

The International Cultivar Registration Authority Register and Checklist for the genus *Lithops* N.E.Br. by Keith Green

The list that follows is the official checklist and register of *Lithops* cultivars, in alphabetical order according to cultivar epithet. It was first compiled as a checklist during the (UK) autumn of 2013. At a botanic level it follows the Cole classification system.

NB. The term “Nomenclatural standard” is used only where a photograph has so been designated; the term “Image example” being used elsewhere. No offence is inferred by the omission or use of personal titles (such as Mr., Mrs., Dr., etc.) which are recorded as researched by, or presented to the registrar. Names attributed to *Lithops* as personal or casual notations may not appear.

Entries in red, preceded by an asterisk * are unacceptable cultivar epithets.

'Albiflora'

Lithops lesliei subsp. *lesliei* var. *lesliei* 'Albiflora'. This was published as a cultivar by Professor Desmond Cole in “Some *Lithops* Cultivars, *Aloe* 22(3): 58-62. 1985”, and later appeared in “*Lithops - Flowering Stones*: 163. 1988”. Image example: Photograph bottom right on page 219 in *Lithops - Flowering Stones* 2005. A white flowering aberration with normal body colours. NB. This Latin form epithet is retained as it is based on *L. lesliei* f. *albiflora* (B. Fearn; 1966) which has subsequently become widely known and accepted as a cultivar.

*'Albiflora'

**L. pseudotruncatella* subsp. *pseudotruncatella* var. *pseudotruncatella* 'Albiflora'. Appeared on page 62 in “Some *Lithops* Cultivars, *Aloe* 22(3): 58-62. 1985”, and on page 182 in *Lithops - Flowering Stones* 1988 by Professor Desmond Cole, although no specimen was believed to exist at either time. In *Lithops - Flowering Stones* 1988 it was explained that cultivar rank had been given to all such aberrant colour forms in that publication, and that in the interest of continuity var. *pseudotruncatella* *'Albiflora' was included. It was only ever known from one specimen and is already in use for *L. lesliei* subsp. *lesliei* var. *lesliei* 'Albiflora' above. An unaccepted epithet in this context.

*'Albiflorus'

**L. bromfieldii* var. *bromfieldii* 'Albiflorus'. Appeared on the Frik du Plooy 1997 seed list numbered F013, but with no description. An unaccepted epithet.

*'Albiflos'

**L. helmetii* 'Albiflos'. This unacceptable Latin based epithet appeared on the Frik du Plooy 1997 seed list with no description, numbered F060. Frik (personal comment) once indicated that this was probably a hybrid of uncertain origin anyway. An unaccepted epithet.

'Albinica'

Lithops lesliei subsp. *lesliei* var. *lesliei* 'Albinica'. This was published as a cultivar by Professor Desmond Cole in “Some *Lithops* Cultivars, *Aloe* 22(3): 58-62. 1985”, and later appeared in “*Lithops - Flowering Stones*: 163. 1988”, originating from A V Dabner and Peter H Wilkins. Image example: Photograph bottom left on page 163 of *Lithops - Flowering Stones* 1988. A stabilised green bodied and white flowering aberration. Vince Formosa of Leeds (personal comment) once indicated that var. *lesliei* *'Vivid Green', a plant that appeared on the now defunct seed list of “Parkways *Lithops*” without a written description, was identical to 'Albinica' that arose from the Cole collection number C36, but came from Cole collection number C5. NB. This Latin form epithet is retained as it is based on *L. lesliei* f. *albinica* (D.T. Cole; 1968) which has subsequently become widely known and accepted as a cultivar.

*'Alpina'

**L. pseudotruncatella* 'Alpina'. This Latin based epithet was unintentionally published in cultivar format (personal comment) by Terry Smale in the "Seed Distribution List" of the *Mesemb Study Group Bulletin* vol. 24(1) pp.3-4 (2009), numbered 2394. Further, and as recorded on page 330 of *Lithops - Flowering Stones* by DT & NA Cole (2005), '*Alpina' is not distinct from *L. pseudotruncatella* subsp. *pseudotruncatella* var. *pseudotruncatella*.

*'Anemone'

**L. salicola* 'Anemone'. Photographs from Valentino Vallicelli and a description stating "mutant green flowers remembering a sea anemone", appeared on the website www.lifile.com concerning 2 ex-C321 seedlings at "Cactus-art Nursery". The photographs however appear only to show the remains of yellow stamens, green flowers are unheard of in *Lithops* and there has been no formal publication. An unaccepted epithet.

'Angel's of Tony'

Lithops olivacea var. *olivacea* 'Angel's of Tony'. First published by Tony Sato in the "*Cactus & Succulent Journal of Japan* 16(4): 8-11, (Dec) 2001". Image example: Photograph of flowering cluster accompanying the protologue, taken by Tony Sato of Fukushima City, Japan. A cultivar with flower petals that do not properly unfurl. In colour however, they are the normal yellow with white centres.

'Annarosa'

Lithops hookeri var. *dabneri* 'Annarosa'. First published by Giuseppe Maria Piccione in "Cultivars in lithops, *Cactus & Co.* 10(2): 115-116. 2006". Nomenclatural standard: Photograph in '*Lithops Scrapbook: part 2*', *Cactus World*, 26 (1), pp. 21-27 p.25, figure 9, 2008, taken by Giuseppe Maria Piccione of Verona, Italy. A stabilised green bodied aberration.

'Aquamarine'

Lithops otzeniana 'Aquamarine'. On the basis of a single specimen this epithet was published by Professor Desmond Cole in "Some Lithops Cultivars, *Aloe* 22(3): 58-62. 1985", and later appeared in "*Lithops - Flowering Stones*: 180: 1988". Following successful propagation this was accepted and discussed as a cultivar by Steven Hammer in "*Lithops - Treasures of the Veld*: 96. 1999". The originators of this cultivar were Professor Desmond Cole and Naureen Cole. Image example: Photograph bottom right on page 180 of *Lithops - Flowering Stones* 1988. A stabilised bluish grey-green bodied aberration.

'Aubarede'

Lithops hookeri var. *lutea* 'Aurea'. First published by Norbert Rebmann in "Un nouveau Lithops, *Cactus & Succulentes* 6(1): 18-19. (July) 2014", originating from Philippe Richaud. Image example: Photograph accompanying the protologue taken by Philippe Richaud of France. Aubarede is a quarter of the town Le Cannet near Cannes in southern France where the plants were developed. A stabilised white flowering aberration.

'Aurea'

Lithops fulviceps var. *fulviceps* 'Aurea'. This was published as a cultivar by Professor Desmond Cole in "Some Lithops Cultivars, *Aloe* 22(3): 58-62. 1985", and later appeared in "*Lithops - Flowering Stones*: 122. 1988", originating from Yasuhiko Shimada of Japan. Image example: Photograph top left on page 123 of *Lithops - Flowering Stones* 1988. A stabilised white flowering, green bodied aberration. Nb. This Latin form epithet is retained as it is based on *L. fulviceps* f. *aurea* (Y. Shimada; 1977) which has subsequently become widely known and accepted as a cultivar.

'Avocado Cream'

Lithops karasmontana subsp. *eberlanzii* 'Avocado Cream'. Published by Professor Desmond Cole in "Some Lithops Cultivars, *Aloe* 22(3): 58-62. 1985", and later appeared in "*Lithops - Flowering Stones*: 160. 1988". Image example: Photograph accompanying the protologue on page 160. A stabilised green bodied aberration.

'Axel's Rose'

Lithops karasmontana 'Axel's Rose'. First published by Bernd Schlösser in "The Rose of Axel Neumann, *Mesemb Study Group Bulletin* 29(1): 11. (January) 2014", originating from Axel Neumann of Irxleben, Germany. Image example: Photograph accompanying the protologue page 10, Fig 29.7, taken by Axel Neumann. A red-purple cultivar that is subsp. *karasmontana* in shape, but of uncertain subspecies origin.

*'Bacchus'

**L. salicola* 'Bacchus'. An excellent epithet coined by Steven Hammer on page 132 of *Lithops - Treasures of the Veld* 1999 in honour of "the Greek god of wine". Unfortunately Steven was unaware at that time the originator, Tony Sato of Japan, had expressed a wish to use the epithet 'Sato's Violet'. Synonym of 'Sato's Violet'.

*'Beauty Blue'

**L. verruculosa* 'Beauty Blue'. An epithet occasionally seen in cultivation alongside the name of the famous Jossie Brandt. However, it is unclear how this differs from var. *verruculosa* and there has been no published description. An unaccepted epithet.

'Bellaketty'

Lithops aucampiae subsp. *euniceae* var. *euniceae* 'Bellaketty'. First published by Giuseppe Maria Piccione in "A new *Lithops* cultivar, *Cactus and Succulent Journal* (US): 75(4): 152-153. 2003". Image example: Photograph in 'Lithops Scrapbook part 2', *Cactus World*, 26 (1): pp. 21-27 page 22, figure 4, 2008, taken by Giuseppe Maria Piccione of Verona, Italy. A stabilised green bodied aberration.

'Bethanien Green'

Lithops schwantesii subsp. *schwantesii* var. *urikosensis* 'Bethanien Green'. First published by Roy Earle, Hilde Mouton & Janice Round in "A New Cultivar of *Lithops schwantesii* subsp. *schwantesii* var. *urikosensis*, *Mesemb Study Group Bulletin* 33(4): 87. (November) 2018". Image example: Photograph in *Lithops Scrapbook II* available at (www.Scrapbooklithops.com), taken by the authors. The origin of the seed was close to the town of Bethanien, Namibia. A stabilised green bodied aberration.

'Betty's Beryl'

Lithops aucampiae subsp. *aucampiae* var. *aucampiae* 'Betty's Beryl'. This was published as a cultivar by Professor Desmond Cole in "*Lithops - Flowering Stones*: 101. 1988", from plants originating in Johnson's Cactus Gardens, California, USA. Image example: Photograph bottom right on page 100 of *Lithops - Flowering Stones* 1988. A stabilised white flowering, green bodied aberration.

*'Blacktop'

**L. lesliei* subsp. *lesliei* var. *venteri* 'Blacktop'. The 'Blacktop' epithet was first mentioned by Terry Smale (without a description) in the *Mesemb Study Group Bulletin* vol. 26, p. 7 (2011) as part of the 2011 seed distribution, numbered 2598. It was again mentioned as number 239 (*'Black Top') on the 2019/20 seed distribution list of the British Cactus And Succulent Society, but again without a description. Currently an unaccepted epithet.

*'Bloody Red'

**L. karasmontana* 'Bloody Red'. One of a myriad of unsubstantiated and unpublished titles occasionally seen on the Internet. An unaccepted epithet.

*'Blue Grey'

**L. schwantesii* subsp. *schwantesii* var. *urikosensis* 'Blue Grey'. Appeared (as not available) on the Frik du Plooy 2015 seed list with no description, numbered F184. Currently an unacceptable epithet.

'Blue Moon'

Lithops schwantesii subsp. *schwantesii* var. *rugosa* 'Blue Moon'. First published by Steven Hammer in "New Cultivars in *Lithops*, *Piante Grasse Speciale* 1995. *Supplemento al n. 4 di Piante Grasse* 15(4): 49. 1995", originating from Norm Dennis of the USA. Nomenclatural standard: Photograph accompanying the protologue page 107, figure 217, taken by Chris Barnhill of the USA. A powdery-bluish bodied cultivar.

*'Blushing Betty'

**L. pseudotruncatella* subsp. *pseudotruncatella* var. *elisabethiae* 'Blushing Betty'. This epithet was mentioned as part of a tribute to the late Tok Schoeman by Steven Hammer in the *Mesemb Study Group Bulletin* vol. 32, p. 63 (2017). *'Blushing Betty' was a suggestion made by Tok for the "super-pink-skinned" var. *elisabethiae* grown by Steven, that may or may not be established in due course. Currently an unaccepted epithet.

*'Brakfontein'

**L. otzeniana* 'Brakfontein'. A photo of a normal looking *L. otzeniana* with the title "SH351 'Brakfontein'" was shown on (www.geocities.jp/axxrd/essey09/otzeniana.htm). This appears to be an erroneous format, as "Brakfontein" is a place where the species are known to grow. There has been no official publication. An unaccepted epithet.

