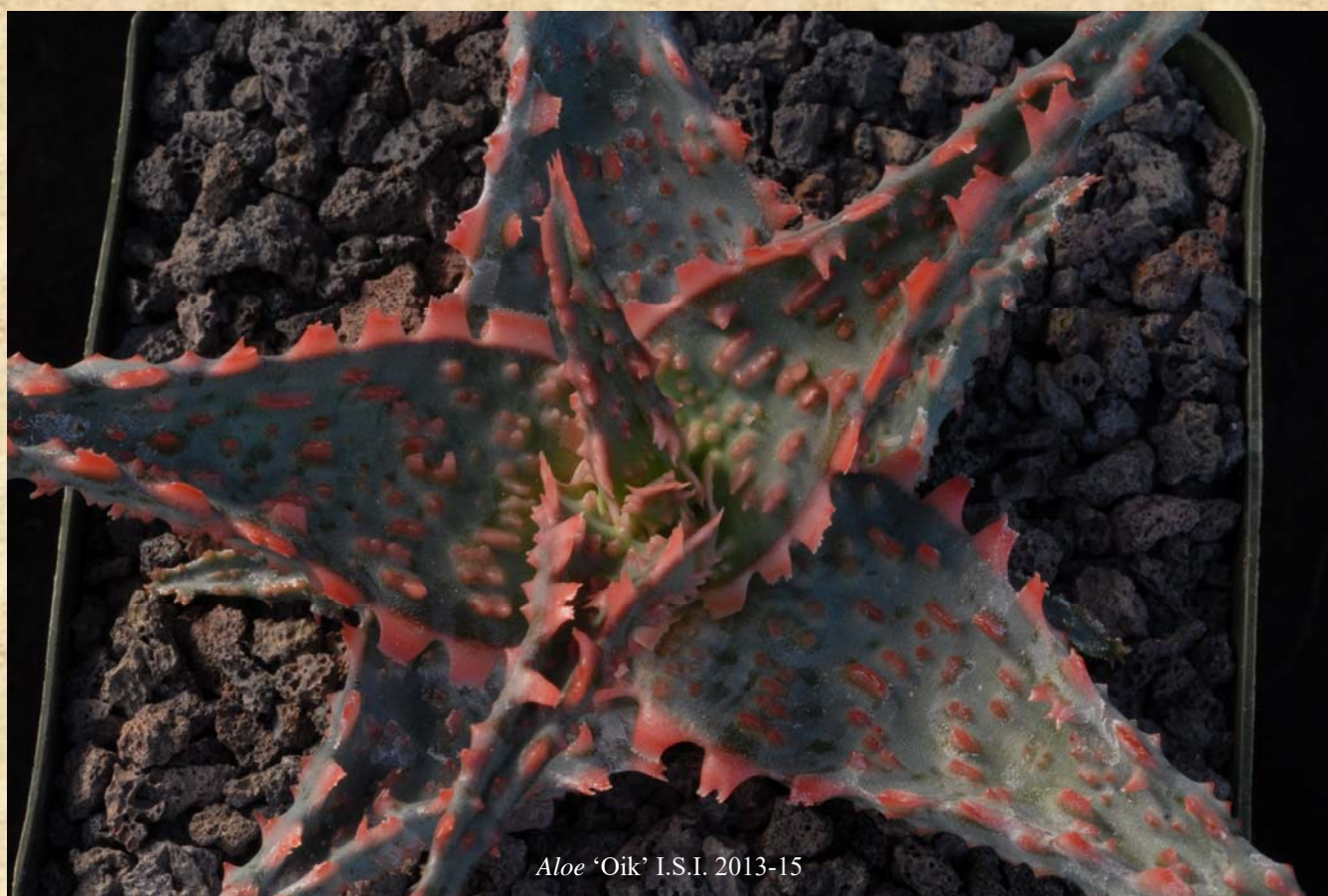


# ALSTERWORTHIA INTERNATIONAL

## THE SUCCULENT ASPHODELACEAE JOURNAL



*Aloe 'Oik' I.S.I. 2013-15*

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# Aloes and a Haworthia distributed by the I.S.I, 2013.

The full list of I.S.I. offerings for 2013, and also those for previous years, may be viewed at <http://www.huntington.org/BotanicalDiv/ISI2013/catalogintro.html>

The complete 2013 list was also published in the March-April USA Cactus & Succulent Journal.

The ISI no longer exports plants but some ISI items are now available in Europe from Succulent Tissue Culture <http://www.succulent-tissue-culture.com/EN>

The text is by John Trager.

*Aloe* 'Brown Betty'



## ISI 2013-11. *Aloe* 'Brown Betty'.

Four of Karen Zimmerman's dwarf "Fantasy" aloe hybrids have been introduced to date: 'Dragon,' DZ' and 'Gargoyle' in 2010 and 'Princess Jack' in 2011. Her hybridization work continues to reveal new combinations of pattern, colour and toothiness.

*Aloe* 'Brown Betty' is a selection from the cross of Kelly Griffin's (KG) # 5 hybrid with Nathan Wong's 'Aumakua Mano', making it a sibling of *Aloe* 'Gargoyle'. The parentage of those parents is too elaborate to detail here or even to have been fully recorded. In any case, 'Brown Betty', in winter, is reddish-brown splashed with cream, like some delicious dessert. Some of the white spots surround pinkish-tipped teeth. In summer the brownish parts go green. Rooted plants from tissue culture of HBG 109996. \$15.

## ISI 2013-12. *Aloe* 'Chameleon'.

This second Zimmerman hybrid for 2013 is named for its chameleon-like, seasonal colour shifts. In summer, its rough, tuberculate, toothy leaves display diffusely intergrading shades of green with patches of translucent white, as if glazed with sugar icing. The leaf edges are darker green, offsetting the white-

toothed, irregularly-serrate margins like those on the keeled heads of some chameleons. In late winter, the plants take on shades of pink and white, the serrate margins standing out even more next to the darker brownish edges. The parentage, like that of *Aloe* 'Brown Betty', is from seed of KG # 5, but with pollen from *Aloe* 'Paul Hutchison', a dwarf clumper with toothy leaves selected by Dick Wright. Rooted plants from tissue-culture of HBG 109997. \$15.

*Aloe* 'Camelion'



## ISI 2013-13. *Aloe* 'Evil Twin'.

Many years ago, in 1975, Shannon Lyons hybridized *Aloe sinkatana* with *A. harlana*. Fast





*Aloe* 'Evil Twin', Huntingdon Botanical Gardens



*Aloe* 'Kujo', Huntingdon Botanical Gardens



forward to 2011 when we finally decided to accession (assign database numbers) the five remaining plants from this cross that had been growing in the lower Desert Garden for decades. Of these, three had subcapitate racemes of dusky orange flowers, while two had yellow flowers. Of the yellow-flowered, one had subcapitate racemes while the other stood out for its capitate inflorescences of bright yellow flowers. This latter plant was singled out some years earlier for propagation and distribution. Gary Lyons chose to call it *Aloe* 'Sophie', after his and Shannon's daughter. We attempted to initiate this plant in tissue culture from an offset of a plant growing in our nursery, but it succumbed to fungal contamination. A second attempt was made from a young inflorescence of a plant in the garden which was successfully initiated. However, some confusion in labelling resulted in the yellow imposter (Sophie's evil twin if you will) inserting herself into the initiation process. Rather than discard the resulting crop, we have decided to introduce both of the yellow flowered siblings with the real 'Sophie' to be introduced at a later date. Rooted plants from tissue culture of HBG 78549. \$8.

**ISI 2013-14. *Aloe* 'Kujo'.**

The 'Sophie' saga described above continues. After that selection was made, Gary Lyons, selected one of Sophie's orange-flowered siblings to be named after the

human Sophie's brother, Jacob. Kujo is his stage name as a world-class break dancer of international acclaim. We had initially thought to introduce the aloes simultaneously so as not to unnecessarily stoke any sibling rivalry, but in the end the elder is the first to be honoured with his own namesake aloe cultivar. Rooted plants from tissue culture of HBG 78546. \$8.

**ISI 2013-15. *Aloe* 'Oik'. Photograph front cover.**

This is the third and last of the Zimmerman hybrids to be introduced in 2013. It has fairly short, triangular, bluish to greenish leaves, depending on the season, covered with irregular, broad, often multi-pointed and therefore ragged-looking, pinkish-red teeth on the margins, while the surface teeth are conical or merged to form raised dashes. Leaf apices are often bilaterally compressed with jagged teeth reminiscent of some medieval weapon. The plant's parentage is 'Confetti' (an earlier un-introduced Zimmerman hybrid) x KZ # 1 (*A. divaricata* x *parvula*). The "oik", in its mildest connotation, is British for a rambunctious child. Rooted plants from tissue culture of HBG 109998. \$15.

**ISI 2013-16. *Aloe veseyi* Reynolds.**

This cliff-dwelling aloe is restricted in habitat and



rare in cultivation. Its pendent stems bear loose rosettes of slender, glaucous-green leaves with elongated white spots. It is said to have yellow to red flowers, but only the yellow is known in cultivation. Described in 1959 by Reynolds, it is his type collection that has been tissue cultured for this introduction: HBG 25907, G. W. Reynolds 8659. It was collected from Kalombo Falls, Northern Province, Zambia, where it grows hanging from rocks and vertical cliff-faces at altitudes of 840-1500 m. \$7.

**ISI 2013-22. *Haworthia* 'Three-Cornered Hat'.**

Most hybridizers eventually graduate beyond the F1 generation, the initial cross of two species. This is because the F1s so often express a muddled combination of characteristics of the two parents; F2s liberate us into purer realms of fantasy. Occasionally, however, F1s are quite attractive and well worth cultivating.

*Haworthia* 'Three-cornered Hat' is a cross of *H. koelmaniorum*, perhaps with *H. viscosa*, made by Bob Kent's trained hummingbird. Bob gave the plant to Steven Hammer, who in turn shared it with us; the present name, a reference to its three-ranked leaves and de Falla's 1917 ballet, *El Sombbrero de Tres Picos*, was already attached. In this slow-growing hybrid, leaves can stack one upon another up to six deep, and are glossy, coppery-brown, covered with concolorous tubercles. Another notable feature, though not necessarily a

selling point, is the elongated inflorescence. One specimen, once extracted from the overhanging branches through which it had scrambled in our

greenhouse, measured an astonishing 2.6 m long! Pride goeth before the fall. Rooted plants of HBG 110000, from tissue culture. \$10.



John Trager demonstrates the 2.6 metre length of the elongated inflorescence of *Haworthia* 'Three Cornered Hat'



*Haworthia* 'Three-Cornered-Hat. Karen Simmerman

**Photograph credits.**

- Aloe* 'Brown Betty' Karen Zimmerman. Hunt. Bot. Gdn.
- Aloe* 'Camelion' Carole Karen Zimmerman
- Aloe* 'Evil Twin' John N. Trager. Hunt Bot. Gdn.
- Aloe* 'Kujo' John N. Trager
- Aloe* 'Oik' Karen Zimmerman
- Aloe* 'Veseyi' John B. Miller, Institute of Aloe Studies.

## Haworthia Species List - SANBI Web Site List.

From time to time each author produces his own plant list based on his species concept. Each list represents that author's personal views in that it promotes that author's species concept and the species he derives from it.

Species lists may also be produced independently by professional bodies. These are independent assessments listing the published species they accept. They consider only species validly published under the provisions of the International Code of Nomenclature.... (I.C.N.).

One highly respected on-line-list of Plants of Southern Africa is produced and kept up to date by the South African National Biodiversity Institute (SANBI).

**Plants of Southern Africa – an online check list. This comprehensive list is free. Go to:**

1. <http://posa.sanbi.org/searchspp.php>
2. From the opening page titled "Plants of Southern Africa - an on line check list" select "Asphodeaceae", from the Family list then
2. From the Genus list select "Haworthia" (or whatever genus interest you), then
4. From Pick the Type of Results you would like to see select "full species details & include synonymous taxa", then click search
5. This will produce a full list of the species SANBI accept. with synonyms
6. Select "save as" to save the full details on your computer.
7. Click on the left arrow at the top left corner to repeat the procedure for another genus.  
The list is updated every two months and is free to down load whenever you wish.

**The SANBI Haworthia list follows.**



- Haworthia aegrota** Poelln. = **Haworthia herbacea** var. **herbacea**
- Haworthia agavoides** Zantner & Poelln. = **Haworthia sordida** var. **sordida**
- Haworthia agnis** L.Battista
- Haworthia albanensis** Schonland = **Haworthia angustifolia** var. **angustifolia**
- Haworthia albicans** (Haw.) Haw. = **Haworthia marginata**
- Haworthia albicans** (Haw.) Haw. var. **virescens** (Haw.) Baker = **Haworthia marginata**
- Haworthia altilinea** Haw.
- Haworthia altilinea** Haw. var. **limpida** = **Haworthia mucronata** var. **inconfluens**
- Haworthia altilinea** Haw. var. **limpida forma inconfluens** Poelln. = **Haworthia mucronata** var. **inconfluens**
- Haworthia altilinea** Haw. var. **morrisiae** Poelln. = **Haworthia mucronata** var. **morrisiae**
- Haworthia altilinea** Haw. var. **morrisiae** Poelln. = **Haworthia mucronata** var. **morrisiae**
- Haworthia angolensis** Baker = **Chortolirion angolense**
- Haworthia angustifolia** Haw. = **Haworthia angustifolia** var. **altissima**, **Haworthia angustifolia** var. **angustifolia**, **Haworthia angustifolia** var. **baylissii**, **Haworthia angustifolia** var. **paucifolia**
- Haworthia angustifolia** Haw. forma **baylissii** (C.L.Scott) M.B.Bayer = **Haworthia angustifolia** var. **baylissii**
- Haworthia angustifolia** Haw. var. **angustifolia** **Aloestephylla** Schult. & J.H.Schult. (2000. Glen & Hardy. FSA 5:1-167.)
- Haworthia albanensis** Schonland (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)
- Haworthia angustifolia** Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia angustifolia** Haw. var. **grandis** G.G.S (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)
- Haworthia angustifolia** Haw. var. **baylissii** (C.L.Scott) M.B.Bayer
- Haworthia angustifolia** Haw. forma **baylissii** (C.L.Scott) M.B.Bayer (1999. Bayer. *Haworthia* revisited.)
- Haworthia angustifolia** Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia baylissii** C.L.Scott (1999. Bayer. *Haworthia* revisited.)
- Haworthia angustifolia** Haw. var. **denticulifera** Poelln. = **Haworthia chloracantha** var. **denticulifera**
- Haworthia angustifolia** Haw. var. **grandis** G.G.Sm. = **Haworthia angustifolia** var. **angustifolia**
- Haworthia angustifolia** Haw. var. **liliputana** Uitewaal = **Haworthia chloracantha** var. **denticulifera**
- Haworthia angustifolia** Haw. var. **paucifolia** G.G.Sm.
- Haworthia angustifolia** Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia arachnoidea** (L.) Duval = **Haworthia arachnoidea** var. **arachnoidea**, **Haworthia arachnoidea** var. **aranaea**, **Haworthia arachnoidea** var. **namaquensis**, **Haworthia arachnoidea** var. **nigricans**, **Haworthia arachnoidea** var. **scabrispina**, **Haworthia arachnoidea** var. **setata**
- Haworthia arachnoidea** (L.) Duval sensu Pole-Evans = **Haworthia cooperi** var. **cooperi**
- Haworthia arachnoidea** (L.) Duval sensu Pole Evans = **Haworthia cooperi** var. **cooperi**
- Haworthia arachnoidea** (L.) Duval var. **arachnoidea**
- Aloe arachnoides** Thunb. (2000. Glen & Hardy. FSA 5:1167.) **Aloe pumila** L. p.p. (PRECIS convention, not of compiler.)
- Aloe pumila** L. var. **arachnoidea** L. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)
- Haworthia arachnoidea** (L.) Duval p.p. (PRECIS convention, not of compiler.)
- Haworthia arachnoidea** (L.) Duval var. **minor** Haw. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)
- Haworthia pallida** Haw. var. **paynei** (L.Bolus) L.Bolus (1985. Scott. Genus *Haworthia* 150.)
- Haworthia arachnoidea** (L.) Duval var. **arana** (A.Berger)
- M.B.Bayer**
- Haworthia arachnoidea** (L.) Duval p.p. (PRECIS convention, not of compiler.)
- Haworthia aranea** (A.Berger) M.B.Bayer (1999. Bayer. *Haworthia* revisited.)
- Haworthia bolusii** Baker var. **aranaea** A.Berger (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)
- Haworthia arachnoidea** (L.) Duval var. **minor** Haw. = **Haworthia arachnoidea** var. **arachnoidea**
- Haworthia arachnoidea** (L.) Duval var. **Namaquensis** M.B.Bayer
- Haworthia arachnoidea** (L.) Duval p.p. (PRECIS convention, not of compiler.)
- Haworthia arachnoidea** (L.) Duval var. **nigricans** (Haw.) M.B.Bayer
- Haworthia arachnoidea** (L.) Duval p.p. (PRECIS convention, not of compiler.)
- Haworthia helmiae** Poelln. (2002. Bayer. *Haworthiad* 16:62-71.)
- Haworthia setata** Haw. var. **nigricans** Haw. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)
- Haworthia unicolor** Poelln. var. **venteri** Bayer (1999. Bayer. *Haworthia* revisited.) **Haworthia venteri** Poelln. (1999. Bayer. *Haworthia* revisited.)
- Haworthia arachnoidea** (L.) Duval var. **scabrispina** M.B.Bayer.
- Haworthia arachnoidea** (L.) Duval p.p. (PRECIS convention, not of compiler.)
- Haworthia arachnoidea** (L.) Duval var. **setata** (Haw.) M.B.Bayer
- Aloe setosa** Schult. & J.H.Schult. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)
- Haworthia arachnoidea** (L.) Duval p.p. (PRECIS convention, not of compiler.)
- Haworthia gigas** Poelln. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)
- Haworthia setata** Haw. (1999. Bayer. *Haworthia* revisited.)
- Haworthia setata** Haw. var. **major** Haw. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)
- Haworthia setata** Haw. var. **media** Haw. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)
- Haworthia arachnoidea** (L.) Duval var. **xiphiophyll** (Baker) M.B.Bayer = **Haworthia decipiens** var. **xiphiophylla**
- Haworthia aranea** (A.Berger) M.B.Bayer = **Haworthia arachnoidea** var. **aranaea**
- Haworthia archeri** W.F.Barker ex M.B.Bayer = **Haworthia marumiana** var. **archeri**, **Haworthia marumiana** var. **dimorpha**
- Haworthia archeri** W.F.Barker ex M.B.Bayer var. **archeri** = **Haworthia marumiana** var. **archeri**
- Haworthia archeri** W.F.Barker ex M.B.Bayer var. **dimorpha** M.B.Bayer = **Haworthia marumiana** var. **Dimorpha**
- Haworthia aristata** Haw.
- Aloe denticulata** (Haw.) Schult. & J.H.Schult. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)
- Haworthia denticulata** Haw. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)
- Haworthia setata** Haw. var. **subinermis** Poelln. (1998. Breuer. The world of *Haworthia* 1.)
- Haworthia armstrongii** Poelln. = **Haworthia glauca** var. **herrei** forma **herrei**
- Haworthia asperiuscula** Haw. = **Haworthia viscosa** var. **viscosa**
- Haworthia asperiuscula** Haw. var. **patagiata** G.G.Sm. = **Haworthia viscosa** var. **viscosa**
- Haworthia asperiuscula** Haw. var. **subintegra** G.G.Sm. = **Haworthia viscosa** var. **viscosa**
- Haworthia atrofusca** G.G.Sm. = **Haworthia magnifica** var. **atrofusca**
- Haworthia atrovirens** (DC.) Haw. = **Haworthia herbacea** var. **herbacea**
- Haworthia attenuata** (Haw.) Haw. = **Haworthia attenuata** var. **attenuata**, **Haworthia attenuata** var. **radula**

