outer parts of a flower; calyx, corolla or both.  
**pungent** ending in a sharp rigid point.  
**raceme** an unbranched flower stalk bearing individual, stalked flowers.  
**terete** cylindrical, round in cross section.  
**trigonous** obtusely three angled.  
**uncinate** hooked.  
**verrucose** warty.

28



29



Fig. 28. Close-up of single rosette in summer growth.  
 Fig. 29. Detail of leaves showing difference in spotting between upper and lower surfaces.  
 Fig. 30. Plant showing winter coloration and brownish-red teeth.  
 Fig. 31. Close-up of raceme showing prominent bracts and speckled appearance of flower parts.  
 Fig. 32. Close-up of single perianth showing detail of exerted stamens.  
 Fig. 33. Close-up of buds showing unique arrangement of bracts totally enclosing developing flowers.  
 Fig. 34. Cultivated plant showing noticeably long and slender peduncle.  
 Back cover. Typical habit of *A. mossurilensis* in cultivation.



30





Typical habit of *A. mossur lensis* in cultivation.