'Brandcafé'

Lithops gracilidelineata 'Brandcafé'. First published by Terry Smale in "Seed Distribution 2017, *Mesemb Study Group Bulletin* 32(1): 11. (January) 2017", originating from Steven Hammer. Image example: Photograph on page 22 accompanying the protologue, Fig 32.36, taken by Andy Young of the UK. A stabilised hybrid between *L. gracilidelineata* subsp./var. *gracilidelineata* 'Café au Lait' and *L. gracilidelineata* subsp. *brandbergensis*, with an orange colour and intermittent features.

*'Buttermilk Valley'

**L. vallis-mariae* 'Buttermilk Valley'. The 'Buttermilk Valley' epithet was mentioned as a "provisional coinage" with double speech marks by Steven Hammer in the *Mesemb Study Group Bulletin* vol. 9, p. 51 (1994) for white flowered variants. However, Steven used the epithet 'Valley Girl' when he published.

*'Buys Weise Nursery'

**L. aucampiae* 'Buys Weise Nursery'. A title occasionally mentioned on-line or depicted as an open-windowed mauve tinted *L. aucampiae*. However, there has been no formal description. An unaccepted epithet.

'Café au Lait'

Lithops gracilidelineata subsp. *gracilidelineata* var. *gracilidelineata* 'Café au Lait'. First published by Steven Hammer in "New Cultivars in *Lithops*, *Piante Grasse Speciale* 1995: 47-48, 1996", originating from C309. Nomenclatural standard: Photograph top right on page 129 of *Lithops - Flowering Stones* 1988. A patterned fuscous cultivar described by Steven Hammer as having "whipped cream islands floating on a cappuccino sea". NB. 'Café au Lait' was discovered as a wild specimen by the Coles but not named by them.

'Cesky Granat'

Lithops otzeniana 'Cesky Granat'. First published by Petr Pavelka in "*Lithops otzeniana* Nel a jeho kultivary do ech, *Kaktusy* 37(1): 27-29. 2001", originating from Mr. Hejtmanek. Nomenclatural standard: Photograph accompanying the protologue, taken by Petr Pavelka of the Czech Republic. The name is Czech for "Czech garnet". A stabilised red bodied aberration.

*'Chartreuse'

**L. marmorata* var. *marmorata* 'Chartreuse'. An epithet used for this green bodied cultivar by Steven Hammer in *Piante Grasse Speciale* 1995. However, at that time Steven was unaware that the originator, Petr Pavelka of the Czech Republic, had already chosen the epithet of 'Polepsky Smaragd'. Synonym of 'Polepsky Smaragd'.

'Cherry'

Lithops lesliei subsp. *lesliei* var. *lesliei* 'Cherry'. First published by Duan Junli in "Cherry From China, *Mesemb Study Group Bulletin* 34(2): 45. (June) 2019". Image example: Three photographs accompanying the protologue, figures 34.63-34.65 on page 34 taken by Duan Junli of China. An open windowed, purple cultivar.

'Chieruby'

Lithops aucampiae subsp. *euniceae* var. *fluminalis* 'Chieruby'. This was published as a cultivar by Professor Desmond Cole and Naureen Cole in "*Lithops - Flowering Stones: 93. 2005*", originating from Yasuhiko Shimada of Japan. Nomenclatural standard: Photograph bottom right on page 93 of *Lithops - Flowering Stones 2005*, taken by Yasuhiko Shimada of Japan. It was named after Mr. Shimada's wife whose name is Chie(ruby). An orange-red bodied cultivar.

*'Chocolate Puddles'

**L. aucampiae* 'Chocolate Puddles'. Mentioned by Steven Hammer in the *Mesemb Study Group Bulletin* vol. 31(2) p. 33 (2016), where the name is said to evoke "Sir Walter Raleigh's gallantry and those dipped-and-murdered mouldy strawberries so beloved at casinos". No photograph was shown, and there has been no official description or publication. An unaccepted epithet.

'Chocolate Sprinkles'

Lithops terricolor 'Chocolate Sprinkles'. First published by Bernd Schlösser in "*Lithops terricolor* 'Chocolate Sprinkles'", *Mesemb Study Group Bulletin* 31(1): 15. (January) 2016". Image example: Photograph of plants accompanying the protologue, figure 31.16 on page 17, taken by Bernd Schlösser of, Germany. A brown bodied cultivar.

*'Choc Top'

**L. hookeri* var. *dabneri* 'Choc Top'. Appeared on the Frik du Plooy 1997 seed list with no description, numbered F070. Currently an unaccepted epithet.

*'Christinae'

**L. schwantesii* 'Christinae'. In 2011 this epithet was presented in cultivar format by the *International Succulent Institute of Japan* (ISIJ) on page 221 of *Succulents* (Volume 2) compiled by Hiroshi Kobayashi and Mitsuo Ekuma. However, as recorded on page 332 of *Lithops - Flowering Stones* by DT & NA Cole (2005), '*Christinae' is not distinct from *L. schwantesii* subsp. *schwantesii* var. *urikosensis*.

*'Chrysoberyl'

**L. verruculosa* var. *verruculosa* 'Chrysoberyl'. A name occasionally used on the Internet in reference to green bodied forms of var. *verruculosa* that arose from ex-C229B stock in Japan. Other than origin, this appears to be identical to the already established ex-C159 cultivar 'Verdigris'. A different source alone is not sufficient to establish a new epithet, and in any case there appears to have been no valid publication. Synonym of 'Verdigris'.

*'Chrysocephala'

**L. julii* 'Chrysocephala'. This Latin based epithet was unintentionally published in cultivar format (personal comment) by Terry Smale in the "Seed Distribution List" of the *Mesemb Study Group Bulletin* vol. 24(1) pp.3-4 (2009), numbered 2386. Further, and as recorded on page 332 of *Lithops - Flowering Stones* by DT & NA Cole (2005), '*Chrysocephala' is not distinct from *L. julii* subsp. *julii*.

*'Copper Beguine'

**L. hallii* 'Copper Beguine'. A title occasionally seen on-line. However, the distinguishing features are unclear and there has been no published description. An unaccepted epithet.

*'Corona'

**L. aucampiae* subsp. *aucampiae* var. *aucampiae* 'Corona'. Appeared in "Katakana script" under a photograph at the bottom of page 81 of *The Genus Lithops* by Yasuhiko Shimada (2001), with no apparent description. Currently an unaccepted epithet.

'Daikangyoku'

Lithops salicola 'Daikangyoku'. First published by the *International Succulent Institute of Japan* under the presidency of Hiroshi Kobayashi in "*Succulents* (Volume 1): 221. 2004". Image example: Photograph accompanying the protologue bottom right, taken by Yasuhiko Shimada of Japan. A cultivar with a fine netting pattern on its face.

*'Dark Wine Red'

**L. aucampiae* 'Dark Wine Red'. One of a myriad of unsubstantiated and unpublished titles occasionally seen on the Internet. An unaccepted epithet.

*'Darley Orange'

**L.* 'Darley Orange'. This epithet together with a photograph, appeared on the website of Abbey Brook Cactus Nursery (<http://www.abbeybrookcacti.com>) without a written description. No description appears to have been published elsewhere either. Currently an unacceptable epithet.

'Dintergreen'

Lithops dinteri subsp. *dinteri* var. *dinteri* 'Dintergreen'. This was published as a cultivar by Professor Desmond Cole in "Some *Lithops* Cultivars, *Aloe* 22(3): 58-62. 1985", and later appeared in "*Lithops Flowering Stones*: 113. 1988", originating from Ed Storms of Azle, Texas, USA. Image example: Photograph top right on page 113 of *Lithops - Flowering Stones* 1988. A stabilised green bodied aberration.

*'Diutina'

**L. marmorata* 'Diutina'. In 2011 this epithet was presented in cultivar format by the *International Succulent Institute of Japan* (ISIJ) on page 219 of *Succulents* (Volume 2) compiled by Hiroshi Kobayashi and Mitsuo Ekuma. However, as recorded on page 333 of *Lithops - Flowering Stones* by DT & NA Cole (2005), '*Diutina' is not distinct from *L. marmorata* var. *marmorata*.

*'Dragon'

**L. karasmontana* subsp. *bella* 'Dragon'. This epithet (given as a "protocultivar") together with a photograph, appeared on the website of Francois Hoes of Belgium (<http://users.skynet.be/fhoes/rsasucculents/>) in the section entitled "Lithops species pictures list 2007", without a written description. '*Dragon' is not distinct from *L. karasmontana* subsp. *bella*.

'Embers'

Lithops bromfieldii var. *glaudinae* 'Embers'. First published by Keith Green in "Two new *Lithops* cultivars, *Mesemb Study Group Bulletin* 21(2): 42, 2006", originating from Steven Hammer of the USA. Image example: Photograph accompanying the protologue figure 21.19, taken by Keith Green of New Malden, England. The epithet '*Rubroroseus' was offered by Erik du Plooy on his 1997 seed list without a description, but he subsequently indicated (personal comment) it pertained to the same plants. Latinised names not previously published in accordance with the *International Code for algae, fungi and plants* (ICN) are not to be used for new cultivars. A deep red bodied cultivar.

'Envy'

Lithops hookeri var. *hookeri* 'Envy'. This was published by Steven Hammer in "*Lithops - Treasures of the Veld*: 73. 1999", although it stated there "yet to make its general debut", suggesting the plants were scarce. NB. I erroneously considered this to have been established by Steven Hammer in *Piante Grasse Speciale* 1995 and reported such in my original *Lithops* Scrapbook notes which are available at (www.scrapbooklithops.com). Nomenclatural standard: Photograph accompanying the protologue on page 71, Figure 111, taken by Chris Barnhill of the USA. A stabilised green bodied aberration.

*'Erniana'

**L. karasmontana* subsp. *eberlanzii* 'Erniana'. In 2011 this epithet was presented in cultivar format by the *International Succulent Institute of Japan* (ISIJ) on page 218 of *Succulents* (Volume 2) compiled by Hiroshi Kobayashi and Mitsuo Ekuma. However, as recorded on page 334 of *Lithops - Flowering Stones* by DT & NA Cole (2005), '*Erniana' is not distinct from *L. karasmontana* subsp. *eberlanzii*.

'Ernst's Witkop'

Lithops gracilidelineata subsp. *gracilidelineata* var. *gracilidelineata* 'Ernst's Witkop'. This was published as a cultivar by Professor Desmond Cole in "Some *Lithops* Cultivars, *Aloe* 22(3): 58-62. 1985", and later appeared in "*Lithops - Flowering Stones*: 129-130. 1988", originating from Ernst Fritz. Image example: Photograph bottom right on page 147 of *Lithops - Flowering Stones* 2005. A stabilised white flowering aberration, with normal body colours and flowers that are larger than 'Fritz's White Lady'.

*'Farinosa'

**L. pseudotruncatella* subsp. *dendritica* 'Farinosa'. In 2011 this epithet was presented in cultivar format by the *International Succulent Institute of Japan* (ISIJ) on page 220 of *Succulents* (Volume 2) compiled by Hiroshi Kobayashi and Mitsuo Ekuma. However, as recorded on page 334 of *Lithops - Flowering Stones* by DT & NA Cole (2005), *'Farinosa' is not distinct from *L. pseudotruncatella* subsp. *dendritica*.

*'Fenestrata'

**L. karasmontana* subsp. *bella* 'Fenestrata'. This Latin based epithet never previously used in relation to this species or subspecies, was numbered by Frik du Plooy as "F102.1A (Shimada)" and in the 2013 on-line catalogue of Conos Paradise "L14-91". In both instances however, there was no description. An unaccepted epithet.

*'Fenestrata'

**L. otzeniana* 'Fenestrata'. This appeared in the book *Succulents* (Volume 1), on page 221, 2004, published by the *International Succulent Institute of Japan* (ISIJ) under the presidency of Hiroshi Kobayashi, with a photograph and description in Japanese. However, this Latin based epithet had never previously been used in relation to this species. An unaccepted epithet.

*'Firebrandt'

* *L. aucampiae* subsp. *aucampiae* var. *aucampiae* 'Firebrandt'. Erroneously named by Keith Green in "Two new *Lithops* cultivars, *Mesemb Study Group Bulletin* 21(2): 42, 2006", before he realised the originator of this cultivar, Jossie Brandt of South Africa, had expressed a wish for it to be called 'Rudesheim Ruby'. A corrective article appeared in the *Mesemb Study Group Bulletin* vol. 25, p. 105 (2010). Synonym of 'Rudesheim Ruby'.