- Haworthia attenuata (Haw.) Haw. forma britteniae (Poelln.) M.B.Bayer = Haworthia attenuata var. attenuata**  
**Haworthia attenuata (Haw.) Haw. forma clariperla (Haw.) M.B.Bayer = Haworthia attenuata var. attenuata**  
**Haworthia attenuata (Haw.) Haw. var. attenuata**  
 Aloe attenuata Haw. (2000. Glen & Hardy. FSA 5:1-167.)  
 Aloe radula Ker Gawl. (2000. Glen & Hardy. FSA 5:1-167.)  
 Haworthia attenuata (Haw.) Haw. forma britteniae (Poelln.) M.B.Bayer (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Haworthia attenuata (Haw.) Haw. forma clariperla (Haw.) M.B.Bayer (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Haworthia attenuata (Haw.) Haw. p.p. (PRECIS convention, not of compiler.)  
 Haworthia attenuata (Haw.) Haw. var. britteniae Poelln. (2001. Rowley & Ed. Eggl. illustrated handbook of succulent plants: Monocots.)  
 Haworthia attenuata (Haw.) Haw. var. clariperla (Haw.) Baker (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Haworthia attenuata (Haw.) Haw. var. deltoidea R.S.Farden (1982. Bayer. New Haworthia Handb. 124.)  
 Haworthia attenuata (Haw.) Haw. var. inusitata R.S.Farden (1982. Bayer. New Haworthia Handb. 124.)  
 Haworthia attenuata (Haw.) Haw. var. linearis R.S.Farden (1982. Bayer. New Haworthia Handb. 124.)  
 Haworthia attenuata (Haw.) Haw. var. minissima R.S.Farden (1982. Bayer. New Haworthia Handb. 124.)  
 Haworthia attenuata (Haw.) Haw. var. odonoghueana R.S.Farden (1982. Bayer. New Haworthia Handb. 124.)  
 Haworthia attenuata (Haw.) Haw. var. uitewaaliana R.S.Farden (1982. Bayer. New Haworthia Handb. 124.)  
 Haworthia britteniae Poelln. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Haworthia clariperla Haw. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Haworthia fasciata (Willd.) Haw. var. caespitose A.Berger (1982. Bayer. New Haworthia Handb. 124.)  
**Haworthia attenuata (Haw.) Haw. var. britteniae Poelln. = Haworthia attenuata var. attenuata**  
**Haworthia attenuata (Haw.) Haw. var. clariperla (Haw.) Baker = Haworthia attenuata var. attenuata**  
**Haworthia attenuata (Haw.) Haw. var. deltoidea R.S.Farden = Haworthia attenuata var. attenuata**  
**Haworthia attenuata (Haw.) Haw. var. inusitata R.S.Farden = Haworthia attenuata var. attenuata**  
**Haworthia attenuata (Haw.) Haw. var. linearis R.S.Farden = Haworthia attenuata var. attenuata**  
**Haworthia attenuata (Haw.) Haw. var. minissima R.S.Farden = Haworthia attenuata var. attenuata**  
**Haworthia attenuata (Haw.) Haw. var. odonoghueana R.S.Farden = Haworthia attenuata var. attenuata**  
**Haworthia attenuata (Haw.) Haw. var. radula (Jacq.) M.B.Bayer**  
 Aloe radula Jacq. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Aloe subulata Salm-Dyck (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Haworthia attenuata (Haw.) Haw. p.p. (PRECIS convention, not of compiler.)  
 Haworthia radula (Jacq.) Haw. (1999. Bayer. Haworthia revisited.)  
 Haworthia radula (Jacq.) Haw. var. pluriperlanta Haw. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
**Haworthia attenuata (Haw.) Haw. var. uitewaaliana R.S.Farden = Haworthia attenuata var. attenuata**  
**Haworthia azurea M.Hayashi**  
**Haworthia badia Poelln. = Haworthia mirabilis var. badia**  
**Haworthia batesiana Uitewaal = Haworthia marumiana var. batesiana**  
**Haworthia batteniae C.L.Scott = Haworthia bolusii var. blackbeardiana**  
**Haworthia bayeri J.D.Venter & S.A.Hammer**  
 Haworthia correcta sensu C.L.Scott (1999. Bayer. Haworthia revisited.)  
 Haworthia willowmorensis sensu C.L.Scott (1999. Bayer. Haworthia revisited.)  
**Haworthia baylissii C.L.Scott = Haworthia angustifolia var. baylissii**  
**Haworthia beanii G.G.Sm. = Haworthia viscosa var. viscosa**  
**Haworthia beanii G.G.Sm. var. minor G.G.Sm. = Haworthia viscosa var. viscosa**  
**Haworthia bicarinata (Haw.) Parr = X Astroworthia X bicarinata**  
**Haworthia bijliana Poelln. = Haworthia mucronata var. inconfluens**  
**Haworthia bijliana Poelln. var. joubertii Poelln. = Haworthia mucronata var. inconfluens**  
**Haworthia blackbeardiana Poelln. = Haworthia bolusii var. blackbeardiana**  
**Haworthia blackbeardiana Poelln. var. major Poelln. = Haworthia bolusii var. blackbeardiana**  
**Haworthia blackburniae W.F.Barker = Haworthia blackburniae var. blackburniae, Haworthia blackburniae var. derustensis, Haworthia blackburniae var. graminifolia**  
**Haworthia blackburniae W.F.Barker var. blackburniae**  
 Haworthia blackburniae W.F.Barker p.p. (PRECIS convention, not of compiler.)  
**Haworthia blackburniae W.F.Barker var. derustensis M.B.Bayer**  
 Haworthia blackburniae W.F.Barker p.p. (PRECIS convention, not of compiler.)  
**Haworthia blackburniae W.F.Barker var. graminifolia (G.G.Sm.) M.B.Bayer**  
 Haworthia blackburniae W.F.Barker p.p. (PRECIS convention, not of compiler.)  
 Haworthia graminifolia G.G.Sm. (1999. Bayer. Haworthia revisited.)  
**Haworthia bolusii Baker = Haworthia bolusii var. blackbeardiana, Haworthia bolusii var. bolusii, Haworthia bolusii var. pringlei**  
**Haworthia bolusii Baker var. aranea A.Berger = Haworthia arachnoidea var. aranea**  
**Haworthia bolusii Baker var. blackbeardiana (Poelln.) M.B.Bayer**  
 Haworthia batteniae C.L.Scott (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Haworthia blackbeardiana Poelln. (1982. Bayer. New Haworthia Handb.)  
 Haworthia blackbeardiana Poelln. var. major Poelln. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Haworthia bolusii Baker p.p. (PRECIS convention, not of compiler.)  
 Haworthia inermis Poelln. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
**Haworthia bolusii Baker var. bolusii**  
 Haworthia bolusii Baker p.p. (PRECIS convention, not of compiler.)  
**Haworthia bolusii Baker var. pringlei (C.L.Scott) M.B.Bayer**  
 Haworthia bolusii Baker p.p. (PRECIS convention, not of compiler.)  
 Haworthia decipiens Poelln. var. pringlei C.L.Scott (2002. Bayer. Haworthiad 16:62-71.)  
 Haworthia pringlei C.L.Scott (2002. Bayer. Haworthiad 16:62-71.)  
**Haworthia bolusii Baker var. semiviva Poelln. = Haworthia semiviva**  
**Haworthia breueri M.Hayashi**  
**Haworthia brevis Haw. = Haworthia minima var. minima**  
**Haworthia britteniae Poelln. = Haworthia attenuata var. attenuata**  
**Haworthia bronkhorstii M.Hayashi**  
**Haworthia browniana Poelln. = Haworthia fasciata**  
**Haworthia bruynsii M.B.Bayer**  
**Haworthia bullulata (Jacq.) Parr = Astroloba bullulata**  
**Haworthia caespitosa Poelln. = Haworthia turgida var. turgida**  
**Haworthia caespitosa Poelln. forma subplana Poelln. = Haworthia turgida var. turgida**



- Haworthia caespitosa** Poelln. forma **subproliferans**  
Poelln. = **Haworthia turgida** var. **turgida**
- Haworthia carrissoi** Resende = **Haworthia glauca** var. **glauca**
- Haworthia chalwinii** Marloth & A.Berger = **Haworthia coarctata** var. **coarctata** forma **coarctata**
- Haworthia chloracantha** Haw. = **Haworthia chloracantha** var. **chloracantha**, **Haworthia chloracantha** var. **denticulifera**, **Haworthia chloracantha** var. **subglauca**
- Haworthia chloracantha** Haw. var. **chloracantha**  
Aloe chloracantha (Haw.) Schult. & J.H.Schult. (2000. Glen & Hardy. FSA 5:1-167.)  
**Haworthia chloracantha** Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia chloracantha** Haw. var. **denticulifera** (Poelln.)  
**M.B.Bayer**  
**Haworthia angustifolia** Haw. var. **denticulifera** Poelln. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
**Haworthia angustifolia** Haw. var. **liliputana** Uitewaal (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
**Haworthia chloracantha** Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia chloracantha** Haw. var. **subglauca** Poelln.  
**Haworthia chloracantha** Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia clariperla** Haw. = **Haworthia attenuata** var. **attenuata**
- Haworthia coarctata** Haw. = **Haworthia coarctata** var. **adelaidensis**, **Haworthia coarctata** var. **coarctata** forma **coarctata**, **Haworthia coarctata** var. **coarctata** forma **greenii**, **Haworthia coarctata** var. **tenuis**
- Haworthia coarctata** Haw. subsp. **adelaidensis** (Poelln.)  
**M.B.Bayer** = **Haworthia coarctata** var. **adelaidensis**
- Haworthia coarctata** Haw. subsp. **coarctata** = **Haworthia coarctata** var. **coarctata** forma **greenii**, **Haworthia coarctata** var. **tenuis**
- Haworthia coarctata** Haw. subsp. **coarctata** var. **greenii** (Baker) **M.B.Bayer** = **Haworthia coarctata** var. **coarctata** forma **greenii**
- Haworthia coarctata** Haw. subsp. **coarctata** var. **tenuis** (G.G.Sm.) **M.B.Bayer** = **Haworthia coarctata** var. **tenuis**
- Haworthia coarctata** Haw. var. **adelaidensis** (Poelln.)  
**M.B.Bayer**  
**Haworthia coarctata** Haw. p.p. (PRECIS convention, not of compiler.)  
**Haworthia coarctata** Haw. subsp. **adelaidensis** (Poelln.)  
**M.B.Bayer** (1999. Bayer. **Haworthia** revisited.)  
**Haworthia reinwardtii** (Salm-Dyck) Haw. var. **adelaidensis** Poelln. (1999. Bayer. **Haworthia** revisited.)  
**Haworthia reinwardtii** (Salm-Dyck) Haw. var. **bellula** G.G.Sm. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
**Haworthia reinwardtii** (Salm-Dyck) Haw. var. **riebeekensis** G.G.Sm. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)
- Haworthia coarctata** Haw. var. **coarctata** = **Haworthia coarctata** var. **coarctata** forma **coarctata**, **Haworthia coarctata** var. **coarctata** forma **greenii**
- Haworthia coarctata** Haw. var. **coarctata** forma **coarctata**  
Aloe coarctata (Haw.) Schult. & J.H.Schult. (2000. Glen & Hardy. FSA 5:1-167.)  
**Haworthia chalwinii** Marloth & A.Berger (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
**Haworthia coarctata** Haw. var. **haworthia** Resende (PRECIS convention, not of compiler.)  
**Haworthia coarctata** Haw. p.p. (PRECIS convention, not of compiler.)  
**Haworthia coarctata** Haw. var. **coarctata** p.p. (PRECIS convention, not of compiler.)  
**Haworthia coarctata** Haw. var. **haworthia** Resende forma **major** Resende (1999. Bayer. **Haworthia** revisited.)  
**Haworthia coarctata** Haw. var. **krausii** Resende (1999. Bayer. **Haworthia** revisited.)
- Haworthia coarctata** Haw. var. **coarctata** forma **greenii** (Baker) **M.B.Bayer**  
**Haworthia coarctata** Haw. p.p. (PRECIS convention, not of compiler.)  
**Haworthia coarctata** Haw. subsp. **coarctata** p.p. (PRECIS convention, not of compiler.)  
**Haworthia coarctata** Haw. subsp. **coarctata** var. **greenii** (Baker) **M.B.Bayer** (1999. Bayer. **Haworthia** revisited.)  
**Haworthia coarctata** Haw. var. **coarctata** p.p. (PRECIS convention, not of compiler.)  
**Haworthia greenii** Baker (1999. Bayer. **Haworthia** revisited.)  
**Haworthia greenii** Baker forma **minor** Resende (1998. Breuer. **The world of Haworthia** 1.)  
**Haworthia peacockii** Baker (1999. Bayer. **Haworthia** revisited.)
- Haworthia coarctata** Haw. var. **haworthia** Resende = **Haworthia coarctata** var. **coarctata** forma **coarctata**
- Haworthia coarctata** Haw. var. **haworthia** Resende forma **major** Resende = **Haworthia coarctata** var. **coarctata** forma **coarctata**
- Haworthia coarctata** Haw. var. **krausii** Resende = **Haworthia coarctata** var. **coarctata** forma **coarctata**
- Haworthia coarctata** Haw. var. **tenuis** (G.G.Sm.) **M.B.Bayer**  
**Haworthia coarctata** Haw. p.p. (PRECIS convention, not of compiler.)  
**Haworthia coarctata** Haw. subsp. **coarctata** p.p. PRECIS convention, not of compiler.)  
**Haworthia coarctata** Haw. subsp. **coarctata** var. **tenuis** (G.G.Sm.) **M.B.Bayer** (1999. Bayer. **Haworthia** revisited.)  
**Haworthia reinwardtii** (Salm-Dyck) Haw. var. **tenuis** G.G.Sm. (1999. Bayer. **Haworthia** revisited.)
- Haworthia comptoniana** G.G.Sm. = **Haworthia emelyae** var. **comptoniana**
- Haworthia concava** Haw. = **Haworthia cymbiformis** var. **cymbiformis**
- Haworthia concinna** Haw. = **Haworthia viscosa** var. **viscosa**
- Haworthia congesta** (Salm-Dyck) Parr = **Astrolobacongesta**
- Haworthia cooperi** Baker = **Haworthia cooperi** var. **cooperi**, **Haworthia cooperi** var. **dielsiana**, **Haworthia cooperi** var. **doldii**, **Haworthia cooperi** var. **gordoniana**, **Haworthia cooperi** var. **gracilis**, **Haworthia cooperi** var. **isabellae**, **Haworthia cooperi** var. **picturata**.
- Haworthia cooperi** Baker var. **cooperi**  
**Haworthia arachnoidea** (L.) Duval sensu Pole-Evans in FPSA 7: t.248 (1982. Bayer. **New Haworthia** Handb.)  
**Haworthia cooperi** Baker p.p. (PRECIS convention, not of compiler.)  
**Haworthia vittata** Baker (1976. Bayer. **Haworthia** Handb. 184.)
- Haworthia cooperi** Baker var. **dielsiana** (Poelln.) **M.B.Bayer**  
**Haworthia cooperi** Baker p.p. (PRECIS convention, not of compiler.)  
**Haworthia dielsiana** Poelln. (1999. Bayer. **Haworthia** revisited.)  
**Haworthia joeyae** C.L.Scott (1999. Bayer. **Haworthia** revisited.)
- Haworthia cooperi** Baker var. **gordoniana** (Poelln.)  
**M.B.Bayer**  
**Haworthia cooperi** Baker p.p. (PRECIS convention, not of compiler.)  
**Haworthia gordoniana** Poelln. (1999. Bayer. **Haworthia** revisited.)
- Haworthia cooperi** Baker var. **gracilis** (Poelln.) **M.B.Bayer**  
**Haworthia cooperi** Baker p.p. (PRECIS convention, not of compiler.)  
**Haworthia gracilis** Poelln. p.p. (PRECIS convention, not of compiler.)  
**Haworthia gracilis** Poelln. var. **Gracilis** (2002. Bayer. **Haworthiad** 16:62-71.)
- Haworthia cooperi** Baker var. **isabellae** (Poelln.) **M.B.Bayer**  
**Haworthia cooperi** Baker p.p. (PRECIS convention, not of compiler.)  
**Haworthia gracilis** Poelln. p.p. (PRECIS convention, not of compiler.)

- Haworthia gracilis Poelln. var. isabellae (Poelln. M.B.Bayer (2002. Bayer. Haworthiad 16:62-71.)  
Haworthia isabellae Poelln. (2002. Bayer Haworthiad 16:62-71.)
- Haworthia cooperi Baker var. leightonii (G.G.Sm.) M.B.Bayer = Haworthia leightonii var. leightonii**  
**Haworthia cooperi Baker var. picturata (M.B.Bayer) M.B.Bayer**  
Haworthia cooperi Baker p.p. (PRECIS convention, not of compiler.)  
Haworthia gracilis Poelln. p.p. (PRECIS convention, not of compiler.)  
Haworthia gracilis Poelln. var. picturata M.B.Bayer (2002. Bayer. Haworthiad 16:62-71.)
- Haworthia cooperi Baker var. pilifera (Baker) M.B.Bayer**  
Haworthia cooperi Baker p.p. (PRECIS convention, not of compiler.)  
Haworthia obtusa Haw. var. pilifera (Baker) Uitewaal (1999. Bayer. Haworthia revisited.)  
Haworthia pilifera Baker (1999. Bayer. Haworthia revisited.)  
Haworthia pilifera Baker var. dielsiana (Poelln.) M.B.Bayer (PRECIS convention, not of compiler.)  
Haworthia pilifera Baker var. dielsiana (Poelln.) M.B.Bayer forma acuminata Poelln. (1999. Bayer. Haworthia revisited.)  
Haworthia stayneri Poelln. (1999. Bayer. Haworthia revisited.)  
Haworthia stayneri Poelln. var. salina Poelln. (1999. Bayer. Haworthia revisited.)
- Haworthia cooperi Baker var. tenera (Poelln.) M.B.Bayer**  
Haworthia cooperi Baker p.p. (PRECIS convention, not of compiler.)  
Haworthia gracilis Poelln. p.p. (PRECIS convention, not of compiler.)  
Haworthia gracilis Poelln. var. tenera (Poelln.) M.B.Bayer (2002. Bayer. Haworthiad 16:62-71.)  
Haworthia tenera Poelln. (2002. Bayer. Haworthiad 16:62-71.)  
Haworthia translucens (Aiton f.) Haw. p.p. (PRECIS convention, not of compiler.)  
Haworthia translucens (Aiton f.) Haw. subsp. tenera (Poelln.) M.B.Bayer (2002. Bayer. Haworthiad 16:62-71.)
- Haworthia cooperi Baker var. truncata (H.Jacobsen) M.B.Bayer**  
Haworthia cooperi Baker p.p. (PRECIS convention, not of compiler.)  
Haworthia obtusa Haw. var. pilifera (Baker) Uitewaal forma truncata H.Jacobsen (1999. Bayer. Haworthia revisited.)
- Haworthia cooperi Baker var. venusta (C.L.Scott) M.B.Bayer**  
Haworthia cooperi Baker p.p. (PRECIS convention, not of compiler.)  
Haworthia venusta C.L.Scott (1999. Bayer. Haworthia revisited.)
- Haworthia cooperi Baker var. viridis (M.B.Bayer) M.B.Bayer**  
Haworthia cooperi Baker p.p. (PRECIS convention, not of compiler.)  
Haworthia gracilis Poelln. p.p. (PRECIS convention, not of compiler.)  
Haworthia gracilis Poelln. var. viridis M.B.Bayer (2002. Bayer. Haworthiad 16:62-71.)
- Haworthia cordifolia Haw. = Haworthia viscosa var. viscosa**  
**Haworthia correctata Poelln. = Haworthia emelyae var. emelyae**  
**Haworthia correctata sensu C.L.Scott = Haworthia bayeri**  
**Haworthia crausii M.Hayashi**  
**Haworthia cymbiformis (Haw.) Duval = Haworthia cymbiformis var. cymbiformis, Haworthia cymbiformis var. incurvula, Haworthia cymbiformis var. obtusa, Haworthia cymbiformis var. ramosa, Haworthia cymbiformis var. reddii, Haworthia cymbiformis var. setulifera**  
**Haworthia cymbiformis (Haw.) Duval var. angustata Poelln. = Haworthia cymbiformis var. cymbiformis**  
**Haworthia cymbiformis (Haw.) Duval var. angustata Poelln. forma subarmata Poelln. = Haworthia cymbiformis var. cymbiformis**  
**Haworthia cymbiformis (Haw.) Duval var. brevifolia Poelln. = Haworthia transiens**  
**Haworthia cymbiformis (Haw.) Duval var. compacta Triebner**
- = Haworthia cymbiformis var. cymbiformis**  
**Haworthia cymbiformis (Haw.) Duval var. cymbiformis**  
Aloe cymbaefolia Schrad. (2000. Glen & Hardy. FSA 5:1167.)  
Aloe cymbiformis Haw. (2000. Glen & Hardy. FSA 5:1-167.)  
Aloe hebes Schult. & J.H.Schult. (2000. Glen & Hardy. FSA 5:1-167.)  
Aloe planifolia (Haw.) Schult. & J.H.Schult. (2000. Glen & Hardy. FSA 5:1-167.)  
Haworthia concava Haw. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia cymbiformis (Haw.) Duval p.p. (PRECIS convention, not of compiler.)  
Haworthia cymbiformis (Haw.) Duval var. angustata Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia cymbiformis (Haw.) Duval var. angustata Poelln. forma subarmata Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia cymbiformis (Haw.) Duval var. compacta Triebner (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia cymbiformis (Haw.) Duval var. planifolia (Haw.) Baker (2000. Glen & Hardy. FSA 5:1-167.)  
Haworthia cymbiformis (Haw.) Duval var. umbraticola (Poelln.) M.B.Bayer (2000. Glen & Hardy. FSA 5:1-167.)  
Haworthia lepida G.G.Sm. (1976. Bayer. Haworthia Handb. 184.)  
Haworthia planifolia Haw. (2000. Glen & Hardy. FSA 5:1167.)  
Haworthia planifolia Haw. var. planifolia (PRECIS convention, not of compiler.)  
Haworthia planifolia Haw. var. exulata Poelln. (1976. Bayer. Haworthia Handb. 184.)  
Haworthia planifolia Haw. var. incrassata Poelln. (1976. Bayer. Haworthia Handb. 184.)  
Haworthia planifolia Haw. var. longifolia Triebner & Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia planifolia Haw. var. longifolia Triebner & Poelln. forma calochlora Triebner & Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia planifolia Haw. var. planifolia forma agavoides Triebner & Poelln. (1976. Bayer. Haworthia Handb. 184.)  
Haworthia planifolia Haw. var. planifolia forma alta Triebner & Poelln. (1976. Bayer. Haworthia Handb. 184.)  
Haworthia planifolia Haw. var. planifolia forma olivacea Triebner & Poelln. (1976. Bayer. Haworthia Handb. 184.)  
Haworthia planifolia Haw. var. planifolia forma robusta Triebner & Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia planifolia Haw. var. poellnitziana Resende (1998. Breuer. The world of Haworthia 1.)  
Haworthia planifolia Haw. var. sublaevis Poelln. (1976. Bayer. Haworthia Handb. 184.)
- Haworthia cymbiformis (Haw.) Duval var. cymbiformis forma ramosa (G.G.Sm.) M.B.Bayer = Haworthia cymbiformis var. ramosa**  
**Haworthia cymbiformis (Haw.) Duval var. incurvula (Poelln.) M.B.Bayer**  
Haworthia cymbiformis (Haw.) Duval p.p. (PRECIS convention, not of compiler.)  
Haworthia incurvula Poelln. (1976. Bayer. Haworthia Handb.)
- Haworthia cymbiformis (Haw.) Duval var. multifolia Triebner = Haworthia transiens**  
**Haworthia cymbiformis (Haw.) Duval var. obesa Poelln. = Haworthia cymbiformis var. setulifera**  
**Haworthia cymbiformis (Haw.) Duval var. obtusa (Haw.) Baker**  
Haworthia cymbiformis (Haw.) Duval p.p. (PRECIS convention, not of compiler.)  
Haworthia hilliana Poelln. (1976. Bayer. Haworthia Handb. 184.)  
Haworthia obtusa Haw. (1976. Bayer. Haworthia Handb. 184.)  
Haworthia umbraticola Poelln. (1976. Bayer. Haworthia Handb. 184.)
- Haworthia cymbiformis (Haw.) Duval var. planifolia (Haw.) Baker = Haworthia cymbiformis var. cymbiformis**  
**Haworthia cymbiformis (Haw.) Duval var. ramosa (G.G.Sm.) M.B.Bayer**  
Haworthia cymbiformis (Haw.) Duval p.p. (PRECIS convention, not of compiler.)  
Haworthia cymbiformis (Haw.) Duval var. cymbiformis forma ramosa (G.G.Sm.) M.B.Bayer (1999. Bayer. Haworthia



- revisited.)  
*Haworthia ramosa* G.G.Sm. (1999. Bayer. *Haworthia* revisited.)  
***Haworthia cymbiformis* (Haw.) Duval var. *reddii* (C.L.Scott) M.B.Bayer**  
*Haworthia cymbiformis* (Haw.) Duval p.p. (PRECIS convention, not of compiler.)  
*Haworthia reddii* C.L.Scott (1999. Bayer. *Haworthia* revisited.)  
***Haworthia cymbiformis* (Haw.) Duval var. *setulifera* (Poelln.) M.B.Bayer**  
*Haworthia cymbiformis* (Haw.) Duval p.p. (PRECIS convention, not of compiler.)  
*Haworthia cymbiformis* (Haw.) Duval var. *obesa* Poelln. (1999. Bayer. *Haworthia* revisited.)  
*Haworthia planifolia* Haw. var. *setulifera* Poelln. (1999. Bayer. *Haworthia* revisited.)  
***Haworthia cymbiformis* (Haw.) Duval var. *transiens* (Poelln.) M.B.Bayer = *Haworthia transiens***  
***Haworthia cymbiformis* (Haw.) Duval var. *translucens* Triebner & Poelln. = *Haworthia transiens***  
***Haworthia cymbiformis* (Haw.) Duval var. *umbraticol* (Poelln.) M.B.Bayer = *Haworthia cymbiformis* var. *cymbiformis***  
***Haworthia decipiens* Poelln. = *Haworthia decipiens* var. *cyanea*, *Haworthia decipiens* var. *decipiens*, *Haworthia decipiens* var. *minor*, *Haworthia decipiens* var. *xiphiophylla***  
***Haworthia decipiens* Poelln. var. *cyanea* M.B.Bayer**  
*Haworthia decipiens* Poelln. p.p. (PRECIS convention, not of compiler.)  
***Haworthia decipiens* Poelln. var. *decipiens***  
*Haworthia decipiens* Poelln. p.p. (PRECIS convention, not of compiler.)  
***Haworthia decipiens* Poelln. var. *minor* M.B.Bayer**  
*Haworthia decipiens* Poelln. p.p. (PRECIS convention, not of compiler.)  
***Haworthia decipiens* Poelln. var. *pringlei* C.L.Scott = *Haworthia bolusii* var. *pringlei***  
***Haworthia decipiens* Poelln. var. *virella* M.B.Bayer = *Haworthia virella***  
***Haworthia decipiens* Poelln. var. *xiphiophylla* (Baker) M.B.Bayer**  
*Haworthia arachnoidea* (L.) Duval var. *xiphiophylla* (Baker) M.B.Bayer (2002. Bayer. *Haworthiad* 16:62-71.)  
*Haworthia decipiens* Poelln. p.p. (PRECIS convention, not of compiler.)  
*Haworthia longiaristata* Poelln. (2002. Bayer. *Haworthiad* 16:62-71.)  
*Haworthia xiphiophylla* Baker (2002. Bayer. *Haworthiad* 16:62-71.)  
***Haworthia dekenahii* G.G.Sm. var. *argenteo-maculosa* G.G.Sm. = *Haworthia pygmaea* var. *argenteo-maculosa***  
***Haworthia dekenahii* G.G.Sm. var. *dekenahii* = *Haworthia magnifica* var. *dekenahii***  
***Haworthia deltoidea* (Hook.f.) Parr = *Astroloba congesta***  
***Haworthia deltoidea* (Hook.f.) Parr var. *intermedia* (A.Berger) Parr = *Astroloba congesta***  
***Haworthia denticulata* Haw. = *Haworthia aristata***  
***Haworthia devriesii* Breuer**  
***Haworthia dielsiana* Poelln. = *Haworthia cooperi* var. *dielsiana***  
***Haworthia distincta* N.E.Br. = *Haworthia venosa* subsp. *venosa***  
***Haworthia divergens* M.B.Bayer = *Haworthia monticola* var. *monticola***  
***Haworthia diversifolia* Poelln. = *Haworthia nigra* var. *diversifolia***  
***Haworthia dodsoniana* (Uitewaal) Parr = *Astroloba herrei***  
***Haworthia egregia* (Poelln.) Parr = *Astroloba bullulata***  
***Haworthia egregia* (Poelln.) Parr var. *egregia* = *Astroloba bullulata***  
***Haworthia egregia* (Poelln.) Parr var. *fardeniana* (Uitewaal) Parr = *Astroloba bullulata***  
***Haworthia eilyae* Poelln. = *Haworthia glauca* var. *herrei* forma *herrei***  
***Haworthia eilyae* Poelln. var. *eilyae* = *Haworthia glauca* var. *herrei* forma *herrei***  
***Haworthia eilyae* Poelln. var. *zantneriana* Resende = *Haworthia glauca* var. *herrei* forma *herrei***  
***Haworthia elizeae* Breuer**  
***Haworthia emelyae* Poelln. = *Haworthia emelyae* var. *comptoniana*, *Haworthia emelyae* var. *emelyae*, *Haworthia emelyae* var. *major*, *Haworthia emelyae* var. *multifolia***  
***Haworthia emelyae* Poelln. var. *beukmannii* Poelln. = *Haworthia mirabilis* var. *beukmannii***  
***Haworthia emelyae* Poelln. var. *comptoniana* (G.G.Sm.) J.D.Venter & S.A.Hammer**  
*Haworthia comptoniana* G.G.Sm. (1997. Venter & Hammer. *Cact. Succ. J.* (Los Angeles) 69:75-77.)  
*Haworthia emelyae* Poelln. p.p. (PRECIS convention, not of compiler.)  
***Haworthia emelyae* Poelln. var. *emelyae***  
*Haworthia correctata* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia emelyae* Poelln. p.p. (PRECIS convention, not of compiler.)  
***Haworthia emelyae* Poelln. var. *major* (G.G.Sm.) M.B.Bayer**  
*Haworthia emelyae* Poelln. p.p. (PRECIS convention, not of compiler.)  
*Haworthia magnifica* Poelln. var. *major* (G.G.Sm.) M.B.Bayer (1997. Bayer. *Aloe* 34:4-6.)  
*Haworthia maraisii* Poelln. var. *major* (G.G.Sm.) M.B.Bayer (1997. Bayer. *Aloe* 34:4-6.)  
*Haworthia schuldiana* Poelln. var. *major* G.G.Sm. (1946. Smith. *Jl S. Afr. Bot.* 12:1-14.)  
***Haworthia emelyae* Poelln. var. *multifolia* M.B.Bayer**  
*Haworthia emelyae* Poelln. p.p. (PRECIS convention, not of compiler.)  
***Haworthia engleri* Dinter = *Haworthia venosa* subsp. *tessellata***  
***Haworthia enigma* M.Hayashi**  
***Haworthia erecta* Haw. = *Haworthia minima* var. *minima***  
***Haworthia esterhuizenii* M.Hayashi**  
***Haworthia fallax* Poelln. = *Haworthia coarctata* var. *coarctata* forma *coarctata***  
***Haworthia fasciata* (Willd.) Haw.**  
*Aloe fasciata* (Willd.) Haw. (2001. Rowley & Ed. Egli. I Illustrated handbook of succulent plants: Monocots.)  
*Aloe fasciata* (Willd.) Haw. var. *major* Salm-Dyck (2001. Rowley & Ed. Egli. Illustrated handbook of succulent plants: Monocots.)  
*Aloe fasciata* (Willd.) Haw. var. *minor* Salm-Dyck (2001. Rowley & Ed. Egli. Illustrated handbook of succulent plants: Monocots.)  
*Aloe subfasciata* Salm-Dyck (1998. Breuer. The world of *Haworthia* 1.)  
*Apicra fasciata* Willd. (2001. Rowley & Ed. Egli. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia browniana* Poelln. (2001. Rowley & Ed. Egli. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia fasciata* (Willd.) Haw. var. *fasciata* (PRECIS convention, not of compiler.)  
*Haworthia fasciata* (Willd.) Haw. forma *browniana* (Poelln.) M.B.Bayer (2001. Rowley & Ed. Egli. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia fasciata* (Willd.) Haw. forma *fasciata* (2001. Rowley & Ed. Egli. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia fasciata* (Willd.) Haw. var. *fasciata* forma *ovato lanceolata* Poelln. (1982. Bayer. *New Haworthia* Handb. 124.)  
*Haworthia fasciata* (Willd.) Haw. var. *fasciata* forma *sparsa* Poelln. (1982. Bayer. *New Haworthia* Handb. 124.)  
*Haworthia fasciata* (Willd.) Haw. var. *fasciata* forma *vanstadensis* Poelln. (1982. Bayer. *New Haworthia* Handb. 124.)  
*Haworthia fasciata* (Willd.) Haw. var. *fasciata* forma *variabilis* Poelln. (1982. Bayer. *New Haworthia* Handb. 124.)  
*Haworthia fasciata* (Willd.) Haw. var. *subconfluens* Poelln. (1998. Breuer. The world of *Haworthia* 1.)  
*Haworthia subfasciata* (Salm-Dyck) Baker (1998. Breuer. The world of *Haworthia* 1.)  
***Haworthia fasciata* (Willd.) Haw. forma *browniana* (Poelln.) M.B.Bayer = *Haworthia fasciata***  
***Haworthia fasciata* (Willd.) Haw. forma *fasciata* = *Haworthia fasciata***  
***Haworthia fasciata* (Willd.) Haw. var. *caespitosa* A.Berger = *Haworthia attenuata* var. *attenuata***  
***Haworthia fasciata* (Willd.) Haw. var. *fasciata* = *Haworthia fasciata***  
***Haworthia fasciata* (Willd.) Haw. var. *fasciata* forma *ovato-***

- lanceolata* Poelln. = *Haworthia fasciata*  
*Haworthia fasciata* (Willd.) Haw. var. *fasciata forma sparsa* Poelln. = *Haworthia fasciata*  
*Haworthia fasciata* (Willd.) Haw. var. *fasciata forma vanstadensis* Poelln. = *Haworthia fasciata*  
*Haworthia fasciata* (Willd.) Haw. var. *fasciata forma variabilis* Poelln. = *Haworthia fasciata*  
*Haworthia fasciata* (Willd.) Haw. var. *subconfluens* Poelln. = *Haworthia fasciata*  
*Haworthia floribunda* Poelln. = *Haworthia floribunda* var. *dentata*, *Haworthia floribunda* var. *floribunda*, *Haworthia floribunda* var. *major*  
*Haworthia floribunda* Poelln. var. *dentata* M.B.Bayer  
*Haworthia floribunda* Poelln. p.p. (PRECIS convention, not of compiler.)  
*Haworthia floribunda* Poelln. var. *floribunda*  
*Haworthia floribunda* Poelln. p.p. (PRECIS convention, not of compiler.)  
*Haworthia floribunda* Poelln. var. *major* M.B.Bayer  
*Haworthia floribunda* Poelln. p.p. (PRECIS convention, not of compiler.)  
*Haworthia foliolosa* (Haw.) Haw. = *Astroloba foliolosa*  
*Haworthia fouchei* Poelln. = *Haworthia retusa* var. *retusa*  
*Haworthia fulva* G.G.Sm. = *Haworthia coarctata* var. *coarctata forma coarctata*  
*Haworthia geraldii* C.L.Scott  
*Haworthia gigas* Poelln. = *Haworthia arachnoidea* var. *setata*  
*Haworthia glabrata* (Salm-Dyck) Baker  
*Aloe glabrata* Sal - Dyck (2000. Glen & Hardy. FSA 5:1-167.)  
*Haworthia glauca* Baker = *Haworthia glauca* var. *glauca*, *Haworthia glauca* var. *herrei* forma *herrei*  
*Haworthia glauca* Baker var. *glauca*  
*Haworthia carrisoi* Resende (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia glauca* Baker p.p. (PRECIS convention, not of compiler.)  
*Haworthia glauca* Baker var. *herrei* (Poelln.) M.B.Bayer = *Haworthia armstrongii* Poelln. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia eilyae* Poelln. (PRECIS convention, not of compiler.)  
*Haworthia eilyae* Poelln. var. *eilyae* (1976. Bayer. *Haworthia Handb.*)  
*Haworthia eilyae* Poelln. var. *zantneriana* Resende (1976. Bayer. *Haworthia Handb.* 184.)  
*Haworthia glauca* Baker p.p. (PRECIS convention, not of compiler.)  
*Haworthia glauca* Baker var. *herrei* (Poelln.) M.B.Bayer p.p. (PRECIS convention, not of compiler.)  
*Haworthia herrei* Poelln. (1976. Bayer. *Haworthia Handb.*)  
*Haworthia herrei* Poelln. var. *depauperata* Poelln. (1976. Bayer. *Haworthia Handb.* 184.)  
*Haworthia jacobseniana* Poelln. (1976. Bayer. *Haworthia Handb.*)  
*Haworthia jonesiae* Poelln. (1976. Bayer. *Haworthia Handb.*)  
*Haworthia globosiflora* G.G.Sm. = *Haworthia nortieri* var. *globosiflora*  
*Haworthia gordoniana* Poelln. = *Haworthia cooperi* var. *gordoniana*  
*Haworthia gracilis* Poelln. = *Haworthia cooperi* var. *gracilis*, *Haworthia cooperi* var. *isabellae*, *Haworthia cooperi* var. *picturata*, *Haworthia cooperi* var. *tenera*, *Haworthia cooperi* var. *viridis*, *Haworthia herbacea* var. *herbacea*  
*Haworthia gracilis* Poelln. var. *gracilis* = *Haworthia cooperi* var. *gracil*  
*Haworthia gracilis* Poelln. var. *isabellae* (Poelln.) M.B.Bayer = *Haworthia cooperi* var. *isabellae*  
*Haworthia gracilis* Poelln. var. *picturata* M.B.Bayer = *Haworthia cooperi* var. *picturata*  
*Haworthia gracilis* Poelln. var. *tenera* (Poelln.) M.B.Bayer = *Haworthia cooperi* var. *tenera*  
*Haworthia gracilis* Poelln. var. *viridis* M.B.Bayer = *Haworthia cooperi* var. *viridis*  
*Haworthia graminifolia* G.G.Sm. = *Haworthia blackburniae* var. *graminifolia*  
*Haworthia granata* (Willd.) Haw. = *Haworthia minima* var. *Minima*  
*Haworthia granata* (Willd.) Haw. var. *polyphylla* Haw. = *Haworthia minima* var. *minima*  
*Haworthia granulata* Marloth = *Haworthia venosa* subsp. *granulata*  
*Haworthia greenii* Baker = *Haworthia coarctata* var. *coarctata forma greenii*  
*Haworthia greenii* Baker forma *minor* Resende = *Haworthia coarctata* var. *coarctata forma greenii*  
*Haworthia greenii* Baker var. *silvicola* G.G.Sm. = *Haworthia coarctata* var. *coarctata forma coarctata*  
*Haworthia guttata* Uitewaal = *Haworthia reticulata* var. *reticulata*  
*Haworthia haageana* Poelln. = *Haworthia reticulata* var. *subregularis*  
*Haworthia haageana* Poelln. var. *subreticulata* Poelln. = *Haworthia reticulata* var. *subregularis*  
*Haworthia habdomadis* Poelln. = *Haworthia mucronata* var. *habdomadis*, *Haworthia mucronata* var. *inconfluens*, *Haworthia mucronata* var. *morrisiae*  
*Haworthia habdomadis* Poelln. var. *habdomadis* = *Haworthia mucronata* var. *habdomadis*  
*Haworthia habdomadis* Poelln. var. *inconfluens* (Poelln.) M.B.Bayer = *Haworthia mucronata* var. *inconfluens*  
*Haworthia habdomadis* Poelln. var. *morrisiae* (Poelln.) M.B.Bayer = *Haworthia mucronata* var. *morrisiae*  
*Haworthia harlandiana* Parr = *Astroloba herrei*  
*Haworthia hayashi* M.Hayashi  
*Haworthia heidelbergensis* G.G.Sm. = *Haworthia heidelbergensis* var. *heidelbergensis*, *Haworthia heidelbergensis* var. *minor*, *Haworthia heidelbergensis* var. *scabra*, *Haworthia heidelbergensis* var. *toonensis*  
*Haworthia heidelbergensis* G.G.Sm. var. *heidelbergensis*  
*Haworthia heidelbergensis* G.G.Sm. p.p. (PRECIS convention, not of compiler.)  
*Haworthia heidelbergensis* G.G.Sm. var. *minor* M.B.Bayer  
*Haworthia heidelbergensis* G.G.Sm. p.p. (PRECIS convention, not of compiler.)  
*Haworthia heidelbergensis* G.G.Sm. var. *scabra* M.B.Bayer<sup>1</sup>  
*Haworthia heidelbergensis* G.G.Sm. p.p. (PRECIS convention, not of compiler.)  
*Haworthia heidelbergensis* G.G.Sm. var. *toonensis* M.B.Bayer  
*Haworthia heidelbergensis* G.G.Sm. p.p. (PRECIS convention, not of compiler.)  
*Haworthia helmiae* Poelln. = *Haworthia arachnoidea* var. *nigricans*  
*Haworthia hemicrypta* (M.B.Bayer) M.Hayashi  
*Haworthia herbacea* (Mill.) Stearn = *Haworthia herbacea* var. *flaccida*, *Haworthia herbacea* var. *herbacea*, *Haworthia herbacea* var. *lupula*, *Haworthia herbacea* var. *paynei*  
*Haworthia herbacea* (Mill.) Stearn var. *flaccida* M.B.Bayer  
*Haworthia herbacea* (Mill.) Stearn var. *herbacea*  
*Aloe arachnoides* Thunb. var. *pellucens* Salm-Dyck (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Aloe atrovirens* DC. (2000. Glen & Hardy. FSA 5:1-167.)  
*Aloe bradyana* Jacq. (2000. Glen & Hardy. FSA 5:1-167.)  
*Aloe herbacea* Mill. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Aloe pallida* (Haw.) Schult. & J.H.Schult. (2000. Glen & Hardy. FSA 5:1-167.)  
*Aloe pellucens* Haw. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Aloe pumila* L. p.p. (PRECIS convention, not of compiler.)  
*Aloe translucens* Aiton f. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Aloe translucens* Haw. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Catevala atrovirens* Medik. (1998. Breuer. *The world of Haworthia* 1.)  
*Haworthia aegrota* Poelln. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia atrovirens* (DC.) Haw. (2000. Glen & Hardy. FSA 5:1-167.)  
*Haworthia gracilis* Poelln. p.p. (PRECIS convention, not of compiler.)  
*Haworthia herbacea* (Mill.) Stearn p.p. (PRECIS convention,