'Fireworks -ZW-'

Lithops verruculosa var. *verruculosa* 'Fireworks -ZW-'. First published by Zhang Shijia and Wei Zichu in "A New Pattern Cultivar: *Lithops* N.E.Br. *verruculosa* Nel var. *verruculosa* 'Fireworks -ZW-', *Mesemb Study Group Bulletin* 33(1): 23. (February) 2018". Image Example: Two photographs accompanying the protologue, figures 33.22 & 33.23 on page 24, taken by Zhang Shijia and Wei Zichu of China. A stabilised form with verruculae joining together to form strong red lines.

*'Flavivirens'

**L. aucampiae* subsp. *euniceae* var. *fluminalis* 'Flavivirens'. Appeared on the Frik du Plooy October 2011 seed list with no description. An unaccepted epithet.

'Freckled Friend'

Lithops amicum 'Freckled Friend'. First published by Tok Schoeman in "*Lithops*: A New Pattern Bred Cultivar, *Mesemb Study Group Bulletin* 24(3): 47. (July) 2009". Image example: Photograph of plants accompanying the protologue taken by Tok Schoeman of Windhoek, Namibia. A reticulated patterned cultivar.

'Fred's Redhead'

Lithops lesliei subsp. *lesliei* var. *lesliei* 'Fred's Redhead'. First published by Steven Hammer in "New Cultivars in *Lithops*, *Piante Grasse Speciale* 1995. *Supplemento al n. 4 di Piante Grasse* 15(4): 48, 69. 1996". Nomenclatural standard: Photograph figure 151 on page 83 of *Lithops - Treasures of the Veld* 1999, taken by Chris Barnhill of the USA. A bright red bodied cultivar.

*'Fred's Redhorn'

**L. lesliei* 'Fred's Redhorn'. Plants with this title have been offered on the internet as a Steven Hammer cross of 'Fred's Redhead' with *L. lesliei* subsp. *lesliei* var. *hornii*. There has however been no official publication. An unaccepted epithet.

'Fritz's White Lady'

Lithops gracilidelineata subsp. *gracilidelineata* var. *waldroniae* 'Fritz's White Lady'. This was published as a cultivar by Professor Desmond Cole in "Some *Lithops* Cultivars, *Aloe* 22(3): 58-62. 1985", and later appeared in "*Lithops - Flowering Stones*: 130. 1998", originating from Ernst Fritz. Image example: Photograph top left on page 131 of *Lithops - Flowering Stones* 1988. A stabilised white flowering aberration, with normal body colours and flowers that are smaller than 'Ernst's Witkop'.

'Fullergreen'

Lithops julii subsp. *fulleri* var. *fulleri* 'Fullergreen'. This was published as a cultivar by Professor Desmond Cole in "*Lithops - Flowering Stones: 150. 1988*". Image example: Photograph mid left on page 150 of *Lithops - Flowering Stones 1988*. A stabilised grey-green bodied aberration.

'Gariiep Juweel'

Lithops aucampiae subsp. *euniceae* var. *fluminalis* 'Gariiep Juweel'. This was published as a correction from *'Jewel of the Gariiep' by Keith Green in the *Mesemb Study Group Bulletin* 32(4): 78. (October) 2017". Earlier In 2017 it was thought that the originator, Mr. Louw Pretorius, had expressed a wish for the title of *'Jewel of the Gariiep' to be used, but after a correction from *'Green River' had been published, it was discovered that he had actually wanted to use the Afrikaans version of the name. The "Gariiep" is the name used by indigenous people for the Orange River. Nomenclatural standard: Photograph on page 188, figure 6 accompanying the protologue of *'Green River', taken by Norihiko Shimada of Japan. A stabilised green bodied aberration.

*'Golden Beryl'

**L. aucampiae* subsp. *aucampiae* var. *aucampiae* 'Golden Beryl'. An epithet suggested by Steven Hammer in the *Mesemb Study Group Bulletin* vol. 7, p. 65 (1992) for the then developing strain of yellow flowering, green bodied cultivars that become 'Jackson's Jade'. Synonym of 'Jackson's Jade'.

'Grain Rain ZW'

Lithops 'Grain Rain ZW'. First published by Zhang Shijia and Wei Zichu in "A New Pattern and Aberrant Colour Cultivar: *Lithops* 'Grain Rain ZW', *Mesemb Study Group Bulletin* 34(3): 66. (August) 2019". Image Example: Three photographs accompanying the protologue, figures 34.90 – 34.92 on page 67 taken by the authors. A yellow-green hybrid involving *L. bromfieldii* var. *mennellii* that has dark surface channels. The epithet is the title of the sixth of 24 solar terms, the last of spring.

*'Green'

**L. dinteri* subsp. *multipunctata* 'Green'. Appeared (as not available) on the Frik du Plooy 2015 seed list with no description, numbered F030 (cultivated Shimada). Currently an unacceptable epithet.

*'Green'

**L. terricolor* 'Green'. Appeared on the Frik du Plooy 2015 seed list with no description, numbered F192 "Springbokvlakte", which is the same origin as 'Green Sandpoort'. An unacceptable epithet.

*'Green Attempts'

**L. otzeniana* 'Green Attempts'. Seed offered by MESA Garden as "green attempts" numbered 1686.12 has become known by some as *'Green Attempts', which has never been described. In any case the name suggests "an attempt" rather than a stabilisation. An unaccepted epithet.

'Green Diamond'

Lithops hermetica 'Green Diamond'. First published by Professor Desmond Cole and Naureen Cole in "*Lithops - Flowering Stones: 165. 2005*". Nomenclatural standard: Photograph top page 165 accompanying the protologue. A stabilised green bodied aberration.

*'Green Hooker'

**L. hookeri* 'Green Hooker'. The 'Green Hooker' epithet was mentioned as a "provisional coinage" without speech marks by Steven Hammer in the *Mesemb Study Group Bulletin* vol. 9, p. 52 (1994), possibly for a single specimen and with no description. An unaccepted epithet.

'Green Ivory'

Lithops pseudotruncatella subsp. *pseudotruncatella* var. *riehmerae* 'Green Ivory'. First published by Bernd Schlösser in "'Green Ivory' A New *Lithops* Cultivar, *Mesemb Study Group Bulletin* 29(4): 82. (October) 2014". Image example: Photograph (Fig 29.108) accompanying the protologue taken by Bernd Schlösser of Dragon, Germany. A green bodied cultivar with a blue or turquoise tint.

*'Green River'

**L. aucampiae* subsp. *euniceae* var. *fluminalis* 'Green River'. Erroneously named by Keith Green in "Lithops Scrapbook part 1: *Cactus World*, 25 (4), pp. 185-197 (2007)", the epithet originating from Steven Hammer of the USA. In 2017 it became apparent that this epithet was used against the wishes of the originator, Mr. Louw Pretorius of South Africa. The correction was published in the *Mesemb Study Group Bulletin* vol. 32, p. 47 (2017), Synonym of 'Jewel of the Gariep'.

'Green Sandpoort'

Lithops terricolor 'Green Sandpoort'. First published by Bernd Schlösser in "Green Speckles and Green Horns, *Mesemb Study Group Bulletin* 28(4): 87. (October) 2013". Image example: Photograph of plants accompanying the protologue on p.88, taken by Bernd Schlösser of Germany. A finely speckled green cultivar.

'Green Soapstone'

Lithops hallii var. *ochracea* 'Green Soapstone'. This was published as a cultivar by Professor Desmond Cole in "Some Lithops Cultivars, *Aloe* 22(3): 58-62. 1985", and later appeared in "*Lithops - Flowering Stones*: 134-135. 1988", originating from Mrs M. E. Huysamen. Image example: Photograph bottom right on page 134 of *Lithops - Flowering Stones* 1988. A stabilised green bodied aberration.

*'Green Top'

**L. lesliei* subsp. *lesliei* 'Green Top'. One of a myriad of unsubstantiated and unpublished titles occasionally seen on the Internet. An unaccepted epithet.

*'Greenberg'

**L. gracilidelineata* subsp. *brandbergensis* 'Greenberg'. Once offered by Vince Formosa of the now defunct "Parkways Lithops" without a description, from seed obtained from Frik du Plooy. Vince Formosa of Leeds (personal comment) once indicated that he intended to use this name for the green bodied aberration of subsp. *brandbergensis*, but was beaten to it by Steven Hammer. Synonym of 'Vertigo'.

*'Greenchillii'

A name from Vincent Formosa that appeared without a description in the *Mesemb Study Group Bulletin* vol. 13, p. 56 (1998), other than "fact or fiction the truth is out there". An unaccepted epithet.

'Greenhorn'

Lithops lesliei subsp. *lesliei* var. *hornii* 'Greenhorn'. Published by Professor Desmond Cole in "Some Lithops Cultivars, *Aloe* 22(3): 58-62. 1985", and later appeared in "*Lithops - Flowering Stones*: 164. 1988". Following successful propagation this was accepted and discussed as a cultivar by Steven Hammer in "*Lithops - Treasures of the Veld*: 96. 1999". The plants were first noted by Ed Storms of Azle, Texas, USA. Image example: Photograph in my original *Lithops* Scrapbook notes which are available at (www.scrapbooklithops.com), taken by Kevin Mason of Carmarthen, Wales. A stabilised green bodied aberration.

*'Gunkanki'

**L. aucampiae* subsp. *euniceae* 'Gunkanki'. *'GUNKANKI' was presented by Tony Sato in *World Succulent Plants Colour Illustrated Dictionary* 2004 on page 65 together with a photograph Fig 476, and the statement "long lines on the tops; yellow flowers". As *L. aucampiae* subsp. *euniceae* naturally has these features, the statement is not descriptive. Synonym of *L. aucampiae* subsp. *euniceae*.

*'Hammergray'

**L. meyeri* 'Hammergray'. *'HAMMERGRAY' was presented by Tony Sato in *World Succulent Plants Colour Illustrated Dictionary* 2004 on page 76 together with a photograph Fig 567, and the statement "Gray leaves". As *L. meyeri* is naturally a grey plant, the statement is not descriptive. Synonym of *L. meyeri*.

'Hammeruby'

Lithops meyeri 'Hammeruby'. On the basis of a single specimen, this epithet was published by Professor Desmond Cole in "*Lithops - Flowering Stones*: 173. 1988", and following successful propagation, accepted and discussed as a cultivar by Steven Hammer in "*Lithops - Treasures of the Veld*: 89. 1999". The originators of this cultivar were Steven Brack and Steven Hammer. Image example: Photograph figure 160 on page 90 of *Lithops - Treasures of the Veld* 1999, taken by Chris Barnhill of the USA. A stabilised red bodied aberration.

'Hanawared'

Lithops gesinae var. *anna* 'Hanawared'. First published by Yasuhiko Shimada in "*International Succulent Institute Japan Newsletter* 7(6): 1-2. 2005". Image example: Photograph accompanying the protologue, taken by Yasuhiko Shimada of Japan. A red bodied cultivar.

*'Harlekin'

**L. julii* subsp. *julii* 'Harlekin'. This is an epithet from the website of the Atomic Plant Nursery in Germany, where a photograph was also shown. Possibly this is a miss-spelling of 'Harlequin' (see below), but in any case there has been no publication in accordance with the *Cultivated Plant Code*. An unaccepted epithet.

'Harlequin'

Lithops 'Harlequin'. First published by Nick Rowlette of Portland, Oregon, USA, in "*Lithops for the curious, the collector, and the cultist*: 62. 1990". Nomenclatural standard: Photograph in '*Lithops Scrapbook*: part 3', *Cactus World*, 26 (2): pp. 81-85, p. 81 figure 1, 2008, taken by Lindsey Deaves of Surrey, England. A "greyish orange-brown" hybrid of *L. julii* subsp. *julii* X *L. hallii* var. *ochracea*.

'Hikoruby'

Lithops aucampiae subsp. *euniceae* var. *euniceae* 'Hikoruby'. This was published as a cultivar by Professor Desmond Cole and Naureen Cole in "*Lithops - Flowering stones*: 90. 2005", originating from Yasuhiko Shimada of Japan. Nomenclatural standard: Photograph bottom right on page 91 of *Lithops - Flowering Stones* 2005, taken by Yasuhiko Shimada of Japan. The name comes from the breeders Christian name (Yasu)hiko. An orange-red bodied cultivar.

*'Hillii'

**L. herreri* 'Hillii'. In 2011 this epithet was presented in cultivar format by the *International Succulent Institute of Japan* (ISIJ) on page 217 of *Succulents* (Volume 2) compiled by Hiroshi Kobayashi and Mitsuo Ekuma. However, as recorded on page 337 of *Lithops - Flowering Stones* by DT & NA Cole (2005), '*Hillii' is not distinct from *L. geyeri* (and is not a form of *L. herreri*).

'Honey Lips ZW'

Lithops julii subsp. *julii* 'Honey Lips ZW'. First published by Zhang Shijia and Wei Zichu in "A New Pattern Cultivar: *Lithops julii* subsp. *julii* cv. 'Honey Lips ZW', *Mesemb Study Group Bulletin* 34(4): 82. (December) 2019". Image Example: Four photographs accompanying the protologue, figures 34.116 – 34.119 on page 83 taken by the authors. A pallid, blueish-green aberration with enlarged honey coloured "lip smears", which are usually small patches along both margins of the fissure.

'Hotlips'

Lithops julii subsp. *julii* 'Hotlips'. First published by Steven Hammer of the USA, in "New Cultivars in *Lithops, Piante Grasse Speciale* 1995. *Supplemento al n. 4 di Piante Grasse* 15(4): 48, 69. 1996". Nomenclatural standard: Photograph on page 69 accompanying the protologue. A pallid cultivar with enhanced "lip-smears", which are small patches along both margins of the fissure.

*'Inae'

**L. verruculosa* 'Inae'. In 2011 this epithet was presented in cultivar format by the *International Succulent Institute of Japan* (ISIJ) on page 221 of *Succulents* (Volume 2) compiled by Hiroshi Kobayashi and Mitsuo Ekuma. However, as recorded on page 337 of *Lithops - Flowering Stones* by DT & NA Cole (2005), '*Inae' is not distinct from *L. verruculosa* var. *verruculosa*.

*'Incagold'

**L. lesliei* subsp. *lesliei* var. *lesliei* 'Incagold'. Once offered by Vince Formosa of the now defunct "Parkways Lithops" without a description. Vince Formosa of Leeds (personal comment) once indicated that both the plants and *'Incagold' epithet, were produced by crossing 'Albinica' with 'Storms's Albinigold'. The resultant plants were green bodied and flowered either white or yellow, being identical to one or other of the parents. White flowers are synonymous with 'Albinica' and yellow flowers are synonymous with 'Storms's Albinigold'.

'Ironstone'

Lithops karasmontana subsp. *bella* 'Ironstone'. First published by Tony Irons in "Ironstone *Lithops*, *Mesemb Study Group Bulletin* 30(2): 48. (April) 2015". Image example: Photograph of on page 50 of plants accompanying the protologue, taken by Tony Irons of the UK. A stabilised cultivar with wide open brown windows and orange brown margins.

'Jackson's Jade'

Lithops aucampiae subsp. *aucampiae* var. *aucampiae* 'Jackson's Jade'. First published by Professor Desmond Cole in "*Mesemb Study Group Bulletin* 7(4): 87. 1992", originating from Tim Jackson of the USA. Nomenclatural standard: Photograph bottom right on page 85 of *Lithops - Flowering Stones* 2005, taken by Tim Jackson of Whittier, California, USA. The name *'Golden Beryl' was once suggested for this cultivar by Steven Hammer in the *Mesemb Study Group Bulletin* vol. 7, page 65, 1992, for the then developing strain of yellow flowering, green bodied aberrations that become 'Jackson's Jade'. A stabilised green bodied, yellow flowering aberration.

*'Jambouree'

L. lesliei* 'Jambouree'. Plants with this title have been offered on the internet, on occasion even as "L. lesliei* 'Jambouree'". Specimens depicted appear to be identical to 'Fred's Redhead', and in any case there has been no publication. An unaccepted epithet.

*'Jane's Red Dog''

**L. lesliei* 'Jane's Red Dog'. This was mentioned by Steven Hammer in the *M.S.G. Bulletin* 35(1), p.4 (2020), as an already "christened" epithet produced by Jane Evans, and described as being like "quadruply distilled whiskey". However, no source of publication was stated and a consistent distinction from 'Fred's Redhead' is unclear. Currently an unaccepted epithet.

*'Jaspilite'

**L. aucampiae* subsp. *aucampiae* var. *aucampiae* 'Jaspilite'. One of a myriad of unsubstantiated and unpublished titles occasionally seen on the Internet. An unaccepted epithet.

*'Jeanett's Pearl'

**L. schwantesii* subsp. *schwantesii* var. *urikosensis* 'Jeanett's Pearl'. Appeared on the Frik du Plooy October 2011 seed list with no description, next to the name Callie Nel. In the *Mesemb Study Group Bulletin* vol. 23 p.25 (2008) Ken Palmer stated that the white flowering aberration he referred to as 'Witspook', was once known as *'Jeanett's Pearl', but never established as such. An unaccepted epithet.

*'Jenny's White Pearl'

**L. geyeri* 'Jenny's White Pearl'. This epithet together with a photograph of a non-flowering single head appeared on the German website (www.exotengarten-odenwalde.de) as "geyeri (Syn. Hillii) 'Jenny's White Pearl'". However, no description was offered and the epithet does not appear to have been established elsewhere. An unaccepted epithet.

*'Jewel of the Gariep'

**L. aucampiae* subsp. *euniceae* var. *fluminalis* 'Jewel of the Gariep'. Erroneously published in the *Mesemb Study Group Bulletin* 32(2): 47. (April) 2017" by Keith Green, to correct the previously used epithet *'Green River'. That epithet had been used by Keith Green in "*Lithops Scrapbook part 1: Cactus World*, 25 (4), pp. 185-197 (2007)", originating from Steven Hammer of the USA. In 2017 it was thought that the originator, Mr. Louw Pretorius, had expressed a wish for the title of 'Jewel of the Gariep' to be used, but after a correction was published, it was discovered that Mr. Pretorius had actually wanted to use the Afrikaans version of the name. Synonym of 'Gariep Juweel'.

*'Johnson's Pinkish'

**L. marmorata* 'Johnson's Pinkish'. An epithet offered on the website (<http://users.skynet.be/fhoes/rsasucculents/>) together with a photograph of plants that do not appear distinct from var. *marmorata*. No written description has been published. An unaccepted epithet.

'Kikukaseki'

Lithops 'Kikukaseki'. First published by the *International Succulent Institute of Japan* under the presidency of Hiroshi Kobayashi in "Succulents (Volume 1): 222. (Jan) 2004", originating from Yasuhiko Shimada. Nomenclatural standard: Photograph accompanying the protologue, taken by Yasuhiko Shimada of Japan. A hybrid of unknown exact parentage with deeply indented brown margins and white flowers.

'Kikusiyō Giyoku'

Lithops 'Kikusiyō Giyoku'. First published by Tony Sato of Japan in "Report of Contest, Japan Succulent Society. 1990 New Year Party in Tokyo, *Cactus & Succulent Journal of Japan* 4(6): 8. (Feb) 1990", originating from Kisata Tanaka. Nomenclatural standard: Photograph accompanying the protologue. A hybrid of unknown exact origin with a chrysanthemum patterned face and white flowers.

*'Kimbergreen'

**L. lesliei* subsp. *lesliei* var. *lesliei* 'Kimbergreen'. This epithet together with a photograph, appeared on the website of Francois Hoes of Belgium (<http://users.skynet.be/fhoes/rsasucculents/>) in the section entitled "Lithops species pictures list 2007", without a written description. Presumably this is a green bodied manifestation of the "Kimberly Form" of var. *lesliei*, although the rank of *forma* or form is not recognised in the Cole monographs. Synonym of 'Storm's Albinigold'.

*'Kokerboom'

**L. aucampiae* 'Kokerboom. One of a myriad of unsubstantiated and unpublished titles occasionally seen on the Internet. An unaccepted epithet.

'Kosogyoku'

Lithops 'Kosogyoku'. First published by Tony Sato of Japan in "*Cactus & Succulent Journal of Japan* 5(4): 11. (Dec) 1990", originating from Kisata Tanaka. Nomenclatural standard: Photograph accompanying the protologue. A hybrid of unknown exact parentage with large white flowers, greyish shoulders and open reddish-brown facial windows.

*'Kuruman form'

**L. aucampiae* 'Kuruman form'. In 2011 this epithet (including a lower case "f") was presented in cultivar format by the *International Succulent Institute of Japan* (ISIJ) on page 215 of *Succulents* (Volume 2) compiled by Hiroshi Kobayashi and Mitsuo Ekuma. The word "form" is not allowed in cultivar names, and as recorded on page 339 of *Lithops - Flowering Stones* by DT & NA Cole (2005), '*Kuruman' is not distinct from *L. aucampiae* subsp. *aucampiae* var. *aucampiae*.

'Lateritia'

Lithops karasmontana subsp. *karasmontana* var. *karasmontana* 'Lateritia'. Established by Steven Hammer in "*Lithops Treasures of the Veld*: 81. 1999", originating from Kurt Dinter. Image example: Photograph figure 130 on page 78 of *Lithops Treasures of the Veld*: 2010, taken by Chris Barnhill of the USA. A stabilised solid red faced var. *karasmontana*. NB. This Latin form epithet is retained as it is based on *L. laterita* (M.K. Dinter; 1928) which has subsequently become widely known and accepted as a cultivar.

'Lava Flow'

Lithops 'Lava Flow'. First published by Bernd Schlösser in "A New Named Hybrid in *Lithops*, *Mesemb Study Group Bulletin* 27(1): 27-28. (February) 2012". Nomenclatural standard: Photograph of plants accompanying the protologue, figure 27.33 on page 27, taken by Bernd Schlösser of, Germany. A hybrid of *L. karasmontana* subsp. *karasmontana* var. *tischeri* X *L. karasmontana* subsp. *karasmontana* var. *lericheana* that has strong rubrications.

'Lerichegreen'

Lithops karasmontana subsp. *karasmontana* var. *lericheana* 'Lerichegreen'. First published by Professor Desmond Cole in "A New Aberrant Colour Form (Cultivar), *Mesemb Study Group Bulletin* 24(2): 31. (April) 2009", originating from Klasië Geldenhuys. Image example: Photograph of plants accompanying the protologue, taken by Naureen Cole of South Africa. A stabilised green bodied aberration.

***'Lime Ice'**

**L. karasmontana* subsp. *karasmontana* var. *aiaisensis* 'Lime Ice'. An epithet mentioned in the *Mesemb Study Group Bulletin* V19, P39 (2004) by Steven Hammer, who then had obtained three specimens by chance when trying to raise more specimens of 'Orange Ice'. It was however never described and no further information is currently available. Currently an unacceptable epithet.

'Limelight'

Lithops julii subsp. *fulleri* var. *fulleri* 'Limelight'. First published by Tok Schoeman in "Two New *Lithops* Cultivars, *Mesemb Study Group Bulletin* 28(4): 76. (October) 2013". Image example: Photograph of plants accompanying the protologue on p. 77 taken by C. J. (Tok) Schoeman of Windhoek, Namibia. A lime green coloured cultivar.

***'Littlewoodii'**

**L. julii* 'Littlewoodii'. This Latin based epithet appeared in the 2013 on-line catalogue of Conos Paradise numbered L63, but without a description. An unaccepted epithet.

***'Maculate'**

**L. optica* 'Maculate'. This epithet was unintentionally published in cultivar format (personal comment) by Terry Smale in the "Seed Distribution List" of the *Mesemb Study Group Bulletin* vol. 24(1) pp.3-4 (2009), numbered 2392. This is a non-distinct local form of *L. optica* (see page 340 of *Lithops - Flowering Stones* by DT & NA Cole (2005).

'Malachite'

Lithops salicola 'Malachite'. This was published as a cultivar by Professor Desmond Cole in "Some *Lithops* Cultivars, *Aloe* 22(3): 58-62. 1985", and later appeared in "*Lithops - Flowering Stones*: 193. 1988", originating from Johann van Schalkwyk. Image example: Photograph of plant on page 193 of *Lithops - Flowering Stones* 1988. A stabilised green bodied aberration.