- not of compiler.)  
*Haworthia luteo-rosea* Uitewaal (1998. Breuer. The world of *Haworthia* 1.)  
*Haworthia pallida* Haw. (2000. Glen & Hardy. FSA 5:1-167.)  
*Haworthia papillosa* (Salm-Dyck) Haw. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia pellucens* Haw. (1998. Breuer. The world of *Haworthia* 1.)  
*Haworthia pumila* (L.) Duval (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia submaculata* Poelln. (1998. Breuer. The world of *Haworthia* 1.)  
*Haworthia translucens* Haw. (PRECIS convention, not of compiler.)  
*Haworthia translucens* Haw. subsp. *translucens* (1999. Bayer. *Haworthia* revisited.)
- Haworthia herbacea* (Mill.) Stearn var. *lupula* M.B.Bayer**  
*Haworthia herbacea* (Mill.) Stearn p.p. (PRECIS convention, not of compiler.)
- Haworthia herbacea* (Mill.) Stearn var. *paynei* (Poelln.) M.B.Bayer**  
*Haworthia herbacea* (Mill.) Stearn p.p. (PRECIS convention, not of compiler.) *Haworthia paynei* Poelln. (1999. Bayer. *Haworthia* revisited.)
- Haworthia herrei* Poelln. = *Haworthia glauca* var. *herrei* forma *herrei***  
***Haworthia herrei* Poelln. var. *depauperata* Poelln. = *Haworthia glauca* var. *herrei* forma *herrei***  
***Haworthia hilliana* Poelln. = *Haworthia cymbiformis* var. *obtusa***  
***Haworthia hurlingii* Poelln. = *Haworthia reticulata* var. *hurlingii***  
***Haworthia hurlingii* Poelln. var. *ambigua* Triebner & Poelln. = *Haworthia reticulata* var. *reticulata***  
***Haworthia imbricata* (Aiton) Haw. = *Astroloba spiralis***  
***Haworthia incurvula* Poelln. = *Haworthia cymbiformis* var. *necurvula***  
***Haworthia indurata* Haw. = *Haworthia viscosa* var. *viscosa***  
***Haworthia inermis* Poelln. = *Haworthia bolusii* var. *blackbeardiana***  
***Haworthia integra* Poelln. = *Haworthia integra* var. *integra*, *Haworthia integra* var. *standeri***  
***Haworthia integra* Poelln. var. *integra***  
*Haworthia integra* Poelln. p.p. (PRECIS convention, not of compiler.)  
*Haworthia rycroftiana* M.B.Bayer (1998. Breuer. The world of *Haworthia* 1.)
- Haworthia integra* Poelln. var. *standeri* J.M.Esterhuizen**  
*Haworthia integra* Poelln. p.p. (PRECIS convention, not of compiler.)
- Haworthia intermedia* Poelln. = *Haworthia maculata* var. *intermedia***  
***Haworthia isabellae* Poelln. = *Haworthia cooperi* var. *isabellae***  
***Haworthia jacobseniana* Poelln. = *Haworthia glauca* var. *herrei* forma *herrei***  
***Haworthia joeyae* C.L.Scott = *Haworthia cooperi* var. *dielsiana***  
***Haworthia jonesiae* Poelln. = *Haworthia glauca* var. *herrei* forma *herrei***  
***Haworthia kemari* M.Hayashi**  
***Haworthia kingiana* Poelln.**  
***Haworthia koelmaniorum* Oberm. & D.S.Hardy = *Haworthia koelmaniorum* var. *koelmaniorum*, *Haworthia koelmaniorum* var. *mcmurtryi***  
***Haworthia koelmaniorum* Oberm. & D.S.Hardy var. *koelmaniorum***  
*Haworthia koelmaniorum* Oberm. & D.S.Hardy p.p. (PRECIS convention, not of compiler.)
- Haworthia koelmaniorum* Oberm. & D.S.Hardy var. *mcmurtryi* (C.L.Scott) M.B.Bayer**  
*Haworthia koelmaniorum* Oberm. & D.S.Hardy p.p. (PRECIS convention, not of compiler.)  
*Haworthia mcmurtryi* C.L.Scott (1999. Bayer. *Haworthia* revisited.)
- Haworthia laetevirens* Haw. = *Haworthia turgida* var. *turgida***  
***Haworthia laevis* Haw. = *Haworthia marginata***  
***Haworthia lataganiae* Poelln. = *Haworthia scabra* var. *lataganiae***
- Haworthia leightonii* G.G.Sm. = *Haworthia leightonii* var. *davidii*, *Haworthia leightonii* var. *leightonii***  
***Haworthia leightonii* G.G.Sm. var. *davidii* Breuer**  
*Haworthia leightonii* G.G.Sm. p.p. (PRECIS convention, not of compiler.)
- Haworthia leightonii* G.G.Sm. var. *leightonii***  
*Haworthia cooperi* Baker var. *leightonii* (G.G.Sm.) M.B.Bayer (2003. Breuer. *Avonia* 21:45-64.)  
*Haworthia leightonii* G.G.Sm. p.p. (PRECIS convention, not of compiler.)
- Haworthia lepida* G.G.Sm. = *Haworthia cymbiformis* var. *cymbiformis***  
***Haworthia limifolia* Marloth = *Haworthia limifolia* var. *limifolia*, *Haworthia limifolia* var. *ubomboensis***  
***Haworthia limifolia* Marloth var. *arcana* Gideon F.Sm. & N.R.Crouch**  
***Haworthia limifolia* Marloth var. *gigantea* M.B.Bayer**  
***Haworthia limifolia* Marloth var. *glaucophylla* M.B.Bayer**  
***Haworthia limifolia* Marloth var. *keithii* G.G.Sm. = *Haworthia limifolia* var. *ubomboensis***  
***Haworthia limifolia* Marloth var. *limifolia***  
*Haworthia limifolia* Marloth p.p. (1950. Smith. *Jl S. Afr. Bot.* 16:3-13, t.I & II.)  
*Haworthia limifolia* Marloth var. *limifolia* forma *diploidea* Resende (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia limifolia* Marloth var. *limifolia* forma *tetraploidea* Resende (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia limifolia* Marloth var. *stolonifera* Resende (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia limifolia* Marloth var. *stolonifera* Resende forma *major* Resende (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia limifolia* Marloth var. *stolonifera* Resende forma *pimentellii* Resende (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)
- Haworthia limifolia* Marloth var. *limifolia* forma *diploidea* Resende = *Haworthia limifolia* var. *limifolia***  
***Haworthia limifolia* Marloth var. *limifolia* forma *tetraploidea* Resende = *Haworthia limifolia* var. *limifolia***  
***Haworthia limifolia* Marloth var. *stolonifera* Resende forma *major* Resende = *Haworthia limifolia* var. *limifolia***  
***Haworthia limifolia* Marloth var. *stolonifera* Resende forma *pimentellii* Resende = *Haworthia limifolia* var. *limifolia***  
***Haworthia limifolia* Marloth var. *ubomboensis* (I.Verd. G.G.Sm.**  
*Haworthia limifolia* Marloth p.p. (1950. Smith. *Jl S. Afr. Bot.* 16:3-13, t.I & II.)  
*Haworthia limifolia* Marloth var. *keithii* G.G.Sm. (1999. Bayer. *Haworthia* revisited.)  
*Haworthia ubomboensis* I.Verd. (1950. Smith. *Jl S. Afr. Bot.* 16:3-13, t.I & II.)
- Haworthia limpida* Haw. = *Haworthia mucronata* var. *mucronata***  
***Haworthia lockwoodii* Archibald**  
***Haworthia longiana* Poelln.**  
*Haworthia longiana* Poelln. var. *albinota* G.G.Sm. (1976. Bayer. *Haworthia* Handb. 184.)
- Haworthia longiana* Poelln. var. *albinota* G.G.Sm. = *Haworthia longiana***  
***Haworthia longiaristata* Poelln. = *Haworthia decipiens* var. *xiphiophylla***  
***Haworthia longibracteata* G.G.Sm. = *Haworthia turgida* var. *longibracteata***  
***Haworthia luteo-rosea* Uitewaal = *Haworthia herbacea* var. *herbacea***  
***Haworthia maculata* (Poelln.) M.B.Bayer = *Haworthia maculata* var. *intermedia*, *Haworthia maculata* var. *maculata***  
***Haworthia maculata* (Poelln.) M.B.Bayer var. *intermedia* M.B.Bayer**  
*Haworthia intermedia* Poelln. (1999. Bayer. *Haworthia* revisited.)  
*Haworthia maculata* (Poelln.) M.B.Bayer p.p. (PRECIS convention, not of compiler.)

- Haworthia maculata (Poelln.) M.B.Bayer var. maculata**  
*Haworthia maculata* (Poelln.) M.B.Bayer p.p. (PRECIS convention, not of compiler.)  
*Haworthia schuldtiana* Poelln. var. *maculata* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)
- Haworthia magnifica Poelln. = Haworthia magnifica var. acuminata, Haworthia magnifica var. atrofusca, Haworthia magnifica var. dekenahii, Haworthia magnifica var. magnifica, Haworthia magnifica var. maraisii, Haworthia magnifica var. splendens**
- Haworthia magnifica Poelln. var. acuminata (M.B.Bayer) M.B.Bayer**  
*Haworthia magnifica* Poelln. p.p. (PRECIS convention, not of compiler.)  
*Haworthia retusa* (L.) Duval forma *acuminata* M.B.Bayer (1997. Bayer. *Aloe* 34:4-6.)  
*Haworthia retusa* (L.) Duval var. *acuminata* M.B.Bayer (1999. Bayer. *Haworthia* revisited.)
- Haworthia magnifica Poelln. var. atrofusca (G.G.Sm.) M.B.Bayer**  
*Haworthia atrofusca* G.G.Sm. (1977. Bayer. *Natln. Cact. Succ. J.* 32.)  
*Haworthia magnifica* Poelln. p.p. (PRECIS convention, not of compiler.)
- Haworthia magnifica Poelln. var. dekenahii (G.G.Sm.) M.B.Bayer**  
*Haworthia dekenahii* G.G.Sm. p.p. (PRECIS convention, not of compiler.)  
*Haworthia dekenahii* G.G.Sm. var. *dekenahii* (1999. Bayer. *Haworthia* revisited.)  
*Haworthia magnifica* Poelln. p.p. (PRECIS convention, not of compiler.)  
*Haworthia retusa* (L.) Duval forma *argenteo-maculosa* (G.G.Sm.) M.B.Bayer p.p. (1997. Bayer. *Aloe* 34:4-6.)  
*Haworthia retusa* (L.) Duval p.p. var. *dekenahii* (G.G.Sm.) M.B.Bayer (1999. Bayer. *Haworthia* revisited.)
- Haworthia magnifica Poelln. var. magnifica**  
*Haworthia magnifica* Poelln. p.p. (PRECIS convention, not of compiler.)
- Haworthia magnifica Poelln. var. major (G.G.Sm.) M.B.Bayer = Haworthia emelyae var. major**
- Haworthia magnifica Poelln. var. meiringii M.B.Bayer = Haworthia maraisii var. meiringii**
- Haworthia magnifica Poelln. var. notabilis (Poelln.) M.B.Bayer = Haworthia maraisii var. notabilis**
- Haworthia magnifica Poelln. var. paradoxa (Poelln.) M.B.Bayer = Haworthia mirabilis var. paradoxa**
- Haworthia magnifica Poelln. var. splendens J.D.Venter & S.A.Hammer**  
*Haworthia magnifica* Poelln. p.p. (PRECIS convention, not of compiler.)
- Haworthia maraisii Poelln. = Haworthia maraisii var. maraisii, Haworthia maraisii var. meiringii, Haworthia maraisii var. notabilis**
- Haworthia maraisii Poelln. var. major (G.G.Sm.) M.B.Bayer = Haworthia emelyae var. major**
- Haworthia maraisii Poelln. var. maraisii**  
*Haworthia maraisii* Poelln. p.p. (PRECIS convention, not of compiler.)  
*Haworthia schuldtiana* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia schuldtiana* Poelln. var. *minor* Triebner & Poelln. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia schuldtiana* Poelln. var. *robertsonensis* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia schuldtiana* Poelln. var. *simplicior* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia schuldtiana* Poelln. var. *sublaevis* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia schuldtiana* Poelln. var. *subtuberculata* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia schuldtiana* Poelln. var. *unilineata* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia sublimpidula* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia triebneriana* Poelln. var. *diversicolor* Triebner & Poelln. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia whitesloaneana* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)
- Haworthia maraisii Poelln. var. meiringii M.B.Bayer**  
*Haworthia magnifica* Poelln. var. *meiringii* M.B.Bayer (1999. Bayer. *Haworthia* revisited.)  
*Haworthia maraisii* Poelln. p.p. (PRECIS convention, not of compiler.)
- Haworthia maraisii Poelln. var. notabilis (Poelln.) M.B.Bayer**  
*Haworthia magnifica* Poelln. var. *notabilis* (Poelln.) M.B.Bayer (1999. Bayer. *Haworthia* revisited.)  
*Haworthia maraisii* Poelln. p.p. (PRECIS convention, not of compiler.)  
*Haworthia notabilis* Poelln. (1999. Bayer. *Haworthia* revisited.)  
*Haworthia schuldtiana* Poelln. var. *erecta* Triebner & Poelln. (1976. Bayer. *Haworthia* Handb. 184.)
- Haworthia maraisii Poelln. var. paradoxa (Poelln.) M.B.Bayer = Haworthia mirabilis var. paradoxa**
- Haworthia margaritifera (L.) Haw. var. corallina Baker = Haworthia minima var. minima**
- Haworthia margaritifera (L.) Haw. var. maxima (Haw.) Uitewaal = Haworthia minima var. minima**
- Haworthia margaritifera (L.) Haw. var. minima (Aiton) Uitewaal = Haworthia minima var. minima**
- Haworthia margaritifera (L.) Haw. var. minor (Aiton) Uitewaal = Haworthia minima var. minima**
- Haworthia marginata (Lam.) Stearn**  
*Aloe albicans* Haw. (2000. Glen & Hardy. *FSA* 5:1-167.)  
*Aloe laevigata* Schult. & J.H.Schult. (2000. Glen & Hardy. *FSA* 5:1-167.)  
*Aloe marginata* Lam. (2000. Glen & Hardy. *FSA* 5:1-167.)  
*Aloe virescens* (Haw.) Schult. & J.H.Schult. (2000. Glen & Hardy. *FSA* 5:1-167.)  
*Haworthia albicans* (Haw.) Haw. (2000. Glen & Hardy. *FSA* 5:1-167.)  
*Haworthia albicans* (Haw.) Haw. var. *virescens* (Haw.) Baker (2000. Glen & Hardy. *FSA* 5:1-167.)  
*Haworthia laevis* Haw. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia ramifera* Haw. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia virescens* Haw. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia virescens* Haw. var. *minor* Haw. (1998. Breuer. *The world of Haworthia* 1.)
- Haworthia marumiana Uitewaal = Haworthia marumiana var. archeri, Haworthia marumiana var. batesiana, Haworthia marumiana var. dimorpha, Haworthia marumiana var. marumiana, Haworthia marumiana var. viridis**
- Haworthia marumiana Uitewaal var. archeri (W.F.Barker ex M.B.Bayer) M.B.Bayer**  
*Haworthia archeri* W.F.Barker ex M.B.Bayer p.p. (PRECIS convention, not of compiler.)  
*Haworthia archeri* W.F.Barker ex M.B.Bayer var. *archeri* (1999. Bayer. *Haworthia* revisited.)  
*Haworthia marumiana* Uitewaal p.p. (PRECIS convention, not of compiler.)
- Haworthia marumiana Uitewaal var. batesiana (Uitewaal) M.B.Bayer**  
*Haworthia batesiana* Uitewaal (1999. Bayer. *Haworthia* revisited.)  
*Haworthia marumiana* Uitewaal p.p. (PRECIS convention, not of compiler.)
- Haworthia marumiana Uitewaal var. dimorpha (M.B.Bayer) M.B.Bayer**  
*Haworthia archeri* W.F.Barker ex M.B.Bayer p.p. (PRECIS convention, not of compiler.)  
*Haworthia archeri* W.F.Barker ex M.B.Bayer var. *dimorpha* M.B.Bayer (1999. Bayer. *Haworthia* revisited.)  
*Haworthia marumiana* Uitewaal p.p. (PRECIS convention, not of compiler.)
- Haworthia marumiana Uitewaal var. marumiana**  
*Haworthia marumiana* Uitewaal p.p. (PRECIS convention, not of compiler.)
- Haworthia marumiana Uitewaal var. viridis M.B.Bayer**  
*Haworthia marumiana* Uitewaal p.p. (PRECIS convention, not of compiler.)
- Haworthia marxii Gildenhuis**



- Haworthia maughanii Poelln. = Haworthia truncata var. maughanii**
- Haworthia maxima (Haw.) Duval**  
 Aloe margaritifera (L.) Burm.f. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Aloe margaritifera (L.) Burm.f. var. maxima Haw. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Aloe papillosa Salm-Dyck (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Aloe pumila L. p.p. (PRECIS convention, not of compiler.)  
 Aloe pumila L. var. margaritifera L. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Aloe semiglabrata (Haw.) Schult. & J.H.Schult. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Aloe semimargaritifera Salm-Dyck (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Aloe semimargaritifera Salm-Dyck var. maxima Salm-Dyck (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Haworthia margaritifera (L.) Haw. var. maxima (Haw.) Uitewaal (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Haworthia papillosa (Salm-Dyck) Haw. var. semipapillosa Haw. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Haworthia semiglabrata Haw. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)
- Haworthia mclarenii Poelln. = Haworthia mucronata var. mucronata**
- Haworthia mcmurtryi C.L.Scott = Haworthia koelmaniorum var. mcmurtryi**
- Haworthia minima (Aiton) Haw. = Haworthia minima var. minima, Haworthia minima var. poellnitziana**
- Haworthia minima (Aiton) Haw. var. minima**  
 Aloe erecta (Haw.) Salm-Dyck (PRECIS convention, not of compiler.)  
 Aloe erecta (Haw.) Salm-Dyck var. laetevirens Salm-Dyck (PRE Herbarium practice, following Glen.)  
 Aloe granata (Willd.) Salm-Dyck (PRECIS convention, not of compiler.)  
 Aloe granata (Willd.) Salm-Dyck var. major Salm-Dyck (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Aloe granata (Willd.) Salm-Dyck var. minor Salm-Dyck (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Aloe granata (Willd.) Schult. & J.H.Schult. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Aloe margaritifera (L.) Burm.f. var. minima Aiton (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Aloe margaritifera (L.) Burm.f. var. minor Aiton (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Aloe minor (Aiton) Schult. & J.H.Schult. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Aloe pumila L. p.p. (PRECIS convention, not of compiler.)  
 Aloe pumila L. var. □ L. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Aloe pumila L. var. y L. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Apicra granata Willd. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Haworthia brevis Haw. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Haworthia erecta Haw. (1999. Bayer. Haworthia revisited.)  
 Haworthia granata (Willd.) Haw. (PRECIS convention, not of compiler.)  
 Haworthia granata (Willd.) Haw. var. polyphylla Haw. (1976. Bayer. Haworthia Handb. 184.)  
 Haworthia margaritifera (L.) Haw. var. corallina Baker (1982. Bayer. New Haworthia Handb. 124.)  
 Haworthia margaritifera (L.) Haw. var. minima (Aiton) Uitewaal (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Haworthia margaritifera (L.) Haw. var. minor (Aiton) Uitewaal (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Haworthia minima (Aiton) Haw. p.p. (PRECIS convention, not of compiler.)  
 Haworthia mutabilis Poelln. (1976. Bayer. Haworthia Handb. 184.)
- Haworthia minima (Aiton) Haw. var. poellnitziana (Uitewaal) M.B.Bayer**  
 Haworthia minima (Aiton) Haw. p.p. (PRECIS convention, not of compiler.)  
 Haworthia poellnitziana Uitewaal (1999. Bayer. Haworthia revisited.)
- Haworthia minutissima Poelln. = Haworthia venosa subsp. tessellata**
- Haworthia mirabilis (Haw.) Haw. = Haworthia mirabilis subsp. mirabilis**
- Haworthia mirabilis (Haw.) Haw. subsp. badia (Poelln.) M.B.Bayer = Haworthia mirabilis var. badia**
- Haworthia mirabilis (Haw.) Haw. subsp. mirabilis**  
 Haworthia mirabilis (Haw.) Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia mirabilis (Haw.) Haw. subsp. mundula (G.G.Sm.) M.B.Bayer = Haworthia mirabilis var. mirabilis**
- Haworthia mirabilis (Haw.) Haw. var. badia (Poelln.) M.B.Bayer**  
 Haworthia badia Poelln. (1999. Bayer. Haworthia revisited.)  
 Haworthia mirabilis (Haw.) Haw. subsp. badia (Poelln.) M.B.Bayer (1999. Bayer. Haworthia revisited.)
- Haworthia mirabilis (Haw.) Haw. var. beukmannii (Poelln.) M.B.Bayer**  
 Haworthia emelyae Poelln. var. beukmannii Poelln. (1999. Bayer. Haworthia revisited.)
- Haworthia mirabilis (Haw.) Haw. var. calcarea M.B.Bayer**
- Haworthia mirabilis (Haw.) Haw. var. consanguinea M.B.Bayer**
- Haworthia mirabilis (Haw.) Haw. var. mirabilis**  
 Aloe mirabilis Haw. (2000. Glen & Hardy. FSA 5:1-167.)  
 Haworthia mirabilis (Haw.) Haw. subsp. mundula (G.G.Sm.) M.B.Bayer (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Haworthia mundula G.G.Sm. (1999. Bayer. Haworthia revisited.)
- Haworthia mirabilis (Haw.) Haw. var. paradoxa (Poelln.) M.B.Bayer**  
 Haworthia magnifica Poelln. var. paradoxa (Poelln.) M.B.Bayer (1997. Bayer. Aloe 34:4-6.)  
 Haworthia maraisii Poelln. var. paradoxa (Poelln.) M.B.Bayer (1997. Bayer. Aloe 34:4-6.)  
 Haworthia paradoxa Poelln. (1997. Bayer. Aloe 34:4-6.)
- Haworthia mirabilis (Haw.) Haw. var. sublineata (Poelln.) M.B.Bayer**  
 Haworthia triebneriana Poelln. var. sublineata Poelln. (1999. Bayer. Haworthia revisited.)
- Haworthia mirabilis (Haw.) Haw. var. triebneriana (Poelln.) M.B.Bayer**  
 Haworthia nitidula Poelln. (1999. Bayer. Haworthia revisited.)  
 Haworthia rossouwii Poelln. (1999. Bayer. Haworthia revisited.)  
 Haworthia triebneriana Poelln. (1999. Bayer. Haworthia revisited.)  
 Haworthia triebneriana Poelln. var. depauperata Poelln. (1999. Bayer. Haworthia revisited.)  
 Haworthia triebneriana Poelln. var. multituberculata Poelln. (1999. Bayer. Haworthia revisited.)  
 Haworthia triebneriana Poelln. var. napierensis Triebner & Poelln. (1999. Bayer. Haworthia revisited.)  
 Haworthia triebneriana Poelln. var. pulchra Poelln. (1999. Bayer. Haworthia revisited.)  
 Haworthia triebneriana Poelln. var. rubrodentata Triebner & Poelln. (1999. Bayer. Haworthia revisited.)  
 Haworthia triebneriana Poelln. var. subtuberculata Poelln. (1999. Bayer. Haworthia revisited.)  
 Haworthia triebneriana Poelln. var. turgida Triebner (1999.)