***'Malasoap'**

**L.* 'Malasoap'. An epithet mentioned by Lindsey Deaves on page 53 of the *Mesemb Study Group Bulletin* vol. 27 (2012). In her article Lindsey assumes this to be a hybrid of *L. hallii* var. *ochracea* 'Green Soapstone' and *L. salicola* 'Malachite' that originated from Steven Hammer in 1992. No definitive description or photograph was given. Currently an unacceptable epithet.

***'Mangans'**

* *L. aucampiae* subsp. *aucampiae* var. *aucampiae* 'Mangans'. One of a myriad of unsubstantiated and unpublished titles occasionally seen on the Internet. An unaccepted epithet.

***'Manyading'**

**L. aucampiae* 'Manyading'. The 2019 MESA Garden website offered "cv 'manyading'" with the description "very nice dark windows". However, the format and publication medium are unacceptable and the plants appear to be a natural variant. *'Manyading' is not distinct from *L. aucampiae* subsp. *aucampiae* var. *aucampiae*.

***'Maraisii'**

**L. lesliei* 'Maraisii'. In 2011 this epithet was presented in cultivar format by the *International Succulent Institute of Japan* (ISIJ) on page 218 of *Succulents* (Volume 2) compiled by Hiroshi Kobayashi and Mitsuo Ekuma. However, as recorded on page 334 of *Lithops - Flowering Stones* by DT & NA Cole (2005), *'Maraisii' is not distinct from *L. lesliei* subsp. *lesliei* var. *venteri*.

*'Margarethae'

**L. vallis-mariae* 'Margarethae'. In 2011 this epithet was presented in cultivar format by the *International Succulent Institute of Japan* (ISIJ) on page 221 of *Succulents* (Volume 2) compiled by Hiroshi Kobayashi and Mitsuo Ekuma. However, as recorded on page 340 of *Lithops - Flowering Stones* by DT & NA Cole (2005), *'Margarethae' is not distinct from *L. vallis-mariae*.

*'Mickbergensis'

**L. karasmontana* 'Mickbergensis'. This Latin based epithet was unintentionally published in cultivar format (personal comment) by Terry Smale in the "Seed Distribution List" of the *Mesemb Study Group Bulletin* vol. 24(1) pp.3-4 (2009), numbered 2388. Further, and as recorded on page 341 of *Lithops - Flowering Stones* by DT & NA Cole (2005), *'Mickbergensis' is not distinct from *L. karasmontana* subsp. *karasmontana* var. *karasmontana*.

'Moss Agate'

Lithops 'Moss Agate'. First published by Jonathan Clark in "'Moss Agate' - A New *Lithops* Hybrid Cultivar, *Mesemb Study Group Bulletin* 23(2): 31-33. (April) 2008". Image example: Photograph of plants accompanying the protologue, taken by Jonathan Y. Clark of Bracknell, England. A hybrid of *L. meyeri* X *L. geyeri* that is *L. meyeri* shaped but darkened in the windows.

*'Mundtii'

**L. pseudotruncatella* 'Mundtii'. In 2011 this epithet was presented in cultivar format by the *International Succulent Institute of Japan* (ISIJ) on page 219 of *Succulents* (Volume 2) compiled by Hiroshi Kobayashi and Mitsuo Ekuma. However, as recorded on page 333 of *Lithops - Flowering Stones* by DT & NA Cole (2005), *'Mundtii' is not distinct from *L. pseudotruncatella* subsp. *pseudotruncatella* var. *pseudotruncatella*.

*'Murasaki'

**L. otzeniana* 'Murasaki'. A photo with this title was shown on (www.geocities.jp/axxrd/essey09/otzeniana.htm) . However, it is not clear how this is distinct from other specimens, and there appears to have been no official publication. An unaccepted epithet.

*'Nelii'

**L. ruschiorum* 'Nelii'. In 2011 this epithet was presented in cultivar format by the *International Succulent Institute of Japan* (ISIJ) on page 220 of *Succulents* (Volume 2) compiled by Hiroshi Kobayashi and Mitsuo Ekuma. However, as recorded on page 342 of *Lithops - Flowering Stones* by DT & NA Cole (2005), *'Nelii' is not distinct from *L. ruschiorum* var. *ruschiorum*.

'Nine Rivers ZW'

Lithops julii 'Nine Rivers ZW'. First published by Zhang Shijia and Wei Zichu in "A New Pattern Cultivar: *Lithops Julii* 'Nine Rivers ZW', *Mesemb Study Group Bulletin* 35(1): 21. (February) 2020". Image Example: Six photographs accompanying the protologue, figures 35.26 – 35.31 on page 3 taken by Zhang Shijia and Wei Zichu of China. A yellow-green cultivar with carved-effect borders and lip smears. The epithet honours the Chinese Emperor Yu who had nine rivers dug around 2000 B.C. to avert a great flood.

'Noemie's Kiwi'

Lithops bromfieldii var. *bromfieldii* 'Noemie's Kiwi'. First published by Ronny Feng in "'Noemie's Kiwi'; A New *Lithops* Cultivar, *Mesemb Study Group Bulletin* 31(4): 98. (October) 2016". Image example: Photograph of plants accompanying the protologue taken by Ronny Feng of Qingdao City, China. Named after Mr. Feng's daughter, Noemie. A stabilised green bodied aberration.

*'Nugget'

**L. aucampiae* subsp. *aucampiae* var. *aucampiae* 'Nugget'. This epithet appeared in the 2013 on-line catalogue of Conos Paradise numbered L2-79, but without a description. An unaccepted epithet.

'Nutwerk'

Lithops schwantesii subsp. *schwantesii* var. *urikosensis* 'Nutwerk'. First published by Steven Hammer in "Lithops - Treasures of the Veld: 132-133. 1999". Nomenclatural standard: Photograph in 'Lithops Scrapbook part 1', *Cactus World*, 25 (4): pp. 185-197 p. 196 figure 23, 2007, taken by Clive Green of New Malden, England. A dark reticulate patterned cultivar.

'Nuwa Stone ZW'

Lithops 'Nuwa Stone ZW'. First published by Zhang Shijia and Wei Zichu in "A new pattern cultivar: *Lithops* N.E.Br. 'Nuwa Stone ZW', *Mesemb Study Group Bulletin* 34 (1): 08. (February) 2019". Image Example: Six photographs accompanying the protologue, figures 34.35 – 34.40 on page 18, taken by the authors. A stabilised hybrid between *L. pseudotruncatella* subsp./var. *pseudotruncatella* and an unknown father, that combines vivid rubrications, unusual patterns and a purple leaf tone to varying degrees. The epithet commemorates an "ancient legend" concerning the goddess Nuwa who is said to have "patched the sky with multi-coloured stones".

*'Opalina'

**L. karasmontana* 'Opalina'. This epithet was unintentionally published in cultivar format (personal comment) by Terry Smale in the "Seed Distribution List" of the *Mesemb Study Group Bulletin* vol. 28(1) pp.5-7 (2013), numbered 2801. Although '*Opalina' had also been mentioned as having a "kind of cultivar status" by Steven Hammer on page 81 of *Lithops - Treasures of the Veld* 1999, it is not distinct from *L. karasmontana* subsp. *karasmontana* var. *karasmontana* (see page 342 of *Lithops - Flowering Stones* by DT & NA Cole (2005).

*'Orange'

**L. karasmontana* subsp. *karasmontana* var. *aiaisensis* 'Orange'. One of a myriad of unsubstantiated and unpublished titles occasionally seen on the Internet. An unaccepted epithet.

'Orange Ice'

Lithops karasmontana subsp. *karasmontana* var. *aiaisensis* 'Orange Ice'. First published by Terry Smale in "Seed Distribution 2007, *Mesemb Study Group Bulletin* 22(1): 18. 2007", originating from Steven Hammer. Nomenclatural standard: Photograph in 'Lithops Scrapbook part 2', *Cactus World*, 26 (1): pp. 21-27 p.25, figure 10, 2008, taken by Terry Smale of Surrey, England. An orange faced cultivar.

*'Pale Yellow Flower'

**L. marmorata* var. *marmorata* 'Pale Yellow Flower'. Appeared on the Frik du Plooy 1997 seed list with no description, numbered F130a (ex Fritz). Currently an unacceptable epithet.

*'Pallida'

**L. julii* 'Pallida'. This Latin based epithet was unintentionally published in cultivar format (personal comment) by Terry Smale in the "Seed Distribution List" of the *Mesemb Study Group Bulletin* vol. 28(1) pp.5-7 (2013), numbered 2797. Further, and as recorded on page 343 of *Lithops - Flowering Stones* by DT & NA Cole (2005), '*Pallida' is not distinct from *L. julii* subsp. *julii*.

'Pearl Blush'

Lithops divergens var. *divergens* 'Pearl Blush'. First published by Steven Hammer in "*Lithops Treasures of the Veld 2nd Edition*: 117. 2010", originating from Emile Heunis of South Africa. Image example: Photograph figure 238 on page 120 of *Lithops - Treasures of the Veld* 2010, taken by Emile Heunis of South Africa. A stabilised white flowering aberration, sometimes with pink petal tips.

*'Peersii'

**L. terricolor* 'Peersii'. In 2011 this epithet was presented in cultivar format by the *International Succulent Institute of Japan* (ISIJ) on page 221 of *Succulents* (Volume 2) compiled by Hiroshi Kobayashi and Mitsuo Ekuma. However, as recorded on page 343 of *Lithops - Flowering Stones* by DT & NA Cole (2005), '*Peersii' is not distinct from *L. terricolor*.

'Peppermint Crème'

Lithops julii subsp. *julii* 'Peppermint Crème'. On the basis of a single specimen, this epithet was published by Professor Desmond Cole in "Some Lithops Cultivars, *Aloe* 22(3): 58-62. 1985", and later appeared in "*Lithops - Flowering Stones*: 148. 1988". Following successful propagation this was accepted and discussed as a cultivar by Steven Hammer in "*Lithops - Treasures of the Veld*: 77. 1999". The originator of this cultivar was Lettie Pretorius. Image example: Photograph page 148 in *Lithops - Flowering Stones* 1988. A stabilised milky bluish-green bodied aberration of the "pallid form".

***'Peridot'**

**L. coleorum* 'Peridot'. A suggested epithet mentioned by Lindsey Deaves on page 96 of the *Mesemb Study Group Bulletin* vol. 26 (2011) for a "fine green form of *L. coleorum*... in the collection of Keith Green". Currently an unacceptable epithet.

***'Pietersruby'**

**L. lesliei* subsp. *lesliei* var. *lesliei* 'Pietersruby'. A name occasionally seen on seeds lists or mentioned in social media. However, it is unclear how this differs from other types of var. *lesliei* and there has been no valid publication. An unaccepted epithet.

***'Pink'**

**L. gesinae* var. *gesinae* 'Pink'. Appeared on the Frik du Plooy 2015 seed list with no description, numbered F045. Currently an unacceptable epithet.

***'Pink'**

**L. julii* subsp. *julii* "Little Woodii" 'Pink'. Appeared on the Frik du Plooy 2015 seed list with no description, numbered F087.1. An unacceptable epithet.

***'Pink'**

**L. lesliei* subsp. *lesliei* var. *lesliei* 'Pink'. One of a myriad of unsubstantiated and unpublished titles occasionally seen on the Internet. An unaccepted epithet.

***'Pink'**

**L. otzeniana* 'Pink'. A photo with this title was shown on (www.geocities.jp/axxrd/essey09/otzeniana.htm). However, it is not clear how this is distinct from other specimens, and there appears to have been no official publication. An unaccepted epithet.

***'Pink Flower'**

**L. karasmontana* subsp. *eberlanzii* 'Pink Flower'. Appeared on the Frik du Plooy 1997 seed list with no description, numbered F103-1. Currently an unaccepted epithet.

***'Pink Localis'**

**L. localis* 'Pink Localis'. *'PINK LOCALIS' was presented by Tony Sato in *World Succulent Plants Colour Illustrated Dictionary* 2004 on page 75 together with a photograph Fig 556, and the statement "Red leaves: mutant". However, among other irregularities the photograph appears to show a normal *L. terricolor*. Synonym of *L. terricolor*.

***'Pink Marmo'**

**L. marmorata* 'Pink Marmo'. *'PINK MARMO' was presented by Tony Sato in *World Succulent Plants Colour Illustrated Dictionary* 2004 on page 75 together with a photograph Fig 563, and the statement "Pink Leaves". However, the photograph appears to show an overwatered plant suffering from sun-stress. Synonym of *L. marmorata*.

'Pinky'

Lithops terricolor 'Pinky'. First published by Bernd Schlösser in "*Lithops terricolor* 'Pinky', *Mesemb Study Group Bulletin* 23(2): 43. (April) 2008", originating from Klaus Ingenwepelt of Germany. Image example: Photograph accompanying the protologue, taken by Bernd Schlösser of Germany. A pink faced cultivar.

'Polepsy Smaragd'

Lithops marmorata var. *marmorata* 'Polepsy Smaragd'. First published by Petr Pavelka in "Desatero *Lithops* (1), *Cactaceae, etc.* 6(1): 24, 26. 1996". Nomenclatural standard: Photograph accompanying the protologue, taken by Petr Pavelka of the Czech Republic. 'Polepsy Smaragd' is the accepted name for *'Chartreuse' which was erroneously published by Steven Hammer in *Piante Grasse Speciale* 1995. The 'Polepsy' part of the epithet refers to the town Polepy where the plants were selected by Vladimir Vojacek, and 'Smaragd' is Czech for "emerald". A stabilised green bodied aberration.

***'Prince Albert'**

**L. terricolor* 'Prince Albert'. This local, non-distinct form of *L. terricolor* occasionally presents as a cultivar, sometimes under **L. localis*. As recorded on page 343 of *Lithops - Flowering Stones* by DT & NA Cole (2005), *'Prince Albert' is not distinct from *L. terricolor*.

***'Pulmonuncula'**

**L. pseudotruncatella* subsp. *dendritica* 'Pulmonuncula'. In 2011 this epithet was presented in cultivar format by the *International Succulent Institute of Japan* (ISIJ) on page 220 of *Succulents* (Volume 2) compiled by Hiroshi Kobayashi and Mitsuo Ekuma. However, as recorded on page 343 of *Lithops - Flowering Stones* by DT & NA Cole (2005), *'Pulmonuncula' is not distinct from *L. pseudotruncatella* subsp. *dendritica*.

'Purper'

Lithops karasmontana subsp. *eberlanzii* 'Purper'. First published by Bernd Schlösser in "A New Red *Lithops* Cultivar, *Mesemb Study Group Bulletin* 26(3): 57. (July) 2011", originating from Frik du Plooy of South Africa. Image example: Photograph accompanying the protologue, taken by Bernd Schlösser of Germany. A stabilised mauve-purple bodied aberration.

'Purple Haze'

Lithops schwantesii subsp. *schwantesii* var. *schwantesii* 'Purple Haze'. First published by Andreas Laras in "*Lithops schwantesii* subsp. *schwantesii* var. *schwantesii* 'Purple Haze', *Mesemb Study Group Bulletin* 34(4): 82. (December) 2019". Nomenclatural Standard: Fig. 34.112, accompanying the protologue taken by Andreas Laras of Athens, Greece. A stabilised purple-mauve bodied aberration with pink margins.

***'Purple Kikukaseki'**

**L.* 'Purple Kikukaseki'. This is rumoured to be a hybrid between *L.* 'Kikukaseki' and *L. salicola* 'Sato's Violet'. Although specimens have been made available by the Shimada family of Japan, there appears to have been no formal establishment. Currently an unaccepted epithet.

***'Purple Kikusiyogyoku'**

**L.* 'Purple Kikusiyogyoku'. This is rumoured to be a hybrid between *L.* 'Kikusiyogyoku' and *L. salicola* 'Sato's Violet'. Although multiple specimens have been seen in the greenhouse of the Shimada family in Japan, there appears to have been no formal establishment. Currently an unaccepted epithet.

***'Purple Kosogyoku'**

**L.* 'Purple Kosogyoku'. This is rumoured to be a hybrid between *L.* 'Kosogyoku' and *L. salicola* 'Sato's Violet'. Although specimens have been made available by the Shimada family of Japan, there appears to have been no formal establishment. Currently an unaccepted epithet.

***'Purple Shell'**

**L.* 'Purple Shell'. This is rumoured to be a hybrid between *L.* 'Kikusiyogyoku', and *L. salicola* 'Sato's Violet'. Although multiple specimens have been seen in the greenhouse of the Shimada family in Japan (with the given title of *'Purple Kikusiyogyoku'), there appears to have been no formal establishment. Currently an unaccepted epithet.

***'Red'**

**L. karasmontana* subsp. *karasmontana* var. *lericheana* 'Red'. Appeared (as not available) on the Frik du Plooy 2015 seed list with no description, numbered F100.1. Currently an unacceptable epithet.

'Red Coral'

Lithops bromfieldii 'Red Coral'. First published by Szabó László in “*Lithops Bromfieldii* ‘Red Coral’, *Mesemb Study Group Bulletin* 33(2): 44. (May) 2018”. Image example: Four photographs of plants accompanying the protologue, figures 33.55– 33.58 on page 45 taken by Szabó László of Hungary. A stabilised cultivar with pronounced red facial lines.

'Red Olive'

Lithops olivacea var. *nebrowonii* 'Red Olive'. Proposed by Steven Hammer in “Cultivated Cultivars, *Mesemb Study Group Bulletin* vol. 9(3): 51. 1994.”, and published by Steven in “A note on *Lithops olivacea* var. *nebrowonii* cv. ‘Red Olive’, *Piante Grasse Speciale* 1995. *Supplemento al n. 4 di Pinate Grasse* 15(4): 50, 72. 1996”. Nomenclatural standard: Photograph accompanying the protologue. A stabilised red bodied aberration.

'Red Reticulata'

Lithops julii subsp. *julii* 'Red Reticulata'. First published by the *International Succulent Institute of Japan* under the presidency of Hiroshi Kobayashi in “*Succulents* (Volume 1): 219. 2004”. Image example: Photograph of plants accompanying the protologue. A red reticulated patterned cultivar.

*'Rhona'

**L. karasmontana* subsp. *bella* 'Rhona'. Appeared on the Frik du Plooy 2015 seed list with no description, numbered F102.2. Currently an unacceptable epithet.

*'Rhubarb'

**L. lesliei* 'Rhubarb'. A name occasionally seen on seeds lists or mentioned in social media in association with Steven Hammer. However, it is unclear how this differs from other types of *L. lesliei* and there has been no valid publication. Currently an unacceptable epithet.

'Rosary'

Lithops karasmontana subsp. *karasmontana* var. *karasmontana* 'Rosary'. First published by Tony Sato in “*Cactus & Succulent journal of Japan* 12(3): 16. (Nov) 1997”. Nomenclatural standard: Photograph accompanying the protologue by Tony Sato of Japan, reproduced in ‘*Lithops Scrapbook part 2*’, *Cactus World*, 26(1): pp. 21-27 p.26, figure 11, 2008. A cultivar with multiple leaf sets.

'Rose of Texas'

Lithops verruculosa var. *verruculosa* 'Rose of Texas'. First published by Steven Hammer in “New Cultivars in *Lithops*, *Piante Grasse Speciale* 1995. *Supplemento al n. 4 di Piante Grasse* 15(4): 49. 1995”, originating from Ed Storms of Azle, Texas, USA. Nomenclatural standard: Photograph figure 194 on page 100 in *Lithops - Treasures of the Veld*, taken by Chris Barnhill of the USA. A rose-pink flowered cultivar with either a normal or green body colour.

*'Ruberoid'

An epithet mentioned by Vince Formosa of Leeds, England, in the *Mesemb Study Group Bulletin* vol. 13, p56 (1998) without any description. Vince Formosa of Leeds (personal comment) once indicated that this was a name he invented for red bodied, yellow flowering specimens of *L. optica* 'Rubra', and that he neither had the plants nor reliable knowledge of them at that time. An unaccepted epithet.

'Rubra'

Lithops optica 'Rubra'. This was published as a cultivar by Professor Desmond Cole in “Some Lithops Cultivars, *Aloe* 22(3): 58-62. 1985”, and later appeared in “*Lithops - Flowering Stones: 178-179. 1988*”, originating from Hindrik de Boer of Holland. Image example: Photograph bottom right on page 178 of *Lithops - Flowering Stones* 1988. A stabilised red bodied, white flowering aberration. NB. This Latin form epithet is retained as it is based on *L. optica* var. *rubra* (A. Tischer; 1926) which has subsequently become widely known and accepted as a cultivar.

'Rubragold'

Lithops optica 'Rubragold'. First published by Desmond and Naureen Cole in "*Lithops - Flowering Stones: 251. 2005*", originating from Yasuhiko Shimada of Japan. Nomenclatural standard: Photograph top right accompanying the protologue, taken by Yasuhiko Shimada. A stabilised red bodied, yellow flowered aberration.

*'Rubroroseus'

**L. bromfieldii* var. *glaudinae* 'Rubroroseus'. Offered by Frik du Plooy on his 1997 seed list without a description, for excessively red specimens. Latinised epithets not previously published in accordance with the *International Code for algae, fungi and plants* (ICN) are not to be used for new cultivars, and this epithet is only included here as it has persisted with some growers. Synonym of 'Embers'.

'Ruby'

Lithops optica 'Ruby'. First published by Nick Rowlette in "*Lithops for the Curious, the Collector and the Cultist: 50. 1990*". Image example: Photograph FSG21 of plants in *Lithops Archive* (2010) [CD-ROM] Available: C.B. Dugdale / N. Rowlette (also available in *Lithops Scrapbook II* (www.scrapbooklithops.com)). A stabilised red bodied white flowering aberration of rapid growth.

'Rudesheim Ruby'

Lithops aucampiae subsp. *aucampiae* var. *aucampiae* 'Rudesheim Ruby'. First published (under the presidency of Hiroshi Kobayashi) by Yashiko Shimada in the *International Succulent Institute of Japan* book, "*Succulents* (Volume 1): 217. 2004", originating from Jossie Brandt of South Africa. Image example: photograph of plants accompanying the protologue. 'Rudesheim Ruby' is the accepted epithet for *'Firebrandt' which was erroneously used by Keith Green in "Two new *Lithops* cultivars, *Mesemb Study Group Bulletin* 21(2): 42, 2006", before he realised the originator of this cultivar, Jossie Brandt of South Africa, had expressed a wish for it to be called 'Rudesheim Ruby'. A corrective article appeared in the *Mesemb Study Group Bulletin* vol. 25, p. 105 (2010). A red bodied cultivar.

'Sage Sun's Hairs -ZW-'

Lithops lesliei 'Sage Sun's Hairs -ZW-'. First published by Zhang Shijia and Wei Zichu in "A New Caespitose Cultivar: *Lithops* N.E.Br. *Lesliei* (N.E.Br.) N.E.Br. 'Sage Sun's Hairs @ZW', *Mesemb Study Group Bulletin* 29(2): 43. (April) 2014". Nomenclatural Standard: Composite photograph of plants accompanying the protologue, figure 29.52 on page 42. Following consultation with the authors (husband and wife) the original epithet (*'SAGE SUN'S HAIRS @ZW') was corrected to conform to the rules of the *Cultivated Plant Code* (see *Articles 21.18., 21.19. and 21.3.* of the October 2009 edition), and derives from a character in Chinese traditional literature called Sun Wukong, who could make copies of himself from each of his hairs. A rapidly clustering cultivar.

*'Sakkie's Green'

**L. hallii* 'Sakkie's Green'. A title sometimes seen on the Internet relating to green bodied specimens of *L. hallii*. However, there has been no published description, and in any case it is unclear if the origin is var. *hallii* or var. *ochracea*, the latter already having the green cultivar 'Green Soapstone' assigned. Currently an unaccepted epithet.

'Sato's Violet'

Lithops salicola 'Sato's Violet'. First published by Yasuhiko Shimada in "*The genus Lithops: 172-173. 2001*", originating from Tony Sato. Nomenclatural standard: Photograph in '*Lithops Scrapbook part 1*', *Cactus World*, 25 (4): pp. 185-197, page 195, figure 21, 2007, taken by Tutomu (Tony) Sato of Fukushima City, Japan. 'Sato's Violet' is the accepted epithet for *'Bacchus' which was erroneously published by Steven Hammer on page 132 of *Lithops - Treasures of the Veld* 1999, before he realised the originator had expressed a wish to use the epithet 'Sato's Violet'. A stabilised lilac-purple bodied aberration.