- Bayer. *Haworthia* revisited.)  
*Haworthia willowmorensis* Poelln. (1999. Bayer. *Haworthia* revisited.)
- Haworthia monticola* Fourc. = *Haworthia monticola* var. *asema*, *Haworthia monticola* var. *monticola***  
***Haworthia monticola* Fourc. var. *asema* M.B.Bayer**  
*Haworthia monticola* Fourc. p.p. (PRECIS convention, not of compiler.)
- Haworthia monticola* Fourc. var. *monticola***  
*Haworthia divergens* M.B.Bayer (1999. Bayer. *Haworthia* revisited.)  
*Haworthia monticola* Fourc. p.p. (PRECIS convention, not of compiler.)
- Haworthia morrisiae* Poelln. = *Haworthia scabra* var. *morrisiae***
- Haworthia mucronata* Haw. = *Haworthia mucronata* var. *calitzdorpensis*, *Haworthia mucronata* var. *habdomadis*, *Haworthia mucronata* var. *inconfluens*, *Haworthia mucronata* var. *morrisiae*, *Haworthia mucronata* var. *mucronata*, *Haworthia mucronata* var. *rooibergensis***
- Haworthia mucronata* Haw. var. *calitzdorpensis* Breuer**  
*Haworthia mucronata* Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia mucronata* Haw. var. *habdomadis* (Poelln.) M.B.Bayer**  
*Haworthia habdomadis* Poelln. p.p. (PRECIS convention, not of compiler.)  
*Haworthia habdomadis* Poelln. var. *habdomadis* (1999. Bayer. *Haworthia* revisited.)  
*Haworthia mucronata* Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia mucronata* Haw. var. *inconfluens* (Poelln.) M.B.Bayer**  
*Haworthia altilinea* Haw. var. *limpida* (PRECIS convention, not of compiler.)  
*Haworthia altilinea* Haw. var. *limpida* forma *inconfluens* Poelln. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia bijliana* Poelln. (PRECIS convention, not of compiler.)  
*Haworthia bijliana* Poelln. var. *joubertii* Poelln. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia habdomadis* Poelln. p.p. (PRECIS convention, not of compiler.)  
*Haworthia habdomadis* Poelln. var. *inconfluens* (Poelln.) M.B.Bayer (1999. Bayer. *Haworthia* revisited.)  
*Haworthia mucronata* Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia mucronata* Haw. var. *morrisiae* (Poelln.) M.B.Bayer**  
*Haworthia altilinea* Haw. var. *morrisiae* Poelln. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia habdomadis* Poelln. p.p. (PRECIS convention, not of compiler.)  
*Haworthia habdomadis* Poelln. var. *morrisiae* (Poelln.) M.B.Bayer (1999. Bayer. *Haworthia* revisited.)  
*Haworthia mucronata* Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia mucronata* Haw. var. *mucronata***  
*Aloe altilinea* (Haw.) Schult. & J.H.Schult. (2000. Glen & Hardy. FSA 5:1-167.)  
*Haworthia limpida* Haw. (1982. Bayer. New *Haworthia* Handb. 124.)  
*Haworthia mclarenii* Poelln. (1999. Bayer. *Haworthia* revisited.)  
*Haworthia mucronata* Haw. p.p. (PRECIS convention, not of compiler.)  
*Haworthia unicolor* Poelln. (1999. Bayer. *Haworthia* revisited.)  
*Haworthia unicolor* Poelln. var. *helmae* Bayer (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)
- Haworthia mucronata* Haw. var. *rooibergensis* J.M.Esterhuizen & L.Battista**  
*Haworthia mucronata* Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia mundula* G.G.Sm. = *Haworthia mirabilis* var. *mirabilis***
- Haworthia musculina* G.G.Sm. = *Haworthia coarctata* var. *coarctata* forma *coarctata***
- Haworthia mutabilis* Poelln. = *Haworthia minima* var. *minima***
- Haworthia mutica* Haw. = *Haworthia mutica* var. *mutica*, *Haworthia mutica* var. *nigra***
- Haworthia mutica* Haw. var. *mutica***  
*Haworthia mutica* Haw. p.p. (PRECIS convention, not of compiler.)  
*Haworthia otzenii* G.G.Sm. (1976. Bayer. *Haworthia* Handb. 184.)
- Haworthia mutica* Haw. var. *nigra* M.B.Bayer**  
*Haworthia mutica* Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia nigra* (Haw.) Baker = *Haworthia nigra* var. *diversifolia*, *Haworthia nigra* var. *nigra***
- Haworthia nigra* (Haw.) Baker var. *diversifolia* (Poelln.) Uitewaal**  
*Haworthia diversifolia* Poelln. (1999. Bayer. *Haworthia* revisited.)  
*Haworthia nigra* (Haw.) Baker p.p. (PRECIS convention, not of compiler.)  
*Haworthia schmidtiana* Poelln. var. *diversifolia* Poelln. (PRECIS convention, not of compiler.)  
*Haworthia schmidtiana* Poelln. var. *diversifolia* Poelln. forma *nana* Poelln. (1999. Bayer. *Haworthia* revisited.)
- Haworthia nigra* (Haw.) Baker var. *nigra***  
*Aloe nigra* (Haw.) Schult. & J.H.Schult. (2000. Glen & Hardy. FSA 5:1-167.)  
*Apicra nigra* Haw. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia nigra* (Haw.) Baker p.p. (PRECIS convention, not of compiler.)  
*Haworthia ryneveldii* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia schmidtiana* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia schmidtiana* Poelln. var. *angustata* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia schmidtiana* Poelln. var. *elongata* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia schmidtiana* Poelln. var. *pusilla* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia schmidtiana* Poelln. var. *suberectata* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)
- Haworthia nigricans* Haw. = *Gasteria nitida***
- Haworthia nitidula* Poelln. = *Haworthia mirabilis* var. *triebneriana***
- Haworthia nortieri* G.G.Sm. = *Haworthia nortieri* var. *globosiflora*, *Haworthia nortieri* var. *nortieri*, *Haworthia nortieri* var. *pehlemanniae***
- Haworthia nortieri* G.G.Sm. var. *giftbergensis* G.G.Sm. = *Haworthia nortieri* var. *nortieri***
- Haworthia nortieri* G.G.Sm. var. *globosiflora* (G.G.Sm.) M.B.Bayer**  
*Haworthia globosiflora* G.G.Sm. (1976. Bayer. *Haworthia* Handb.)  
*Haworthia nortieri* G.G.Sm. p.p. (PRECIS convention, not of compiler.)
- Haworthia nortieri* G.G.Sm. var. *montana* G.G.Sm. = *Haworthia nortieri* var. *nortieri***
- Haworthia nortieri* G.G.Sm. var. *nortieri***  
*Haworthia nortieri* G.G.Sm. p.p. (PRECIS convention, not of compiler.)  
*Haworthia nortieri* G.G.Sm. var. *giftbergensis* G.G.Sm. (1982. Bayer. New *Haworthia* Handb.)  
*Haworthia nortieri* G.G.Sm. var. *montana* G.G.Sm. (1982. Bayer. New *Haworthia* Handb. 124.)  
*Haworthia schmidtiana* G.G.Sm. (PRECIS convention, not of compiler.)  
*Haworthia schmidtiana* G.G.Sm. var. *giftbergensis* G.G.Sm. (1982. Bayer. New *Haworthia* Handb. 124.)
- Haworthia nortieri* G.G.Sm. var. *pehlemanniae* (C.L.Scott) M.B.Bayer**  
*Haworthia nortieri* G.G.Sm. p.p. (PRECIS convention, not of compiler.)  
*Haworthia pehlemanniae* C.L.Scott (1999. Bayer. *Haworthia*

- revisited.)
- Haworthia notabilis* Poelln. = *Haworthia maraisii* var. *notabilis*
- Haworthia obtusa* Haw. = *Haworthia cymbiformis* var. *obtusa*
- Haworthia obtusa* Haw. var. *pilifera* (Baker) Uitewaal = *Haworthia cooperi* var. *pilifera*
- Haworthia obtusa* Haw. var. *pilifera* (Baker) Uitewaal forma *truncate*, H.Jacobsen = *Haworthia cooperi* var. *truncate*
- Haworthia odetteae* Breuer
- Haworthia olivettiana* Parr = *X Astroworthia X bicarinata*
- Haworthia opalina* M.Hayashi
- Haworthia ozenii* G.G.Sm. = *Haworthia mutica* var. *mutica*
- Haworthia outeniquensis* M.B.Bayer
- Haworthia pallida* Haw. = *Haworthia herbacea* var. *herbacea*
- Haworthia pallida* Haw. var. *paynei* (L.Bolus) L.Bolus = *Haworthia arachnoidea* var. *arachnoidea*
- Haworthia papillosa* (Salm-Dyck) Haw. = *Haworthia herbacea* var. *herbacea*
- Haworthia papillosa* (Salm-Dyck) Haw. var. *semipapillosa* Haw. = *Haworthia maxima*
- Haworthia paradoxa* Poelln. = *Haworthia mirabilis* var. *paradoxa*
- Haworthia parksiana* Poelln
- Haworthia parva* Haw. = *Haworthia venosa* subsp. *tessellata*
- Haworthia paynei* Poelln. = *Haworthia herbacea* var. *paynei*
- Haworthia peacockii* Baker = *Haworthia coarctata* var. *coarctata* forma *greenii*
- Haworthia pehlemanniae* C.L.Scott = *Haworthia nortieri* var. *Pehlemanniae*
- Haworthia pellucens* Haw. = *Haworthia herbacea* var. *herbacea*
- Haworthia pentagona* (Aiton) Haw. = *Astroloba spiralis*
- Haworthia pentagona* (Aiton) Haw. var. *spiralis* (Salm-Dyck) Parr = *Astroloba spiralis*
- Haworthia pentagona* Haw. = *Astroloba spiralis*
- Haworthia pentagona* Haw. var. *spirella* (Haw.) Parr = *Astroloba spiralis*
- Haworthia pentagona* Haw. var. *torulosa* (Haw.) Parr = *Astroloba spiralis*
- Haworthia picta* Poelln. = *Haworthia picta* var. *janvlokii*, *Haworthia picta* var. *picta*, *Haworthia picta* var. *tricolor*
- Haworthia picta* Poelln. var. *janvlokii* Breuer
- Haworthia picta* Poelln. p.p. (PRECIS convention, not of compiler.)
- Haworthia picta* Poelln. var. *picta*
- Haworthia picta* Poelln. p.p. (PRECIS convention, not of compiler.)
- Haworthia picta* Poelln. var. *tricolor* Breuer
- Haworthia picta* Poelln. p.p. (PRECIS convention, not of compiler.)
- Haworthia pilifera* Baker = *Haworthia cooperi* var. *pilifera*
- Haworthia pilifera* Baker var. *dielsiana* (Poelln.) M.B.Bayer = *Haworthia cooperi* var. *pilifera*
- Haworthia pilifera* Baker var. *dielsiana* (Poelln.) M.B.Bayer forma *acuminata* Poelln. = *Haworthia cooperi* var. *pilifera*
- Haworthia planifolia* Haw. = *Haworthia cymbiformis* var. *cymbiformis*
- Haworthia planifolia* Haw. var. *exulata* Poelln. = *Haworthia cymbiformis* var. *cymbiformis*
- Haworthia planifolia* Haw. var. *incrassata* Poelln. = *Haworthia cymbiformis* var. *cymbiformis*
- Haworthia planifolia* Haw. var. *longifolia* Triebner & Poelln. = *Haworthia cymbiformis* var. *cymbiformis*
- Haworthia planifolia* Haw. var. *longifolia* Triebner & Poelln. forma *calochlora* Triebner & Poelln. = *Haworthia cymbiformis* var. *cymbiformis*
- Haworthia planifolia* Haw. var. *planifolia* = *Haworthia cymbiformis* var. *cymbiformis*
- Haworthia planifolia* Haw. var. *planifolia* forma *agavoides* Triebner & Poelln. = *Haworthia cymbiformis* var. *cymbiformis*
- Haworthia planifolia* Haw. var. *planifolia* forma *alta* Triebner & Poelln. = *Haworthia cymbiformis* var. *cymbiformis*
- Haworthia planifolia* Haw. var. *planifolia* forma *olivacea* Triebner & Poelln. = *Haworthia cymbiformis* var. *cymbiformis*
- Haworthia planifolia* Haw. var. *planifolia* forma *robusta*
- Triebner & Poelln. = *Haworthia cymbiformis* var. *cymbiformis*
- Haworthia planifolia* Haw. var. *poellnitziana* Resende = *Haworthia cymbiformis* var. *cymbiformis*
- Haworthia planifolia* Haw. var. *setulifera* Poelln. = *Haworthia cymbiformis* var. *setulifera*
- Haworthia planifolia* Haw. var. *sublaevis* Poelln. = *Haworthia cymbiformis* var. *cymbiformis*
- Haworthia planifolia* Haw. var. *transiens* Poelln. = *Haworthia transiens*
- Haworthia poellnitziana* Uitewaal = *Haworthia minima* var. *poellnitziana*
- Haworthia pringlei* C.L.Scott = *Haworthia bolusii* var. *pringlei*
- Haworthia pseudotessellata* Poelln. = *Haworthia venosa* subsp. *tessellata*
- Haworthia pubescens* M.B.Bayer = *Haworthia pubescens* var. *livida*, *Haworthia pubescens* var. *pubescens*
- Haworthia pubescens* M.B.Bayer var. *livida* M.B.Bayer
- Haworthia pubescens* M.B.Bayer p.p. (PRECIS convention, not of compiler.)
- Haworthia pubescens* M.B.Bayer var. *pubescens*
- Haworthia pubescens* M.B.Bayer p.p. (PRECIS convention, not of compiler.)
- Haworthia pulchella* M.B.Bayer = *Haworthia pulchella* var. *globifera*, *Haworthia pulchella* var. *pulchella*
- Haworthia pulchella* M.B.Bayer var. *globifera* M.B.Bayer
- Haworthia pulchella* M.B.Bayer p.p. (PRECIS convention, not of compiler.)
- Haworthia pulchella* M.B.Bayer var. *pulchella*
- Haworthia pulchella* M.B.Bayer p.p. (PRECIS convention, not of compiler.)
- Haworthia pumila* (L.) Duval = *Haworthia herbacea* var. *herbacea*
- Haworthia pungens* M.B.Bayer
- Haworthia pygmaea* Poelln. = *Haworthia pygmaea* var. *argenteo-maculosa*, *Haworthia pygmaea* var. *pygmaea*
- Haworthia pygmaea* Poelln. var. *argenteo-maculosa* (G.G.Sm.) M.B.Bayer
- Haworthia pygmaea* G.G.Sm. p.p. (PRECIS convention, not of compiler.)
- Haworthia pygmaea* G.G.Sm. var. *argenteo-maculosa* G.G.Sm. (1997. Bayer. Aloe 34:4-6.)
- Haworthia pygmaea* Poelln. p.p. (PRECIS convention, not of compiler.)
- Haworthia retusa* (L.) Duval forma *argenteo-maculosa* (G.G.Sm.) M.B.Bayer p.p. (1997. Bayer. Aloe 34:4-6.)
- Haworthia pygmaea* Poelln. var. *pygmaea*
- Haworthia pygmaea* Poelln. p.p. (PRECIS convention, not of compiler.)
- Haworthia radula* (Jacq.) Haw. = *Haworthia attenuata* var. *radula*
- Haworthia radula* (Jacq.) Haw. var. *pluriperlata* Haw. = *Haworthia attenuata* var. *radula*
- Haworthia ramifera* Haw. = *Haworthia marginata*
- Haworthia ramosa* G.G.Sm. = *Haworthia cymbiformis* var. *Ramosa*
- Haworthia recurva* (Haw.) Haw. = *Haworthia venosa* subsp. *venosa*
- Haworthia reddii* C.L.Scott = *Haworthia cymbiformis* var. *reddii*
- Haworthia reinwardtii* (Salm-Dyck) Haw. = *Haworthia reinwardtii* var. *brevicula*, *Haworthia reinwardtii* var. *reinwardtii* forma *chalumnensis*, *Haworthia reinwardtii* var. *reinwardtii* forma *kaffirdriftensis*, *Haworthia reinwardtii* var. *reinwardtii* forma *olivacea*,
- Haworthia reinwardtii* (Salm-Dyck) Haw. var. *adelaidensis* Poelln. = *Haworthia coarctata* var. *adelaidensis*
- Haworthia reinwardtii* (Salm-Dyck) Haw. var. *archibaldiae* Poelln. = *Haworthia reinwardtii* var. *reinwardtii* forma *reinwardtii*
- Haworthia reinwardtii* (Salm-Dyck) Haw. var. *bellula* G.G.Sm. = *Haworthia coarctata* var. *adelaidensis*
- Haworthia reinwardtii* (Salm-Dyck) Haw. var. *brevicula* G.G.Sm.
- Haworthia reinwardtii* (Salm-Dyck) Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia reinwardtii* (Salm-Dyck) Haw. var. *diminuta*