*'Scarlet'

**L. lesliei* var. *lesliei* 'Scarlet'. Plants with this title have been shown and offered on the internet, but without a written description. They appear identical to some specimens of 'Fred's Redhead', and in any case there has been no publication. An unaccepted epithet.

'Shagreen'

Lithops schwantesii subsp. *schwantesii* var. *rugosa* 'Shagreen'. First published by Terry Smale in "Seed Distribution 2013, *Mesemb Study Group Bulletin* 28(1): 7. (January) 2013", originating from Steven Hammer of the USA. Image example: Photographs in *Lithops Scrapbook II* available at (www.scrapbooklithops.com), taken by Tok Schoeman of Windhoek, Namibia. A stabilised green bodied aberration.

'Shimada's Apricot'

Lithops hookeri var. *marginata* 'Shimada's Apricot'. First published by Yasuhiko Shimada in "A New *Lithops* Cultivar, *Cactus and Succulent Journal* (US) 72(6): 302 (1 Dec). 2000". Nomenclatural standard: Photograph accompanying the protologue and in *The Genus Lithops*, Shimada (2001. 122), taken by Yasuhiko Shimada of Japan. A bright plum-red bodied cultivar.

***'Signalberg'**

**L. karasmontana* 'Signalberg'. This epithet was unintentionally published in cultivar format (personal comment) by Terry Smale in the "Seed Distribution List" of the *Mesemb Study Group Bulletin* vol. 23(1) pp.23-25, (2008), numbered 2279 but without a description. Further, and as recorded on page 345 of *Lithops - Flowering Stones* by DT & NA Cole (2005), '*Signalberg' is not distinct from *L. karasmontana* subsp. *karasmontana* var. *karasmontana*.

'Silver Reed'

Lithops ruschiorum var. *ruschiorum* 'Silver Reed'. First published by Professor Desmond Cole and Naureen Cole in "*Lithops - Flowering Stones: 274-275. 2005*". Nomenclatural standard: Photograph bottom left on page 274 accompanying the protologue. A stabilised white flowering aberration with normal body colours. NB. Although the protologue makes reference to only 1 plant, the photograph clearly shows a reproducible group.

'Silver Spurs'

Lithops terricolor 'Silver Spurs'. On the basis of a single specimen, this epithet was published by Professor Desmond Cole in "Some *Lithops* Cultivars, *Aloe* 22(3): 58-62. 1985", and later appeared in "*Lithops - Flowering Stones: 202. 1988*". Following successful propagation this was accepted and discussed as a cultivar by Steven Hammer in "*Lithops - Treasures of the Veld: 87. 1999*", but under the species name of *localis* (which Steven Hammer considers to be the correct species name). The originator of this cultivar was Johann van Schalkwyk. Image example: Photograph bottom right on page 202 of *Lithops - Flowering Stones 1988*. A white flowering cultivar.

'Silwersalm'

Lithops 'Silwersalm'. First published by Tok Schoeman in "Two New *Lithops* Cultivars, *Mesemb Study Group Bulletin* 28(4): 76. (October) 2013". Image example: Photograph of plants accompanying the protologue on p. 77 taken by C. J. (Tok) Schoeman of Windhoek, Namibia. A pink patterned hybrid with white flowers.

***'Sinshu Murasaki'**

**L. otzeniana* 'Sinshu Murasaki'. A photo with this title was shown on (www.geocities.jp/axrd/essey09/otzeniana.htm). However, it is not clear how this is distinct from other specimens, and there appears to have been no official publication. An unaccepted epithet.

***'Smokey Peach'**

* *L. karasmontana* subsp. *karasmontana* var. *lericheana* 'Smokey Peach'. Once offered by Vincent Formosa of the now defunct "Parkways *Lithops*" without a description. Currently an unacceptable epithet.

'Snow Fog'

Lithops gracilidelineata subsp. *gracilidelineata* var. *gracilidelineata* 'Snow Fog'. First published by David Kao in "*Lithops* 'Snow Fog', A New Cultivar From China, *Mesemb Study Group Bulletin* 30(1): 17. (January) 2015". Nomenclatural Standard: Photograph (Fig 30.13) accompanying the protologue, taken by David Kao of Taiwan. An orange and white cultivar with lightning-bolt facial markings.

'Speckled Gold'

Lithops terricolor 'Speckled Gold'. On the basis of a single specimen, this epithet was published by Professor Desmond Cole in "Some Lithops Cultivars, *Aloe* 22(3): 58-62. 1985", and later appeared in "*Lithops - Flowering Stones*: 203. 1988". Following successful propagation this was accepted and discussed as a cultivar by Steven Hammer in "*Lithops - Treasures of the Veld*: 87. 1999", but under the species name of *localis* (which Steven Hammer considers to be the correct species name). Image example: Photograph top right on page 203 of *Lithops - Flowering Stones* 1988. A stabilised yellowish-green bodied aberration.

*'Sperrgebiet'

**L.* 'Sperrgebiet'. Although not presented as a cultivar, this name was used by Terry Smale in the "Seed Distribution List" of the *Mesemb Study Group Bulletin* vol. 32(1) pp.10-12, (2017), numbered 3234. The description there stated; "ex Klasië Geldenhuys, said to be a new wild taxon but perhaps more likely to be a horticultural hybrid involving *weneri* or *riehmerae*?" As this could potentially appear in cultivar format on future seed lists, it is recorded here as an excluded name to avoid confusion. An unacceptable epithet.

'Splendido'

Lithops herrei 'Splendido'. First published by Giuseppe Maria Piccione in "A new cultivar in *Lithops, Cactus and Succulent Journal (US)* 73(2): 76. (Mar-April) 2001". Nomenclatural standard: Photograph of flowering plant accompanying the protologue, taken by Giuseppe Maria Piccione of Verona, Italy. A stabilised white flowering light green bodied aberration.

'Split Pea'

Lithops pseudotruncatella subsp. *archerae* 'Split Pea'. First published by Steven Hammer in "New Cultivars in *Lithops, Piante Grasse Speciale 1995. Supplemento al n. 4 di Piante Grasse* 15(4): 47. 1996". Nomenclatural standard: Photograph figure 184 on page 97 in *Lithops - Treasures of the Veld* 1999, taken by Chris Barnhill of the, USA. A green bodied cultivar.

'Springbloom'

Lithops pseudotruncatella subsp. *pseudotruncatella* var. *pseudotruncatella* 'Springbloom'. First published by Nick Rowlette in "*Lithops for the Curious, the Collector and the Cultist*: 52. 1990". Image example: Photograph FSG9 of plants in *Lithops Archive* (2010) [CD-ROM] Available: C.B. Dugdale / N. Rowlette (also available in *Lithops Scrapbook II* (www.scrapbooklithops.com)). A cultivar with an early and, or multiple flowering habit.

'Steamy Windows'

Lithops terricolor 'Steamy Windows'. First published by Bernd Schlösser in "*Lithops terricolor* 'Steamy Windows', *Mesemb Study Group Bulletin* 31(2): 33. (April) 2016". Image example: Photograph (Fig 31.49) accompanying the protologue taken by Bernd Schlösser of Dragun, Germany. A white flowering cultivar with few or absent mini-windows.

'Storms's Albinigold'

Lithops lesliei subsp. *lesliei* var. *lesliei* 'Storms's Albinigold'. Published by Professor Desmond Cole in "Some Lithops Cultivars, *Aloe* 22(3): 58-62. 1985", and later appeared in "*Lithops - Flowering Stones*: 163. 1988", originating from Ed Storms of Azle, Texas, USA. Image example: Photograph bottom left on page 219 in *Lithops - Flowering Stones* 2005. The name is a tribute to the late Ed Storms of Azle, Texas, USA, a much respected grower of *Lithops*. A stabilised green bodied yellow flowering aberration.

'Storms's Snowcap'

Lithops aucampiae subsp. *aucampiae* var. *aucampiae* 'Storms's Snowcap'. Published by Professor Desmond Cole in "Some Lithops Cultivars, *Aloe* 22(3): 58-62. 1985", and later appeared in "*Lithops - Flowering Stones*: 102. 1988", originating from Ed Storms of Azle, Texas, USA. Image example: Photograph top left on page 83 in *The genus Lithops* 2001, taken by Yasuhiko Shimada of Japan. The name is a tribute to the late Ed Storms of Azle, Texas, USA, a much respected grower of *Lithops*. A stabilised white flowering aberration with normal body colours.

*'Streyi'

**L. gracilidelineata* 'Streyi'. This Latin based epithet appeared in the book *Succulents* (Volume 1), on page 218, 2004, published by the *International Succulent Institute of Japan* (ISIJ) under the presidency of Hiroshi Kobayashi, with a photograph and description in Japanese. It was also unintentionally published in cultivar format (personal comment) by Terry Smale in the "Seed Distribution List" of the *Mesemb Study Group Bulletin* vol. 25(1) pp.8-10, (2010), numbered 2476. Further, and as recorded on page 346 of *Lithops - Flowering Stones* by DT & NA Cole (2005), *'Streyi' is not distinct from *L. gracilidelineata* subsp. *gracilidelineata* var. *gracilidelineata*.

'Sulphurea'

Lithops bromfieldii var. *insularis* 'Sulphurea'. This was published as a cultivar by Professor Desmond Cole in "Some Lithops Cultivars, *Aloe* 22(3): 58-62. 1985", and later appeared in "*Lithops - Flowering Stones*: 108. 1988", originating from Yasuhiko Shimada of Japan. Image example: Photograph top right on page 108 of *Lithops - Flowering Stones* 1988. A stabilised green bodied aberration. NB. This Latin form epithet is retained as it is based on *L. bromfieldii* var. *insularis* f. *sulphurea* (Y. Shimada; 1977) which has subsequently become widely known and accepted as a cultivar.

'Sunflowers ZW'

Lithops 'Sunflowers ZW'. First published by Zhang Shijia and Wei Zichu in "A new pattern cultivar: *Lithops* N.E.Br. 'Sunflowers ZW', *Mesemb Study Group Bulletin* 33(3): 63. (August) 2018". Image Example: Three photographs accompanying the protologue, figures 33.83 – 33.85 on page 62 taken by the authors. A hybrid between *L. wernerii* and *L. gracilidelineata* 'Café au Lait' with a yellow-brown facial halo. The epithet honours the famous sunflower paintings of Vincent van Gogh.

'Sunstone'

Lithops 'Sunstone'. First published by Nick Rowlette in "*Lithops for the curious, the collector, and the cultist*: 61. 1990". Nomenclatural standard: Photograph in '*Lithops* Scrapbook: part 3', *Cactus World*, 26 (2), pp. 81-85, page 84, figure 5, 2008, taken by Kevin Mason of Carmarthen, Wales. A hybrid of *L. karasmontana* subsp. *bella* X *L. karasmontana* subsp. *karasmontana* var. *karasmontana*. Described by Kevin Mason of Wales (personal comment) as having "ruined iron coloured windows, with a metallic sheen".

***'Super Mac'**

**L. salicola* 'Super Mac'. Appeared on the Frik du Plooy October 2011 seed list with no description, numbered F168.1. Currently an unacceptable epithet.

***'Swart Modder'**

**L. fulviceps* 'Swart Modder'. This appeared in the book *Succulents* (Volume 1), on page 218, 2004, published by the *International Succulent Institute of Japan* (ISIJ) under the presidency of Hiroshi Kobayashi, with a photograph and description in Japanese. However, it transpired this was the botanic variety correctly published according to the *ICN* by Professor Desmond Cole, and that the epithet should not be used. This is simply *Lithops fulviceps* var. *laevigata*.

***'Syusingyoku'**

**L. karasmontana* 'Syusingyoku'. *'SYUSINGYOKU' was presented by Tony Sato in *World Succulent Plants Colour Illustrated Dictionary* 2004 on page 71 together with a photograph Fig 528, and the statement "Selected types: red tops". The statement does not distinguish *'Syusingyoku' from 'Lateritia'. Synonym of 'Lateritia'.

'Talisman'

Lithops 'Talisman'. First published by Nick Rowlette in "*Lithops for the curious, the collector, and the cultist*: 61. 1990". Nomenclatural standard: Photograph in '*Lithops* Scrapbook part 3', *Cactus World*, 26 (2): pp. 81-85, page 85, figure 6, 2008", taken by Francois Hoes of Belgium. A violet tinged reticulated hybrid of *L. gesinae* var. *annae* X *L. gracilidelineata* subsp. *gracilidelineata* var. *gracilidelineata*.