- G.G.Sm. (1976. Bayer. Haworthia Handb. 184.)  
**Haworthia reinwardtii (Salm-Dyck) Haw. var. chalumnensis**  
 G.G.Sm. = **Haworthia reinwardtii var. reinwardtii forma chalumnensis**
- Haworthia reinwardtii (Salm-Dyck) Haw. var. committeesensis** G.G.Sm. = **Haworthia coarctata var. coarctata forma coarctata**
- Haworthia reinwardtii (Salm-Dyck) Haw. var. conspicua** Poelln. = **Haworthia coarctata var. coarctata forma coarctata**
- Haworthia reinwardtii (Salm-Dyck) Haw. var. diminuta** G.G.Sm. = **Haworthia reinwardtii var. brevicula**
- Haworthia reinwardtii (Salm-Dyck) Haw. var. grandicula** G.G.Sm. = **Haworthia reinwardtii var. reinwardtii forma reinwardtii**
- Haworthia reinwardtii (Salm-Dyck) Haw. var. huntsdriftensis** G.G.Sm. = **Haworthia coarctata var. coarctata forma coarctata**
- Haworthia reinwardtii (Salm-Dyck) Haw. var. kaffirdriftensis** G.G.Sm. = **Haworthia reinwardtii var. reinwardtii forma kaffirdriftensis**
- Haworthia reinwardtii (Salm-Dyck) Haw. var. major Baker** = **Haworthia reinwardtii var. reinwardtii forma reinwardtii**
- Haworthia reinwardtii (Salm-Dyck) Haw. var. olivacea** G.G.Sm. = **Haworthia reinwardtii var. reinwardtii forma olivacea**
- Haworthia reinwardtii (Salm-Dyck) Haw. var. peddiensis** G.G.Sm. = **Haworthia reinwardtii var. reinwardtii forma reinwardtii**
- Haworthia reinwardtii (Salm-Dyck) Haw. var. pseudocoarctata** Poelln. = **Haworthia coarctata var. coarctata forma coarctata**
- Haworthia reinwardtii (Salm-Dyck) Haw. var. pulchra** Poelln. = **Haworthia reinwardtii var. reinwardtii forma reinwardtii**
- Haworthia reinwardtii (Salm-Dyck) Haw. var. reinwardtii** = **Haworthia reinwardtii var. reinwardtii forma chalumnensis, Haworthia reinwardtii var. reinwardtii forma kaffirdriftensis, Haworthia reinwardtii var. reinwardtii forma olivacea, Haworthia reinwardtii var. reinwardtii forma reinwardtii, Haworthia reinwardtii forma reinwardtii**
- Haworthia reinwardtii (Salm-Dyck) Haw. var. reinwardtii forma chalumnensis (G.G.Sm.) M.B.Bayer**  
 Haworthia reinwardtii (Salm-Dyck) Haw. p.p. (PRECIS convention, not of compiler.)  
 Haworthia reinwardtii (Salm-Dyck) Haw. var. chalumnensis G.G.Sm. (1976. Bayer. Haworthia Handb. 184.)  
 Haworthia reinwardtii (Salm-Dyck) Haw. var. reinwardtii p.p. (PRECIS convention, not of compiler.)
- Haworthia reinwardtii (Salm-Dyck) Haw. var. reinwardtii forma kaffirdriftensis (G.G.Sm.) M.B.Bayer**  
 Haworthia reinwardtii (Salm-Dyck) Haw. p.p. (PRECIS convention, not of compiler.)  
 Haworthia reinwardtii (Salm-Dyck) Haw. var. kaffirdriftensis G.G.Sm. (1976. Bayer. Haworthia Handb. 184.)  
 Haworthia reinwardtii (Salm-Dyck) Haw. var. reinwardtii p.p. (PRECIS convention, not of compiler.)
- Haworthia reinwardtii (Salm-Dyck) Haw. var. reinwardtii forma olivacea (G.G.Sm.) M.B.Bayer**  
 Haworthia reinwardtii (Salm-Dyck) Haw. p.p. (PRECIS convention, not of compiler.)  
 Haworthia reinwardtii (Salm-Dyck) Haw. var. olivacea G.G.Sm. (2001. Hayashi. Haworthiad 15:16-20.)  
 Haworthia reinwardtii (Salm-Dyck) Haw. var. reinwardtii p.p. (PRECIS convention, not of compiler.)
- Haworthia reinwardtii (Salm-Dyck) Haw. var. reinwardtii forma reinwardtii**  
 Aloe reinwardtii Salm-Dyck (2000. Glen & Hardy. FSA 5:1-167.)  
 Haworthia reinwardtii (Salm-Dyck) Haw. p.p. (PRECIS convention, not of compiler.)  
 Haworthia reinwardtii (Salm-Dyck) Haw. var. archibaldiae Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
 Haworthia reinwardtii (Salm-Dyck) Haw. var. grandicula G.G.Sm. (1982. Bayer. New Haworthia Handb. 124.)  
 Haworthia reinwardtii (Salm-Dyck) Haw. var. major Baker (1982. Bayer. New Haworthia Handb. 124.)  
 Haworthia reinwardtii (Salm-Dyck) Haw. var. peddiensis
- G.G.Sm. (1982. Bayer. New Haworthia Handb. 124.)  
 Haworthia reinwardtii (Salm-Dyck) Haw. var. pulchra Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
 Haworthia reinwardtii (Salm-Dyck) Haw. var. reinwardtii p.p. (PRECIS convention, not of compiler.)  
 Haworthia reinwardtii (Salm-Dyck) Haw. var. triebnerii Resende (1982. Bayer. New Haworthia Handb. 124.)  
 Haworthia reinwardtii (Salm-Dyck) Haw. var. valida G.G.Sm. (1982. Bayer. New Haworthia Handb. 124.)
- Haworthia reinwardtii (Salm-Dyck) Haw. var. reinwardtii forma zebrina (G.G.Sm.) M.B.Bayer**  
 Haworthia reinwardtii (Salm-Dyck) Haw. p.p. (PRECIS convention, not of compiler.)  
 Haworthia reinwardtii (Salm-Dyck) Haw. var. reinwardtii p.p. (PRECIS convention, not of compiler.)  
 Haworthia reinwardtii (Salm-Dyck) Haw. var. zebrina G.G.Sm. (2001. Hayashi. Haworthiad 15.)
- Haworthia reinwardtii (Salm-Dyck) Haw. var. riebeckensis** G.G.Sm. = **Haworthia coarctata var. adelaidensis**
- Haworthia reinwardtii (Salm-Dyck) Haw. var. tenuis** G.G.Sm. = **Haworthia coarctata var. tenuis**
- Haworthia reinwardtii (Salm-Dyck) Haw. var. triebnerii** Resende = **Haworthia reinwardtii var. reinwardtii forma reinwardtii**
- Haworthia reinwardtii (Salm-Dyck) Haw. var. valida** G.G.Sm. = **Haworthia reinwardtii var. reinwardtii forma reinwardtii**
- Haworthia reinwardtii (Salm-Dyck) Haw. var. zebrina** G.G.Sm. = **Haworthia reinwardtii var. reinwardtii forma zebrina**
- Haworthia reticulata (Haw.) Haw. = Haworthia reticulata var. attenuata, Haworthia reticulata var. hurlingii, Haworthia reticulata var. reticulata, Haworthia reticulata var. subregularis**
- Haworthia reticulata (Haw.) Haw. var. acuminata** Poelln. = **Haworthia reticulata var. reticulata**
- Haworthia reticulata (Haw.) Haw. var. attenuata** M.B.Bayer  
 Haworthia reticulata (Haw.) Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia reticulata (Haw.) Haw. var. hurlingii (Poelln.) M.B.Bayer**  
 Haworthia hurlingii Poelln. (1982. Bayer. New Haworthia Handb.)  
 Haworthia reticulata (Haw.) Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia reticulata (Haw.) Haw. var. reticulata**  
 Aloe herbacea DC. (2000. Glen & Hardy. FSA 5:1-167.)  
 Aloe pumilio Jacq. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
 Aloe reticulata Haw. (2000. Glen & Hardy. FSA 5:1-167.)  
 Haworthia guttata Uitewaal (1999. Bayer. Haworthia revisited.)  
 Haworthia hurlingii Poelln. var. ambigua Triebner & Poelln. (1976. Bayer. Haworthia Handb. 184.)  
 Haworthia reticulata (Haw.) Haw. p.p. (PRECIS convention, not of compiler.)  
 Haworthia reticulata (Haw.) Haw. var. acuminata Poelln. (1982. Bayer. New Haworthia Handb. 124.)
- Haworthia reticulata (Haw.) Haw. var. subregularis (Baker) Pilbeam**  
 Haworthia haageana Poelln. (1999. Bayer. Haworthia revisited.)  
 Haworthia haageana Poelln. var. subreticulata Poelln. (1998. Breuer. The world of Haworthia 1.)  
 Haworthia reticulata (Haw.) Haw. p.p. (PRECIS convention, not of compiler.)  
 Haworthia subregularis Baker (1999. Bayer. Haworthia revisited.)
- Haworthia retusa (L.) Duval = Haworthia retusa var. quimutica, Haworthia retusa var. retusa**
- Haworthia retusa (L.) Duval forma acuminata** M.B.Bayer = **Haworthia magnifica var. acuminata**
- Haworthia retusa (L.) Duval forma argenteo-maculosa (G.G.Sm.) M.B.Bayer = Haworthia**
- Haworthia retusa (L.) Duval var. acuminata** M.B.Bayer = **Haworthia magnifica var. acuminata**
- Haworthia retusa (L.) Duval forma argenteo-maculosa (G.G.Sm.) M.B.Bayer = Haworthia magnifica var.**

- dekenahii**, *Haworthia pygmaea* var. *argenteo-maculosa*  
**Haworthia retusa** (L.) Duval var. *acuminata* M.B.Bayer =  
*Haworthia magnifica* var. *acuminata*  
**Haworthia retusa** (L.) Duval var. *dekenahii* (G.G.Sm.)  
M.B.Bayer = *Haworthia magnifica* var. *dekenahii*  
**Haworthia retusa** (L.) Duval var. *densiflora* G.G.Sm. =  
*Haworthia retusa* var. *retusa*  
**Haworthia retusa** (L.) Duval var. *multilineata* G.G.Sm. =  
*Haworthia retusa* var. *retusa*  
**Haworthia retusa** (L.) Duval var. *quimutica* M.Hayashi  
*Haworthia retusa* (L.) Duval p.p. (PRECIS convention, not of  
compiler.)  
**Haworthia retusa** (L.) Duval var. *retusa*  
*Aloe retusa* L. (2000. Glen & Hardy. FSA 5:1-167.)  
*Haworthia fouchei* Poelln. (1982. Bayer. New *Haworthia*  
*Handb.*)  
*Haworthia retusa* (L.) Duval p.p. (PRECIS convention, not of  
compiler.)  
*Haworthia retusa* (L.) Duval var. *densiflora* G.G.Sm. (1982.  
Bayer. New *Haworthia Handb.* 124.)  
*Haworthia retusa* (L.) Duval var. *multilineata* G.G.Sm. (1982.  
Bayer. New *Haworthia Handb.* 124.)  
*Haworthia retusa* (L.) Duval var. *solitaria* G.G.Sm. (1982.  
Bayer. New *Haworthia Handb.* 124.)  
**Haworthia retusa** (L.) Duval var. *solitaria* G.G.Sm. =  
*Haworthia retusa* var. *retusa*  
**Haworthia rossouwii** Poelln. = *Haworthia mirabilis* var.  
*triebneriana*  
**Haworthia rubriflora** (L.Bolus) Parr = *Astroloba rubriflora*  
**Haworthia rycroftiana** M.B.Bayer = *Haworthia integra* var.  
*integra*  
**Haworthia ryneveldii** Poelln. = *Haworthia nigra* var. *nigra*  
**Haworthia scabra** Haw. = *Haworthia scabra* var. *johanii*,  
*Haworthia scabra* var. *lateganiae*, *Haworthia scabra* var.  
*morrisiae*, *Haworthia scabra* var. *scabra*, *Haworthia*  
*scabra* var. *starkiana*  
**Haworthia scabra** Haw. var. *johanii* M.Hayashi  
*Haworthia scabra* Haw. p.p. (PRECIS convention, not of  
compiler.)  
**Haworthia scabra** Haw. var. *lateganiae* (Poelln.) M.B.Bayer  
*Haworthia lateganiae* Poelln. (1999. Bayer. *Haworthia*  
*revisited.*)  
*Haworthia scabra* Haw. p.p. (PRECIS convention, not of  
compiler.)  
*Haworthia starkiana* Poelln. var. *lateganiae* (Poelln.)  
M.B.Bayer (1999. Bayer. *Haworthia revisited.*)  
**Haworthia scabra** Haw. var. *morrisiae* (Poelln.) M.B.Bayer  
*Haworthia morrisiae* Poelln. (1976. Bayer. *Haworthia Handb.*)  
*Haworthia scabra* Haw. p.p. (PRECIS convention, not of  
compiler.)  
**Haworthia scabra** Haw. var. *scabra*  
*Aloe scabra* (Haw.) Schult. & J.H.Schult. (2000. Glen &  
Hardy. FSA 5:1-167.)  
*Haworthia scabra* Haw. p.p. (PRECIS convention, not of  
compiler.)  
*Haworthia tuberculata* Poelln. (1976. Bayer. *Haworthia Handb.*  
184.)  
*Haworthia tuberculata* Poelln. var. *acuminata* Poelln. (1976.  
Bayer. *Haworthia Handb.* 184.)  
*Haworthia tuberculata* Poelln. var. *angustata* Poelln. (1976.  
Bayer. *Haworthia Handb.* 184.)  
*Haworthia tuberculata* Poelln. var. *subexpansa* Poelln. (1976.  
Bayer. *Haworthia Handb.* 184.)  
*Haworthia tuberculata* Poelln. var. *sublaevis* Poelln. (1976.  
Bayer. *Haworthia Handb.* 184.)  
**Haworthia scabra** Haw. var. *starkiana* (Poelln.) M.B.Bayer  
*Haworthia scabra* Haw. p.p. (PRECIS convention, not of  
compiler.)  
*Haworthia smitii* Poelln. (1999. Bayer. *Haworthia revisited.*)  
*Haworthia starkiana* Poelln. (1999. Bayer. *Haworthia*  
*revisited.*)  
**Haworthia schmidtiana** G.G.Sm. = *Haworthia nortieri* var.  
*nortieri*  
**Haworthia schmidtiana** G.G.Sm. var. *gibbergensis* G.G.Sm. =  
*Haworthia nortieri* var. *nortieri*  
**Haworthia schmidtiana** Poelln. = *Haworthia nigra* var. *nigra*  
**Haworthia schmidtiana** Poelln. var. *angustata* Poelln. =  
*Haworthia nigra* var. *nigra*  
*Haworthia schmidtiana* Poelln. var. *diversifolia* Poelln. =  
*Haworthia nigra* var. *diversifolia*  
**Haworthia schmidtiana** Poelln. var. *diversifolia* Poelln. forma  
*nana* Poelln. = *Haworthia nigra* var. *diversifolia*  
**Haworthia schmidtiana** Poelln. var. *elongata* Poelln. =  
*Haworthia nigra* var. *nigra*  
**Haworthia schmidtiana** Poelln. var. *pusilla* Poelln. =  
*Haworthia nigra* var. *nigra*  
**Haworthia schmidtiana** Poelln. var. *suberectata* Poelln. =  
*Haworthia nigra* var. *nigra*  
**Haworthia schoemaniai** M.Hayashi  
**Haworthia schuldiana** Poelln. = *Haworthia maraisii* var.  
*maraisii*  
**Haworthia schuldiana** Poelln. var. *erecta* Triebner & Poelln.  
= *Haworthia maraisii* var. *notabilis*  
**Haworthia schuldiana** Poelln. var. *maculata* Poelln. =  
*Haworthia maculata* var. *maculate*  
**Haworthia schuldiana** Poelln. var. *major* G.G.Sm. =  
*Haworthia emelyae* var. *major*  
**Haworthia schuldiana** Poelln. var. *minor* Triebner & Poelln.  
= *Haworthia maraisii* var. *maraisii*  
**Haworthia schuldiana** Poelln. var. *robertsonensis* Poelln. =  
*Haworthia maraisii* var. *maraisii*  
**Haworthia schuldiana** Poelln. var. *simplicior* Poelln. =  
*Haworthia maraisii* var. *maraisii*  
**Haworthia schuldiana** Poelln. var. *sublaevis* Poelln. =  
*Haworthia maraisii* var. *maraisii*  
**Haworthia schuldiana** Poelln. var. *subtuberculata* Poelln. =  
*Haworthia maraisii* var. *maraisii*  
**Haworthia schuldiana** Poelln. var. *unilineata* Poelln. =  
*Haworthia maraisii* var. *maraisii*  
**Haworthia scottii** Breuer  
**Haworthia semiglabrata** Haw. = *Haworthia maxima*  
**Haworthia semiviva** (Poelln.) M.B.Bayer  
**Haworthia serrata** M.B.Bayer  
**Haworthia setata** Haw. = *Haworthia arachnoidea* var. *setata*  
**Haworthia setata** Haw. var. *major* Haw. = *Haworthia*  
*arachnoidea* var. *setata*  
**Haworthia setata** Haw. var. *media* Haw. = *Haworthia*  
*arachnoidea* var. *setata*  
**Haworthia setata** Haw. var. *nigricans* Haw. = *Haworthia*  
*arachnoidea* var. *nigricans*  
**Haworthia setata** Haw. var. *subinermis* Poelln. = *Haworthia*  
*aristata*  
**Haworthia smitii** Poelln. = *Haworthia scabra* var. *starkiana*  
**Haworthia sordida** Haw. = *Haworthia sordida* var. *lavranii*,  
*Haworthia sordida* var. *sordida*  
**Haworthia sordida** Haw. var. *lavranii* C.L.Scott  
*Haworthia sordida* Haw. p.p. (PRECIS convention, not of  
compiler.)  
**Haworthia sordida** Haw. var. *sordida*  
*Aloe sordida* (Haw.) Schult. & J.H.Schult. (2000. Glen &  
Hardy. FSA 5:1-167.)  
*Haworthia agavoides* Zantner & Poelln. (2001. Rowley & Ed.  
Eggl. *Illustrated handbook of succulent plants: Monocots.*)  
*Haworthia sordida* Haw. p.p. (PRECIS convention, not of  
compiler.)  
**Haworthia spiralis** (L.) Duval = *Astroloba spiralis*  
**Haworthia spirella** Haw. = *Astroloba spiralis*  
**Haworthia springbokvlakensis** C.L.Scott  
**Haworthia starkiana** Poelln. = *Haworthia scabra* var.  
*starkiana*  
**Haworthia starkiana** Poelln. var. *lateganiae* (Poelln.)  
M.B.Bayer = *Haworthia scabra* var. *lateganiae*  
**Haworthia stayneri** Poelln. = *Haworthia cooperi* var. *pilifera*  
**Haworthia stayneri** Poelln. var. *salina* Poelln. = *Haworthia*  
*cooperi* var. *pilifera*  
**Haworthia stenophylla** Baker = *Chortolirion angolense*  
**Haworthia subfasciata** (Salm-Dyck) Baker = *Haworthia*  
*fasciata*  
**Haworthia sublimpidula** Poelln. = *Haworthia maraisii* var.  
*maraisii*  
**Haworthia submaculata** Poelln. = *Haworthia herbacea* var.  
*herbacea*  
**Haworthia subregularis** Baker = *Haworthia reticulata* var.  
*subregularis* *Haworthia subspicata* Baker = *Chortolirion*  
*angolense*  
**Haworthia tenera** Poelln. = *Haworthia cooperi* var. *tenera*