*'Tears of Tony'

**L. olivacea* 'Tears of Tony'. An epithet occasionally seen in cultivation alongside the name of Steven Hammer. However, it is unclear how this differs from var. *olivacea* and there has been no published description. An unaccepted epithet.

'Top Red'

Lithops karasmontana subsp. *karasmontana* var. *karasmontana* 'Top Red'. First published by the *International Succulent Institute of Japan* under the presidency of Hiroshi Kobayashi in "Succulents (Volume 1): 219. 2004". Image example: Photograph accompanying the protologue taken by Yasuhiko Shimada of Japan. A vibrant red mesh patterned cultivar.

*'Triebneri'

**L. schwantesii* 'Triebneri'. In 2011 this epithet was presented in cultivar format by the *International Succulent Institute of Japan* (ISIJ) on page 221 of *Succulents* (Volume 2) compiled by Hiroshi Kobayashi and Mitsuo Ekuma. However, as recorded on page 347 of *Lithops - Flowering Stones* by DT & NA Cole (2005), *'Triebneri' is not distinct from *L. schwantesii* subsp. *schwantesii* var. *schwantesii*.

*'Umdausensis'

**L. marmorata* 'Umdausensis'. This Latin based epithet was unintentionally published in cultivar format (personal comment) by Terry Smale in the "Seed Distribution List" of the *Mesemb Study Group Bulletin* vol. 28(1) pp.5-7 (2013), numbered 2807. Further, and as recorded on page 347 of *Lithops - Flowering Stones* by DT & NA Cole (2005), *'Umdausensis' is not distinct from *L. marmorata* var. *marmorata*.

'Valley Girl'

Lithops vallis-mariae 'Valley Girl'. First published by Steven Hammer in "New Cultivars in *Lithops. Piante Grasse Speciale 1995. Supplemento al n. 4 di Piante Grasse* 15(4): 49. 1995", originating from Jane Evans. Nomenclatural standard: Photograph in 'Lithops Scrapbook part 1', *Cactus World*, 25 (4): pp. 185-197 (2007), page 196, figure 25, 2007, taken by Tim Jackson of the USA. The provisional epithet of *'Buttermilk Valley' was rejected. A stabilised white flowering aberration with normal body colours.

'Ventergreen'

Lithops lesliei subsp. *lesliei* var. *venteri* 'Ventergreen'. First published by Yasuhiko Shimada in "Two new Lithops cultivars, *Mesemb Study Group Bulletin* 21(4): 78-79. 2006". Image example: Photograph accompanying the protologue, taken by Yasuhiko Shimada of Japan. A stabilised green bodied aberration.

'Verdigris'

Lithops verruculosa var. *verruculosa* 'Verdigris'. First published by Steven Hammer in "*Lithops-Treasures of the veld*: 100, 111. 1999". Nomenclatural standard: Photograph figure 195, on page 100 accompanying the protologue, taken by Chris Barnhill of the USA. A green bodied aberration that has normal var. *verruculosa* flower colours.

*'Vermiculate'

**L. hookeri* 'Vermiculate'. This epithet was unintentionally published in cultivar format (personal comment) by Terry Smale in the "Seed Distribution List" of the *Mesemb Study Group Bulletin* vol. 24(1) pp.3-4 (2009). Further, and as recorded on page 348 of *Lithops - Flowering Stones* by DT & NA Cole (2005), *'Vermiculate' is not distinct from *L. hookeri* var. *hookeri*.

*'Vermil Lip'

**L. karasmontana* 'Vermil Lip'. An epithet offered on the website (www.conos-paradise.com) as "L69-26: Lithops karasmontana 'Vermil Lip", but without a description or photograph. An unaccepted epithet.

'Vertigo'

Lithops gracilidelineata subsp. *brandbergensis* 'Vertigo'. First published by Steven Hammer in "Two new *Lithops* cultivars, *Mesemb Study Group Bulletin* 18(3): 66. 2003", originating from Frik du Plooy. Nomenclatural standard: Photograph in '*Lithops Scrapbook part 2*', *Cactus World*, 26 (1): pp. 21-27 page 24, figure 8, 2008, taken by Kevin Mason of Carmarthen, Wales. The name is in reference to the wild habitat of subsp. *brandbergensis* on top of the Brandberg Mountains in Namibia, and also a "tongue-in-cheek" use of the word "vert" which is French for green. Vince Formosa of Leeds (personal comment) once indicated that he intended to use the name *'Greenberg' for this cultivar, but was beaten to it by Steven Hammer. A stabilised green bodied aberration.

'Violetta'

Lithops terricolor 'Violetta'. First published under the species name of *localis* (which he considers to be the correct species name) by Steven Hammer in "New Cultivars in *Lithops*, *Piante Grasse Speciale* 1995. *Supplemento al n. 4 di Piante Grasse* 15(4): 48. 1995". Nomenclatural Standard: Photograph figure 115 on page 71 in *Lithops - Treasures of the Veld* 1999, taken by Chris Barnhill of the USA. A reddish-violet bodied cultivar.

*'Vivid Green'

**L. lesliei* subsp. *lesliei* var. *lesliei* 'Vivid Green'. Once offered by Vince Formosa of the now defunct "Parkways *Lithops*" without a description. Vince Formosa of Leeds (personal comment) once indicated that this was a green bodied, white flowering plant identical to the first published 'Albinica', but originated from C5 a differing colony. A synonym of 'Albinica' (which originated from C36).

*'Wheyward, Ho!'

**L. geyeri* 'Wheyward, Ho!'. Mentioned by Steven Hammer as a single white flowering specimen in the *Mesemb Study Group Bulletin* vol. 31 (4) p.96 (2016). An unaccepted epithet.

*'White Flower'

**L. lesliei* subsp. *lesliei* var. *mariae* 'White Flower'. Mentioned as a single specimen in the *Mesemb Study Group Bulletin* vol. 24 (1) p.14 (2009) with a photograph on page 5, but of dubious identification and probably a hybrid. An unaccepted epithet.

'White Nymph'

Lithops bromfieldii var. *bromfieldii* 'White Nymph'. First published by Yasuhiko Shimada in "A new *Lithops* cultivar, *Mesemb Study Group Bulletin* 17(3): 62. (July) 2002". Nomenclatural Standard: Photograph of budding plant in *The Genus Lithops*, Shimada (2001. 87), taken by Yasuhiko Shimada of Japan and cited in the protologue. A stabilised white flowering aberration.

'White Queen'

Lithops pseudotruncatella subsp. *pseudotruncatella* var. *elisabethiae* 'White Queen'. First published by Hilde Mouton in "White Flowering *Lithops pseudotruncatella* subsp. *pseudotruncatella* var. *elisabethiae*, *Mesemb. Study Group Bulletin* 30(1): 18. (January) 2015", originating from a habitat rescue. Image example: Photograph (Fig 30.10) accompanying the protologue, taken by Hilde Mouton of Namibia. A stabilised white flowering aberration.

'White Rabbit'

Lithops 'White Rabbit'. First published by Eric Collins in "*Lithops White Rabbit*", *Cactus and Succulent Journal* (of The Cactus and Succulent Society of New South Wales Inc.) 30(6): 105-107. (October to December) 2016". Image example: Photograph of plants accompanying the protologue taken by Eric Collins of Snowtown, South Australia. A stabilised hybrid of unknown origin with a lightly marked, convex top and white flowers.

'White Susan'

Lithops hookeri var. *susannae* 'White Susan'. First published by Francois Hoes in "'White Susan': A New *Lithops* Cultivar, *Mesemb Study Group Bulletin* 31(4): 98. (October) 2016". Image example: Photograph of plants accompanying the protologue taken by Francois Hoes of Belgium. A stabilised aberration that has white flowers with a yellow centre.

*'Whitfield'

**L. bromfieldii* 'Whitfield. The 'Whitfield' epithet was mentioned as a "provisional coinage" without speech marks by Steven Hammer in the *Mesemb Study Group Bulletin* vol. 9, p. 51 (1994), pertaining to a single specimen and with no description. An unaccepted epithet.

'Witblom'

Lithops lesliei subsp. *lesliei* var. *minor* 'Witblom'. On the basis of a single specimen, this epithet was published by Professor Desmond Cole in "Some *Lithops* Cultivars, *Aloe* 22(3): 58-62. 1985", and later appeared in "*Lithops - Flowering Stones*: 166: 1988". Following successful propagation this was accepted and discussed as a cultivar by Steven Hammer in "*Lithops - Treasures of the Veld*: 85. 1999". The originator of this cultivar was Professor Desmond Cole. Image example: Photograph bottom right on page 225 in *Lithops - Flowering Stones* 2005. A stabilised white flowering aberration.

'Witspook'

Lithops schwantesii subsp. *schwantesii* var. *urikosensis* 'Witspook'. First published by Tim Jackson in "White Flowered *Lithops schwantesii* Update, *Mesemb Study Group Bulletin* 32(4): 87. (October) 2017", originating from Ken Palmer. Previously in "A White Ghost Among *Lithops*, *Mesemb Study Group Bulletin* 23(1): 25. (January) 2008", Ken stated this white flowering aberration was once known as '*Jeanett's Pearl', but never established as such. Although Ken proposed the name of 'Witspook' in the same article, the epithet was not then established because available printed matter inferred no plants were in existence at that time. However, cross referencing of Tim's article and photographs confirm the lineage, and establish the cultivar. The 'Witspook' title was suggested by Steven Hammer, and translates from Afrikaans into English as "White Ghost". Image example: Photographs available at www.filefactory.com/folder/35664aa84c1b3b7b taken by Tim Jackson of the USA. A stabilised white flowering aberration.

*'Wrinkle Freddy'

**L. karasmontana* 'Wrinkle Freddy'. One of a myriad of unsubstantiated and unpublished titles occasionally seen on the Internet. An unaccepted epithet.

*'Yellow Green'

**L. gracilidelineata* subsp. *brandbergensis* 'Yellow Green'. Appeared (as not available) on the Frik du Plooy 2015 seed list with no description, numbered F052. This may not differ from 'Vertigo'. Currently an unacceptable epithet.

*'Yellow Green form'

**L. otzeniana* 'Yellow Green form'. The epithet (including a lower case "f") with a photograph and a description in Japanese appeared in the book *Succulents* (Volume 1) on page 221, 2004, published by the *International Succulent Institute of Japan* (ISIJ) under the presidency of Hiroshi Kobayashi. The word "form" is not allowed in cultivar names. An unaccepted epithet.

'Yunmeng Lake ZW'

Lithops julii subsp. *julii* 'Yunmeng Lake ZW'. First published as '*Yunmeng Lake' by Zhang Shijia and Wei Zichu in "A New Pattern Cultivar: *Lithops* (Dint. & Schant.) N.E.Br. subsp. *julii* cv. 'Yunmeng Lake', *Mesemb Study Group Bulletin* 33(2): 47. (May) 2018", but corrected to 'Yunmeng Lake ZW' in the *Mesemb Study Group Bulletin* 33(3): 63. (August) 2018". Image Example: Four photographs accompanying the protologue, figures 33.59 – 33.62 on page 45, taken by Zhang Shijia and Wei Zichu of China. The epithet is the name of an ancient lake in mainland China, now greatly reduced in size. A green cultivar with "hoar frost" windows and a distinct facial boarder.

*'Zebra'

**L. karasmontana* subsp. *eberlanzii* 'Zebra'. Appeared on the January 2007 Mesa Garden seed list numbered 1625.763, with the description "prominent z stripes". However, in an e-mail to Keith Green dated 13 June 2007, Steven Brack of Mesa Garden, New Mexico, USA, said the plants were not distinctive and should not have been published in cultivar format. This is simply *Lithops karasmontana* subsp. *eberlanzii*.

'Zorro'

Lithops dorotheae 'Zorro'. First published by Steven Hammer in "Two new *Lithops* cultivars, *Mesemb Study Group Bulletin* 18(3): 66. 2003", originating from Ed Storms of Azle, Texas, USA. Nomenclatural standard: Photograph in 'Lithops Scrapbook part 2', *Cactus World*, 26 (1): pp. 21-27 page 23, figure 6, 2008, taken by Chris Barnhill of the USA. A lightning-bolt patterned cultivar.