- Haworthia tenuifolia* Engl. = *Chortolirion angolense*  
*Haworthia tessellata* Haw. = *Haworthia venosa* subsp. *tessellata*  
*Haworthia tessellata* Haw. var. *coriacea* Resende & Poelln. = *Haworthia venosa* subsp. *tessellata*  
*Haworthia tessellata* Haw. var. *coriacea* Resende & Poelln. forma *brevior* Resende & Poelln. = *Haworthia venosa* subsp. *tessellata*  
*Haworthia tessellata* Haw. var. *coriacea* Resende & Poelln. forma *longior* Resende & Poelln. = *Haworthia venosa* subsp. *tessellata*  
*Haworthia tessellata* Haw. var. *elongata* Woerden = *Haworthia venosa* subsp. *tessellata*  
*Haworthia tessellata* Haw. var. *inflexa* Baker = *Haworthia venosa* subsp. *tessellata*  
*Haworthia tessellata* Haw. var. *luisieri* Resende & Poelln. = *Haworthia venosa* subsp. *tessellata*  
*Haworthia tessellata* Haw. var. *obesa* Resende & Poelln. = *Haworthia venosa* subsp. *tessellata*  
*Haworthia tessellata* Haw. var. *palhinhae* Resende & Poelln. = *Haworthia venosa* subsp. *tessellata*  
*Haworthia tessellata* Haw. var. *parva* (Schult. & J.H.Schult.) Baker = *Haworthia venosa* subsp. *tessellata*  
*Haworthia tessellata* Haw. var. *parva* (Schult. & J.H.Schult.) Baker forma *major* J.R.Br. = *Haworthia venosa* subsp. *tessellata*  
*Haworthia tessellata* Haw. var. *simplex* Resende & Poelln. = *Haworthia venosa* subsp. *tessellata*  
*Haworthia tessellata* Haw. var. *stephaniana* Resende & Poelln. = *Haworthia venosa* subsp. *tessellata*  
*Haworthia tessellata* Haw. var. *tuberculata* Poelln. = *Haworthia venosa* subsp. *tessellata*  
*Haworthia tessellata* Haw. var. *velutina* Resende & Poelln. = *Haworthia venosa* subsp. *tessellata*  
*Haworthia torquata* Haw. = *Haworthia viscosa* var. *viscosa*  
*Haworthia tortuosa* (Haw.) Haw. = *Haworthia viscosa* var. *viscosa*  
*Haworthia tradouwensis* Breuer  
*Haworthia transiens* (Poelln.) M.B.Bayer  
*Haworthia cymbiformis* (Haw.) Duval var. *brevifolia* Poelln. (2002. Bayer. *Haworthiad* 16:62-71.)  
*Haworthia cymbiformis* (Haw.) Duval var. *multifolia* Triebner (2002. Bayer. *Haworthiad* 16:62-71.)  
*Haworthia cymbiformis* (Haw.) Duval var. *transiens* (Poelln.) M.B.Bayer (2002. Bayer. *Haworthiad* 16:62-71.)  
*Haworthia cymbiformis* (Haw.) Duval var. *translucens* Triebner & Poelln. (2002. Bayer. *Haworthiad* 16:62-71.)  
*Haworthia planifolia* Haw. var. *transiens* Poelln. (2002. Bayer. *Haworthiad* 16:62-71.)  
*Haworthia translucens* (Aiton f.) Haw. = *Haworthia cooperi* var. *tenera*  
*Haworthia translucens* (Aiton f.) Haw. subsp. *tenera* (Poelln.) M.B.Bayer = *Haworthia cooperi* var. *tenera*  
*Haworthia translucens* (Aiton f.) Haw. subsp. *tenera* (Poelln.) M.B.Bayer = *Haworthia cooperi* var. *tenera*  
*Haworthia translucens* Haw. = *Haworthia herbacea* var. *herbacea*  
*Haworthia translucens* Haw. subsp. *translucens* = *Haworthia herbacea* var. *herbacea*  
*Haworthia tetryensis* Breuer  
*Haworthia triebneriana* Poelln. = *Haworthia mirabilis* var. *triebneriana*  
*Haworthia triebneriana* Poelln. var. *diversicolor* Triebner & Poelln. = *Haworthia maraisii* var. *maraisii*  
*Haworthia triebneriana* Poelln. var. *multituberculata* Poelln. = *Haworthia mirabilis* var. *triebneriana*  
*Haworthia triebneriana* Poelln. var. *napierensis* Triebner & Poelln. = *Haworthia mirabilis* var. *triebneriana*  
*Haworthia triebneriana* Poelln. var. *pulchra* Poelln. = *Haworthia mirabilis* var. *triebneriana*  
*Haworthia triebneriana* Poelln. var. *rubrodentata* Triebner & Poelln. = *Haworthia mirabilis* var. *triebneriana*  
*Haworthia triebneriana* Poelln. var. *sublineata* Poelln. = *Haworthia mirabilis* var. *sublineata*  
*Haworthia triebneriana* Poelln. var. *subtuberculata* Poelln. = *Haworthia mirabilis* var. *triebneriana*  
*Haworthia triebneriana* Poelln. var. *turgida* Triebner = *Haworthia mirabilis* var. *triebneriana*  
*Haworthia mirabilis* var. *triebneriana*  
*Haworthia truncata* Schonland = *Haworthia truncata* var. *maughanii*, *Haworthia truncata* var. *minor*, *Haworthia truncata* var. *truncata*  
*Haworthia truncata* Schonland forma *crassa* Poelln. = *Haworthia truncata* var. *truncata*  
*Haworthia truncata* Schonland forma *tenuis* Poelln. = *Haworthia truncata* var. *truncata*  
*Haworthia truncata* Schonland var. *maughanii* (Poelln.) B.Fearn  
*Haworthia maughanii* Poelln. (1999. Bayer. *Haworthia* revisited.)  
*Haworthia truncata* Schonland p.p. (PRECIS convention, not of compiler.)  
*Haworthia truncata* Schonland var. *minor* Breuer  
*Haworthia truncata* Schonland var. *truncata*  
*Haworthia truncata* Schonland forma *crassa* Poelln. (1982. Bayer. *New Haworthia Handb.* 124.)  
*Haworthia truncata* Schonland forma *tenuis* Poelln. (1982. Bayer. *New Haworthia Handb.* 124.)  
*Haworthia truncata* Schonland p.p. (PRECIS convention, not of compiler.)  
*Haworthia tuberculata* Poelln. = *Haworthia scabra* var. *scabra*  
*Haworthia tuberculata* Poelln. var. *acuminata* Poelln. = *Haworthia scabra* var. *scabra*  
*Haworthia tuberculata* Poelln. var. *angustata* Poelln. = *Haworthia scabra* var. *scabra*  
*Haworthia tuberculata* Poelln. var. *subexpansa* Poelln. = *Haworthia scabra* var. *scabra*  
*Haworthia tuberculata* Poelln. var. *sublaevis* Poelln. = *Haworthia scabra* var. *scabra*  
*Haworthia turgida* Haw. = *Haworthia turgida* var. *longibracteata*, *Haworthia turgida* var. *suberecta*, *Haworthia turgida* var. *turgida*  
*Haworthia turgida* Haw. var. *longibracteata* (G.G.Sm.) M.B.Bayer  
*Haworthia longibracteata* G.G.Sm. (1999. Bayer. *Haworthia* revisited.)  
*Haworthia turgida* Haw. p.p. (PRECIS convention, not of compiler.)  
*Haworthia turgida* Haw. var. *pallidifolia* G.G.Sm. = *Haworthia turgida* var. *suberecta*  
*Haworthia turgida* Haw. var. *suberecta* Poelln.  
*Haworthia turgida* Haw. p.p. (PRECIS convention, not of compiler.)  
*Haworthia turgida* Haw. var. *pallidifolia* G.G.Sm. (1999. Bayer. *Haworthia* revisited.)  
*Haworthia turgida* Haw. var. *subtuberculata* Poelln. (1999. Bayer. *Haworthia* revisited.)  
*Haworthia turgida* Haw. var. *subtuberculata* Poelln. = *Haworthia turgida* var. *suberecta*  
*Haworthia turgida* Haw. var. *turgida*  
*Aloe laetevirens* (Haw.) Link (2000. Glen & Hardy. *FSA* 5:1-167.)  
*Aloe turgida* (Haw.) Schult. & J.H.Schult. (2000. Glen & Hardy. *FSA* 5:1-167.)  
*Haworthia caespitosa* Poelln. (2001. Rowley & Ed. Eggl. *Illustrated handbook of succulent plants: Monocots.*)  
*Haworthia caespitosa* Poelln. forma *subplana* Poelln. (2001. Rowley & Ed. Eggl. *Illustrated handbook of succulent plants: Monocots.*)  
*Haworthia caespitosa* Poelln. forma *subproliferans* Poelln. (2001. Rowley & Ed. Eggl. *Illustrated handbook of succulent plants: Monocots.*)  
*Haworthia laetevirens* Haw. (2000. Glen & Hardy. *FSA* 5:1-167.)  
*Haworthia turgida* Haw. p.p. (PRECIS convention, not of compiler.)  
*Haworthia ubomboensis* I.Verd. = *Haworthia limifolia* var. *ubomboensis*  
*Haworthia umbraticola* Poelln. = *Haworthia cymbiformis* var. *obtusa*  
*Haworthia unicolor* Poelln. = *Haworthia mucronata* var. *mucronata*  
*Haworthia unicolor* Poelln. var. *helmae* Bayer = *Haworthia mucronata* var. *mucronata*  
*Haworthia unicolor* Poelln. var. *venteri* Bayer = *Haworthia arachnoidea* var. *nigricans*



- Haworthia variegata L.Bolus = Haworthia variegata var. hemicrypta, Haworthia variegata var. modesta, Haworthia variegata var. petrophila, Haworthia variegata var. variegata**
- Haworthia variegata L.Bolus var. hemicrypta M.B.Bayer**  
Haworthia variegata L.Bolus p.p. (PRECIS convention, not of compiler.)
- Haworthia variegata L.Bolus var. modesta M.B.Bayer**
- Haworthia variegata L.Bolus var. petrophila M.B.Bayer**  
Haworthia variegata L.Bolus p.p. (PRECIS convention, not of compiler.)
- Haworthia variegata L.Bolus var. variegata**  
Haworthia variegata L.Bolus p.p. (PRECIS convention, not of compiler.)
- Haworthia venosa (Lam.) Haw. = Haworthia venosa subsp. granulata, Haworthia venosa subsp. tessellata, Haworthia venosa subsp. venosa, Haworthia venosa subsp. Woolleyi**
- Haworthia venosa (Lam.) Haw. subsp. granulata (Marloth) M.B.Bayer**  
Haworthia granulata Marloth (1976. Bayer. Haworthia Handb.)  
Haworthia venosa (Lam.) Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia venosa (Lam.) Haw. subsp. tessellata (Haw.) M.B.Bayer**  
Aloe parva (Haw.) Schult. & J.H.Schult. (2000. Glen & Hardy. FSA 5:1-167.)  
Aloe tessellata (Haw.) Schult. & J.H.Schult. (2000. Glen & Hardy. FSA 5:1-167.)  
Haworthia engleri Dinter (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia minutissima Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia parva Haw. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia pseudotessellata Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia tessellata Haw. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia tessellata Haw. var. parva (Schult. & J.H.Schult.) Baker (PRECIS convention, not of compiler.)  
Haworthia tessellata Haw. var. coriacea Resende & Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia tessellata Haw. var. coriacea Resende & Poelln. forma brevior Resende & Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia tessellata Haw. var. coriacea Resende & Poelln. forma longior Resende & Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia tessellata Haw. var. elongata Woerden (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia tessellata Haw. var. inflexa Baker (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia tessellata Haw. var. luisieri Resende & Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia tessellata Haw. var. obesa Resende & Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia tessellata Haw. var. palhinhae Resende & Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia tessellata Haw. var. parva (Schult. & J.H.Schult.) Baker forma major J.R.Br. (2000. Glen & Hardy. FSA 5:1-167.)  
Haworthia tessellata Haw. var. simplex Resende & Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia tessellata Haw. var. stephiana Resende & Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia tessellata Haw. var. tuberculata Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia tessellata Haw. var. velutina Resende & Poelln. (1982. Bayer. New Haworthia Handb. 124.)  
Haworthia venosa (Lam.) Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia venosa (Lam.) Haw. subsp. venosa**  
Aloe recurva Haw. (2000. Glen & Hardy. FSA 5:1-167.)  
Aloe tricolor Haw. (2000. Glen & Hardy. FSA 5:1-167.)  
Aloe venosa Lam. (2000. Glen & Hardy. FSA 5:1-167.)  
Haworthia distincta N.E.Br. (1982. Bayer. New Haworthia Handb. 124.)
- Haworthia recurva (Haw.) Haw. (2000. Glen & Hardy. FSA 5:1-167.)  
Haworthia venosa (Lam.) Haw. p.p. (PRECIS convention, not of compiler.)  
Haworthia venosa (Lam.) Haw. var. oertendahlii Hjelmq. (1982. Bayer. New Haworthia Handb. 124.)
- Haworthia venosa (Lam.) Haw. subsp. woolleyi (Poelln.) Halda**  
Haworthia venosa (Lam.) Haw. p.p. (PRECIS convention, not of compiler.)  
Haworthia woolleyi Poelln. (1999. Bayer. Haworthia revisited.)
- Haworthia venosa (Lam.) Haw. var. oertendahlii Hjelmq. Haworthia venosa subsp. Venosa**
- Haworthia venterii Poelln. = Haworthia arachnoidea var. nigricans**
- Haworthia venusta C.L.Scott = Haworthia cooperi var. venusta**
- Haworthia virella (M.B.Bayer) M.Hayashi**  
Haworthia decipiens Poelln. var. virella M.B.Bayer (2003. Hayashi. Haworthia Study 9.)
- Haworthia virescens Haw. = Haworthia marginata**
- Haworthia virescens Haw. var. minor Haw. = Haworthia marginata**
- Haworthia viscosa (L.) Haw. = Haworthia viscosa var. variabilis, Haworthia viscosa var. viscosa**
- Haworthia viscosa (L.) Haw. subsp. dereki-clarki Halda = Haworthia viscosa var. viscosa**
- Haworthia viscosa (L.) Haw. var. caespitosa Poelln. = Haworthia viscosa var. viscosa**
- Haworthia viscosa (L.) Haw. var. concinna (Schult. & J.H.Schult.) Baker = Haworthia viscosa var. viscosa**
- Haworthia viscosa (L.) Haw. var. cougaensis G.G.Sm. = Haworthia viscosa var. viscosa**
- Haworthia viscosa (L.) Haw. var. indurata (Haw.) Baker = Haworthia viscosa var. viscosa**
- Haworthia viscosa (L.) Haw. var. major Haw. = Haworthia viscosa var. viscosa**
- Haworthia viscosa (L.) Haw. var. minor Haw. = Haworthia viscosa var. viscosa**
- Haworthia viscosa (L.) Haw. var. parvifolia Haw. = Haworthia viscosa var. viscosa**
- Haworthia viscosa (L.) Haw. var. pseudotortuosa (Salm-Dyck) Baker = Haworthia viscosa var. viscosa**
- Haworthia viscosa (L.) Haw. var. quaggaensis G.G.Sm. = Haworthia viscosa var. viscosa**
- Haworthia viscosa (L.) Haw. var. subobtusa Poelln. = Haworthia viscosa var. viscosa**
- Haworthia viscosa (L.) Haw. var. torquata (Salm-Dyck) Baker = Haworthia viscosa var. viscosa**
- Haworthia viscosa (L.) Haw. var. variabilis Breuer** <sup>[LC]</sup>  
Haworthia viscosa (L.) Haw. p.p. (PRECIS convention, not of compiler.)
- Haworthia viscosa (L.) Haw. var. viridissima G.G.Sm. = Haworthia viscosa var. viscosa**
- Haworthia viscosa (L.) Haw. var. viscosa**  
Aloe asperiuscula (Haw.) Schult. & J.H.Schult. (2000. Glen & Hardy. FSA 5:1-167.)  
Aloe concinna (Haw.) Schult. & J.H.Schult. (2000. Glen & Hardy. FSA 5:1-167.)  
Aloe cordifolia (Haw.) Schult. & J.H.Schult. (2000. Glen & Hardy. FSA 5:1-167.)  
Aloe indurata Schult. & J.H.Schult. (2000. Glen & Hardy. FSA 5:1-167.)  
Aloe pseudotortuosa Salm-Dyck (2000. Glen & Hardy. FSA 5:1-167.)  
Aloe subtortuosa Schult. & J.H.Schult. (2000. Glen & Hardy. FSA 5:1-167.)  
Aloe torquata (Haw.) Salm-Dyck (2000. Glen & Hardy. FSA 5:1-167.)  
Aloe tortuosa Haw. (1976. Bayer. Haworthia Handb. 184.)  
Aloe triangularis Medik. (1998. Breuer. The world of Haworthia 1.)  
Aloe viscosa L. (2000. Glen & Hardy. FSA 5:1-167.)  
Haworthia asperiuscula Haw. (2000. Glen & Hardy. FSA 5:1-167.)  
Haworthia asperiuscula Haw. var. patagiata G.G.Sm. (1976. Bayer. Haworthia Handb. 184.)  
Haworthia asperiuscula Haw. var. subintegra G.G.Sm. (1976.

Bayer. *Haworthia* Handb. 184.)  
*Haworthia beanii* G.G.Sm. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia beanii* G.G.Sm. var. *minor* G.G.Sm. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia concinna* Haw. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia cordifolia* Haw. (2000. Glen & Hardy. FSA 5:1-167.)  
*Haworthia indurata* Haw. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia torquata* Haw. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia tortuosa* (Haw.) Haw. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
*Haworthia viscosa* (L.) Haw. p.p. (PRECIS convention, not of compiler.)  
*Haworthia viscosa* (L.) Haw. subsp. *dereki-clarki* Halda (1999. Bayer. *Haworthia* revisited.)  
*Haworthia viscosa* (L.) Haw. var. *caespitosa* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia viscosa* (L.) Haw. var. *concinna* (Schult. & J.H.Schult.) Baker (2000. Glen & Hardy. FSA 5:1-167.)  
*Haworthia viscosa* (L.) Haw. var. *cougaensis* G.G.Sm. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia viscosa* (L.) Haw. var. *indurata* (Haw.) Baker (2000. Glen & Hardy. FSA 5:1-167.)  
*Haworthia viscosa* (L.) Haw. var. *major* Haw. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia viscosa* (L.) Haw. var. *minor* Haw. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia viscosa* (L.) Haw. var. *parvifolia* Haw. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia viscosa* (L.) Haw. var. *pseudotortuosa* (Salm-Dyck) Baker (2000. Glen & Hardy. FSA 5:1-167.)  
*Haworthia viscosa* (L.) Haw. var. *quaggaensis* G.G.Sm. (1982. Bayer. *New Haworthia* Handb. 124.)  
*Haworthia viscosa* (L.) Haw. var. *subobtusa* Poelln. (1976. Bayer. *Haworthia* Handb. 184.)  
*Haworthia viscosa* (L.) Haw. var. *torquata* (Salm-Dyck) Baker (2000. Glen & Hardy. FSA 5:1-167.)  
*Haworthia viscosa* (L.) Haw. var. *viridissima* G.G.Sm. (2001. Rowley & Ed. Eggl. Illustrated handbook of succulent plants: Monocots.)  
***Haworthia vittata* Baker = *Haworthia cooperi* var. *cooperi***  
***Haworthia vlokii* M.B.Bayer**  
***Haworthia whitesloaneana* Poelln. = *Haworthia maraisii* var. *maraisii***  
***Haworthia willowmorensis* Poelln. = *Haworthia mirabilis* var. *triebneriana***  
***Haworthia willowmorensis* sensu C.L.Scott = *Haworthia bayeri***  
***Haworthia wittebergensis* W.F.Barker**  
***Haworthia woolleyi* Poelln. = *Haworthia venosa* subsp. *woolleyi***  
***Haworthia xiphiophylla* Baker = *Haworthia decipiens* var. *xiphiophylla***  
***Haworthia zantneriana* Poelln. = *Haworthia zantneriana* var. *minor*, *Haworthia zantneriana* var. *zantneriana***  
***Haworthia zantneriana* Poelln. var. *minor* M.B.Bayer**  
*Haworthia zantneriana* Poelln. p.p. (PRECIS convention, not of compiler.)  
***Haworthia zantneriana* Poelln. var. *zantneriana***  
*Haworthia zantneriana* Poelln. p.p. (PRECIS convention, not of compiler.)  
***Haworthia zenigata* M.Hayash**

Editor's Note

This list, extracted from the SANBI web site, gives the species in alphabetical order.

For further information please access the site:

**<http://posa.sanbi.org/searchspp.php>**

where further information will be found in the list such as the altitude at which the species grows plus various buttons ( "f" for floristic information, "en" for Red Data details, "SIBIS" for integrated biodiversity information, "LC" least concern details etc. ) which can be click to access additional details.

Enjoy the experience.



# Generic Concepts in the Aloioideae Part 3 - The Phylogenetic Story

Gordon. D. Rowley

Much murky water has flowed under the taxonomic bridge since I looked at the problem of classifying genera of the *Aloe* complex in 1976. Numerical taxonomy has been replaced by phylogenetic taxonomy; we now consult the recipe for life before viewing the end products. Even the offending name Aloineae has been corrected to Aloioideae with status as subfamily, and then shunted from Liliaceae to Asphodelaceae, raised to family as Aloaceae, and subsequently thrust back into submission as a subfamily of the Australian grass trees Xanthorrhoeaceae: an unpopular piece of lumping rejected by many.

The correct type of the genus *Aloe* itself is *A. perfoliata*, designated by Hitchcock in 1929, as confirmed by Stearn in the index to the Ray Society reprint of *Species Plantarum*, not *A. disticha* as stated in the *Illustrated Handbook of Succulent Plants*.

Internally the classification into species has always been difficult, especially among haworthias, and the picture emerged of a group in an active state of evolution, without clear-cut boundaries between some groups of species (Ramdhani 2011). Arrival of DNA sequencing brought new hope, although nobody expected a simple solution. Treutlein et al. (2003) revealed what was long suspected, that the large genera *Haworthia* and *Aloe* were paraphyletic, and now Daru et al. (2013) have come up with a more thorough survey outlining eight recognisable groupings of species that involve the least rearranging of existing concepts. Of two options, uniting everything into one genus *Aloe* would take us back to the days of Salm-Dyck and would hardly find favour even with subgenera and sections to identify the clades. Nevertheless we need a practicable set of names reflecting the new recognition of clades, for which Daru and his colleagues have given excellent foundation and Bayer & Manning (2012) have provided a basic set of names under *Haworthia*, even if not the final word. The alternative, then, is to take up the major clades at generic level - a more practical solution that involves few changes of name in a group comprising around 700 species. A start has already been made by Grace et al. (2013) in resolving the *Aloe* complex by naming *Aloidendron* for the tree aloes *Aloe barberae*, *A. dichotomum*, *A. eminens*, *A. pillansii*, *A. ramosissimum* and *A. tongaense*, and *Aloiampelos* for the scramblers and climbers *A. ciliaris*, *A. commixta*, *A. decumbens*, *A. gracilis*, *A. juddii*, *A. striatula* and *A. tenuior*. In addition they take up the early generic name *Kumara* of Medikus for the single isolated species familiar as *Aloe plicatilis*. Here I am indebted to eagle-eyed Roy Mottram for pointing out that "Grace et al. have made an error in adopting *Kumara disticha* Medik. when *plicatilis* is the obvious priority name at the rank of species." Hence we have:

*Kumara plicatilis* (L.) G.D. Rowley n. comb.  
Basionym: *Aloe disticha* var. *plicatilis* L. in *Sp. Plant.* 1: 321. 1753.  
Syn: *Aloe plicatilis* (L.) Mill., *Gard. Dict.* ed.8: Aloe no.7. 1768.

*Kumara disticha* Medik., *Theodora speciosa*: 70. 1786. The genus *Chortolirion* has been transferred to *Aloe* and attention now turns to the complex of species centred around *Haworthia*. Whereas the former *Aloe* group has predominantly coloured flowers in shades of red, pink and yellow with few exceptions, favouring bird pollination, the *Haworthia* complex characteristically has smaller, less showy, whitish, two-lipped flowers adapted to bee

pollination, with few exceptions: *Aloe aristata* and *Poellnitzia*, for example. *Haworthia* of old is currently recognisable as made up of two major clades: the "soft-leaved haworthias" comprising Section *Haworthia* and most of the species, and another group of species which includes most of the "hard-leaved haworthias" (section *Hexangularis*) for which the generic name *Haworthiopsis* seems most appropriate here. A third but smaller genus covers most of sections *Robustipedunculares*, *Astroloba*, *Poellnitzia* and a few outcasts of *Haworthia*, for which Rafinesque's generic name *Tulista* of 1840 based on *Aloe pumila* var. *margaritifera* L. (*Haworthia margaritifera* (L.) Haw.) can now be taken up. A list of the necessary name transfers follows.

## KEY

(Watch out for some exceptions - plants do not read keys)

A. Leaves soft and juicy, green or pale green, sometimes spotted, smooth or with fine white bristles, not spine-tipped; inflorescences thin, wiry, flexible, pallid; pedicels distinct; flower base ± triangular; outer tepals free; style curved upwards.....HAWORTHIA

AA. Leaves firm, dark to blackish green, spine-tipped, smooth or white-tubercled; inflorescences stiff, strict; tepals ± united below; flower base ± hexagonal; ± straight...B

B Rosettes sessile or nearly so; flowers bilabiate ..... HAWORTHIOPSIS

BB Rosettes sessile or short-stemmed with leaves in 5 spiralling series; flowers actinomorphic with spreading tepal tips (*T. aristata* and *T. rubriflora* with coloured, erect or pendent flowers)..... TULISTA

## ALOE L.

With the genus *Aloe* shorn of its largest members, it has in turn gained some of the smallest grass aloes by integration of the genus *Chortolirion*. In these days of speed and instant online publication we have two competing transfers of the three species. Once again I am indebted to Roy Mottram for verifying that the names provided by Grace et al. appeared online on January 7, 2013, ahead of those of Daru et al. on February 20, so the outcome today is as follows:-

*Aloe subspicata* (Baker) Boatwr. & J.C. Manning

Syn. *Haworthia angolensis* Baker non *Aloe angolensis* Baker; *Aloe welwitschii* Klopper & Gideon F. Sm.; *Haworthia subspicata* Baker; *Chortolirion angolense* (Baker) A. Berger.

*Aloe barendii* Klopper & Gideon F. Sm.

Syn. *Haworthia tenuifolia* Engler non *Aloe tenuifolia* Lam. non *Aloe tenuifolia* Boatwr. & J.C. Manning; *Chortolirion tenuifolium* A. Berger.

*Aloe jeppeae* Klopper & Gideon F. Sm.

Syn. *Chortolirion latifolium* Zonn. & Fritz non *Aloe latifolia* Haw.; *Aloe aestivalis* Boatwr. & J.C. Manning.

## HAWORTHIA Duval

The genus is now limited to the "soft-leaved" species as covered by subgenus *Haworthia* of old, with Linnaeus's *Aloe pumila* var. *arachnoidea* as type. The foliage in rosettes is

mainly in paler shades of green, without conspicuous white tubercles, and the inflorescences are slender, pallid and flexible. The flowers are all two-lipped, whitish and adapted to bee-pollination, with a rounded triangular base, inverted clubshaped tube, and style curving upwards.

HAWORTHIOPSIS G.D. Rowley n. gen.

Type: *Haworthia coarctata* Haworth in *Phil. Mag.* 64: 301. 1824. Corresponds with *Haworthia* Sect. *Hexangularis* Uitewaal in *Desert Plant Life* 19(9): 136, 1947. Leaves rigid, entire, dark to blackish green, spine-tipped, ± verrucose; inflorescences robust, strict; flowers with a curved tube and slightly connate tepals, ± hexagonal, bilabiate, decurrent with the pedicel, with a straight style.

*Haworthiopsis attenuata* (Haw.) n. comb.

*Aloe attenuata* Haworth, *Synopsis Plantarum Succulentarum*: 92. 1812.

*Haworthiopsis attenuata* var. *glabrata* (Salm-Dyck) n. comb.

*Aloe glabrata* Salm-Dyck, *Hort. Dyck.*: 325. 1834.

*Haworthiopsis attenuata* var. *radula* (Jacq.) n. comb.

*Aloe radula* Jacq., *Plant. Rar. Horti Caes. Schoenbr.* 4: 11, t.422. 1804.

*Haworthiopsis bruynsii* (M.B. Bayer) n. comb.

*Haworthia bruynsii* M.B. Bayer, *Journal of South African Botany* 47: 789. 1981.

*Haworthiopsis coarctata* (Haw.) n. comb.

*Haworthia coarctata* Haw., *Phil. Mag. & J.* 64: 301. 1824.

*Haworthiopsis coarctata* var. *adelaidensis* (Poelln.) n. comb.

*Haworthia coarctata* var. *adelaidensis* Poelln., *Beitr. z. Sukkulenteenk. u. -Pflege* 1940: 43.

*Haworthiopsis coarctata* var. *tenuis* (G.G. Sm.) n. comb.

*Haworthia reinwardtii* var. *tenuis* G.G. Sm., *J. S. Afr. Bot.* 14: 51. 1948.

*Haworthiopsis fasciata* (Willd.) n. comb.

*Apicra fasciata* Willd., *Bemerk. u. Gattung Aloe, Ges. Naturf. Fr. Berlin Mag.* 5: 271. 1811.

*Haworthiopsis glauca* (Baker) n. comb.

*Haworthia glauca* Baker, *J. Linn. Soc. Bot.* 18: 203. 1880.

*Haworthiopsis glauca* var. *herrei* (Poelln.) n. comb.

*Haworthia herrei* Poelln., *Fedde Repert.* 26: 24. 1929.

*Haworthiopsis granulata* (Marl.) n. comb.

*Haworthia granulata* Marl., *Trans. Roy. Soc. S. Afr.* 2: 39. 1910.

*Haworthiopsis limifolia* (Marl.) n. comb.

*Haworthia limifolia* Marl., *Trans. Roy. Soc. S. Afr.* 1: 409, 1908.

*Haworthiopsis limifolia* var. *arcana* (Gideon F. Sm. & N.R. Crouch) n. comb.

*Haworthia limifolia* var. *arcana* Gideon F. Sm. & N.R. Crouch, *Bradleya* 19: 119. 2001.

*Haworthiopsis limifolia* var. *gigantea* (M.B. Bayer) n. comb.

*Haworthia limifolia* var. *gigantea* M.B. Bayer, *J. S. Afr. Bot.* 28: 215. 1962.

*Haworthiopsis limifolia* var. *glaucophylla* (M.B. Bayer) n. comb.

*Haworthia limifolia* var. *glaucophylla* M.B. Bayer in *Haworthia Update* 2: 1. 2006.

*Haworthiopsis limifolia* var. *ubomboensis* (Verd.) n. comb.

*Haworthia ubomboensis* Verd., *Fl. Pl. S. Afr.* 21: t.818. 1941.

*Haworthiopsis longiana* (Poelln.) n. comb.

*Haworthia longiana* Poelln., *Fedde Repert.* 41: 203. 1937.

*Haworthiopsis nigra* (Haw.) n. comb.

*Apicra nigra* Haw., *Phil. Mag. & J.* 64: 302. 1824.

*Haworthiopsis nigra* var. *diversifolia* (Poelln.) n. comb.

*Haworthia diversifolia* Poelln., *Fedde Repert.* 41: 200. 1937.

*Haworthiopsis nigra* var. *elongata* (Poelln.) n. comb.

*Haworthia schmidtiana* var. *elongata* Poelln., *Fedde Repert.* 44: 240. 1938.

*Haworthiopsis reinwardtii* (Salm-Dyck) n. comb.

*Aloe reinwardtii* Salm-Dyck, *Hort. Dyck.* 37. 1821.

*Haworthiopsis reinwardtii* var. *brevicula* (G.G. Sm.) n. comb.

*Haworthia reinwardtii* var. *brevicula* G.G. Sm., *J. S. Afr. Bot.* 10: 11. 1944

*Haworthiopsis scabra* (Haw.) n. comb.

*Haworthia scabra* Haw., *Suppl. Plant. Succ.* 58. 1819.

*Haworthiopsis scabra* var. *lateganiae* (Poelln.) n. comb.

*Haworthia lateganiae* Poelln., *Desert Plant Life* 9: 103. 1937.

*Haworthiopsis scabra* var. *morrisiae* (Poelln.) n. comb.

*Haworthia morrisiae* Poelln., *Kakteenk.* 1937: 132. 1937.

*Haworthiopsis scabra* var. *starkiana* (Poelln.) n. comb.

*Haworthia starkiana* Poelln., *Fedde Repert.* 33: 73. 1933.

*Haworthiopsis sordida* (Haw.) n. comb.

*Haworthia sordida* Haw., *Revis. Plant. Succ.*: 51. 1821.

*Haworthiopsis sordida* var. *lavrani* (C.L. Scott) n. comb.

*Haworthia sordida* var. *lavrani* C.L. Scott, *Cact. Succ. J. (US)* 53: 70. 1981.

*Haworthiopsis tessellate* (Haw.) n. comb.

*Haworthia tessellata* Haw. in *Phi. Mag. & J.* 64: 300, 1824.

*Haworthiopsis venosa* (Lam.) n. comb.

*Aloe venosa* Lam., *Encycl. Meth. Bot.* 1: 89. 1783.

*Haworthiopsis viscosa* (L.) n. comb.

*Aloe viscosa* L., *Sp. Plant.* 1: 322. 1753.

*Haworthiopsis woolleyi* (Poelln.) n. comb.

*Haworthia woolleyi* Poelln., *Fedde Repert.* 42: 269. 1937.

TULISTA Raf.

*Autikon Botanikon*: 137. 1840. Type: *T. (Haworthia) margaritifera* (L.) Raf. (*Aloe pumila* var. *margaritifera* L., *Sp. Plant.* 1: 322. 1753. (See Manning, J., *Alsterworthia Int.* 13(1): 6. 2013) Lectotype: Commelijn, *Hort. Med. Amst.* 2: 6. 2013.

Stemless or short-stemmed, without visible internodes; leaves spiralled or in 5 twisted series, stiff, ± spine-tipped, mostly entire and verrucose (soft, spotted and with fine bristles and apical awn in *T. aristata*) inflorescence stiffly erect; flowers tubular, straight-tubed with shortly connate

sepals, actinomorphic, ± hexagonal or bilabiate, with included anthers, suberect or pendulous (except *T. aristata* and *T. rubriflora* which have pendulous red flowers).

*Tulista aristata* (Haw.) n. comb.

*Aloe aristata* Haw., *Phil. Mag. & J.* 66: 280. 1825.

*Tulista X bicarinata* (Haw.) n. comb.

Based on *Apicra bicarinata* Haworth in *Plantarum Supplementarum* p.63, 1819. A wild hybrid of *T. corrugata* X *T. pumila*.

*Tulista bullulata* (Jaq.) n. comb.

Based on *Aloe bullulata* Jacquin in *Fragmenta Botanica* p.72 t.109, 1800-1809.

*Tulista congesta* (Salm-Dyck) n. comb.

*Aloe congesta* Salm-Dyck, *Monogr. Aloes et Mesemb.* Sect. VI: t.1. 1854.

*Tulista corrugata* (N.L. Mey. & Gideon F. Sm.) n. comb.

*Astroloba corrugata* N.L. Mey. & Gideon F. Sm., *Bothalia* 28(1): 61. 1998.

*Tulista foliolosa* (Haw.) n. comb.

*Aloe foliolosa* Haw., *Trans. Linn. Soc.* 7: 7. 1804.

*Tulista herrei* (Uitewaal) n. comb.

*Astroloba herrei* Uitewaal, *Desert Plant Life* 20: 37. 1948.

*Tulista kingiana* (Poelln.) n. comb.

*Haworthia kingiana* Poelln., *Cactus J.* 5: 31. 1936.

*Tulista koelmaniorum* (Oberm. & D.S. Hardy) n. comb.

*Haworthia koelmaniorum* Oberm. & D.S. Hardy, *Fl. Pl. Afr.* 38: t.1502. 1967.

*Tulista koelmaniorum* var. *mcmurtryi* (C.L. Scott) n. comb.

*Haworthia mcmurtryi* C.L. Scott, *Cact. Succ. J. (US)* 56: 69. 1984.

*Tulista marginata* (Lam.) n. comb.

*Aloe marginata* Lam., *Encycl. Meth. Bot.* 1: 89. 1783.

*Tulista pumila* (L.) n. comb.

*Aloe pumila* L., *Sp. Plant.* 1: 322. 1783.

*Tulista pungens* (M.B. Bayer) n. comb.

*Haworthia pungens* M.B. Bayer, *Haworthia Revisited:* 188. 1999.

*Tulista rubriflora* (L. Bolus) n. comb.

*Apicra rubriflora* L. Bolus, *Ann. Bolus Herb.* 3: 13. 1920.

*Tulista spiralis* (L.) n. comb.

*Aloe spiralis* L., *Sp. Plant.* 1: 322. 1753.

*Tulista viscosa* (L.) n. comb.

*Aloe viscosa* L., *Sp. Plant.* 1: 322. 1753.

*Tulista* as composed above shows a wider range of features than the other genera, and so is less easy to define briefly. It might even be considered a "dump genus" of left-overs if it were not for the DNA evidence that indicates a common origin for all the species as much as for *Haworthia* and *Haworthiopsis*. Perhaps a closer examination will reveal more characters in common, large or not so large, among the 13 species.

Especial thanks are due to Roy Mottram, whose expertise has forestalled or corrected several errors in this potential nomenclatural minefield.

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# An usual method for propagating *Drimia haworthioides* in the East Indian climate.

Soumen Aditya

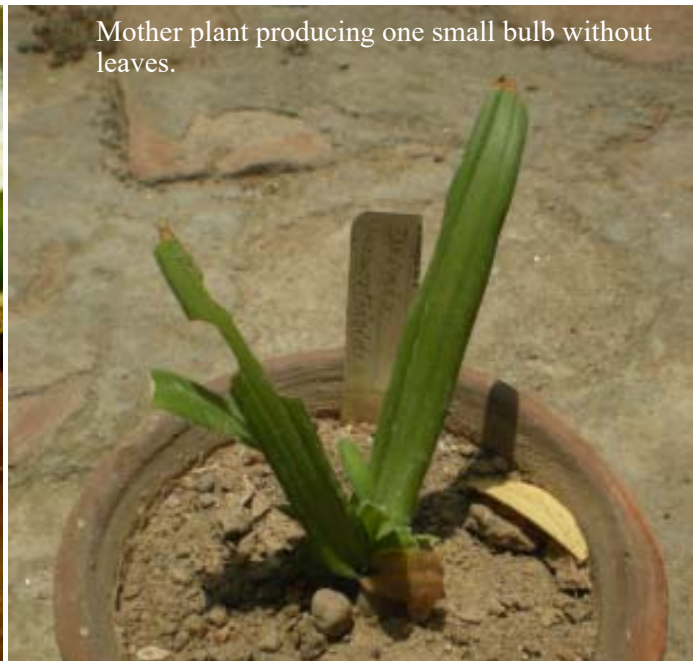
Bulbous plants can be propagated by seed, by natural vegetative production of offsets and also by “artificial” propagation methods. One time I collected a plant of *Drimia haworthioides* from Mr. D. Choudhuri’s collection. He given me the plant because I showed interest in it, actually I love all Liliaceae and Asphodelaceae genera. The plants do not like our hot humid climate, but I try to overcome the problem with my little experience. Throughout the year I put the plant in an area with a very good air flow, the lower shelf of my haworthias, which like a very shady place.

For a long time my *Drimia* did not produce pups in my cultivation conditions. This year I started to propagate my haworthias, particularly a few delicate ones, at my Kolkata friends’ request, because they are now very much loved plants. My friend Dr. Debashis Mukhopadhyay, scientist at F, Saha Institute of Nuclear Physics at Kolkata, an enthusiastic and good grower of many divers plant species from around the world, also told me he wanted to grow *Drimia*, but I had only one plant which I like very much. I therefore decided to try leaf propagation early in the month of February though I had no knowledge of propagation from drimia leaves. I therefore applied the *Haworthia* leaf propagation method to the *Drimia*. I loosened the potting soil round the *Drimia* and pulled out a few old rosette leaf node which had survived a very long time without any water. That same day I put them in sandy leaf mould based soil [I had sterilized the soil with hot water a few days

before]. I keep them along with my haworthia leaf propagations. I kept them dry for about six weeks and then started misting daily with 8:1:1 [Water + Fungicide + Butyric acid], but found that they were not dry in our climate, so I reduce watering at the end of March and now water just once a week. I was delighted this April to see that, about 8 weeks after potting up, each node produce one baby in the leaf margin. I wondered why the old leaf nodes did not produce any root systems; the new babies produce healthy tap roots. I potted more leaf nodes in a similar potting mix to that used for mature plants and sprayed once a week in very hot weather [38-41°C with 93% humidity]. I enjoy now every week a few new babies from my old lady.

Thank for Dr. Mukhopadhyay for his demand. Also thanks goes to “Alsterworthia International” Editor Mr. Harry Mays, for his encouragement.

**Note:** A newly formed bulb on my *Drimia haworthioides* was not dormant during the dormant period and produced leaves the following season. However, the new bulbs from the leaf nodes starting sprouting immediately, but this time the mother plants was still dormant, not producing any leaves. No clear cause can be given for this phenomenon ?





## User's Guide to the International Code of Nomenclature... (Melbourne Code).

Some of you may already have a copy of the International Code of Nomenclature for Algae, Fungi and Plants (ICN).

If you do not, and would like a copy, please see page 31 of the March 2013 *Alsterworthia International*.

Koeltz Scientific Books has now published a users' guide for this code. The details are:  
Turland, N. J.: *The Code Decoded*. 2012. (Regnum Vegetabile, Volume 155). 18 illus. approx. 170 p.  
Hardcover.

EUR 43.00 (ISBN 978-3-87429-433-1) (Koeltz Book - ID: 102836)

This book is the user's guide to the International Code of Nomenclature for algae, fungi, and plants, specifically the Melbourne Code. The objective has been to create a text that is reasonably clear and simple using plain language as far as possible, to serve newer users of the Code as well as veterans who are not familiar with every arcane detail. The chapters are arranged for quick reference, e.g. important dates for certain rules, how to publish a new name, how to find the correct name for a taxon, how to designate a type, or even how to try to change the Code itself. Subheadings, boxes, bulleted lists, tables, key words in boldface, a subject index, and an index to scientific names help user to find information

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## Haworthia Study - Updated Information.

Details of prices for *Haworthia Study*, the Japanese Society journal, were given on page 13 of the November 2013 *Alsterworthia International* journal. That information is still valid but is supplemented by the following. The second *Haworthia Study* for 2012, number 28, is being replaced with a Special Issue on Japanese cultivars, which is much larger than a journal, so it will be charged for separately - details to be announced. The annual subscription paid for 2012 will now cover the two *Haworthia Study* numbered 27 & 29. Subscribers will already have received 27. 29 will be published in July 2013 or later. The next "annual" subscription will be for number 30, which will be the last for 2013 and number 31, which will be the first for 2014. Thus, the annual subscription, which was for two issues of *Haworthia Study* in one calendar year, is now for two issues, one of which will be published in the second half of one year and the other in the first half of the next year.

The cost of a back issues in Yen, not including postage, is equal to the cost of each current issue expressed in pounds (£10.00 excluding postage). Postage will be added in Yen for the country of destination. Members and non-members who require back issues of *Haworthia Study* will receive them *direct from Japan*. Back issues will normally be ordered in pairs, but single copies may also be ordered. *Back issue orders should be sent direct to Harry Mays, [hmays@freenetname.co.uk](mailto:hmays@freenetname.co.uk)*, who will advise the total cost in Yen to cover the cost of the journals plus Japanese postage direct to the purchaser. The purchaser should send the total amount in Yen direct to Dr Hayashi [m-hayashi@nausica.jp](mailto:m-hayashi@nausica.jp) by PayPal or by bank draft drawn on a Japanese bank. The back issues will be sent direct to the purchaser as soon as payment is received in Japan.

Please note that the current year for back issues is the year in which the journals were scheduled to be published. For example, following on from the foregoing, the current year for issues with numbers 27 & 29 is 2012 up to and including July 2013, compared with numbers 30 and 31 for which the current year is August, 2013 - July 2014. For years prior to 2012 the current year is the calendar year. You can avoid purchasing back issues if you remember to renew on time!!