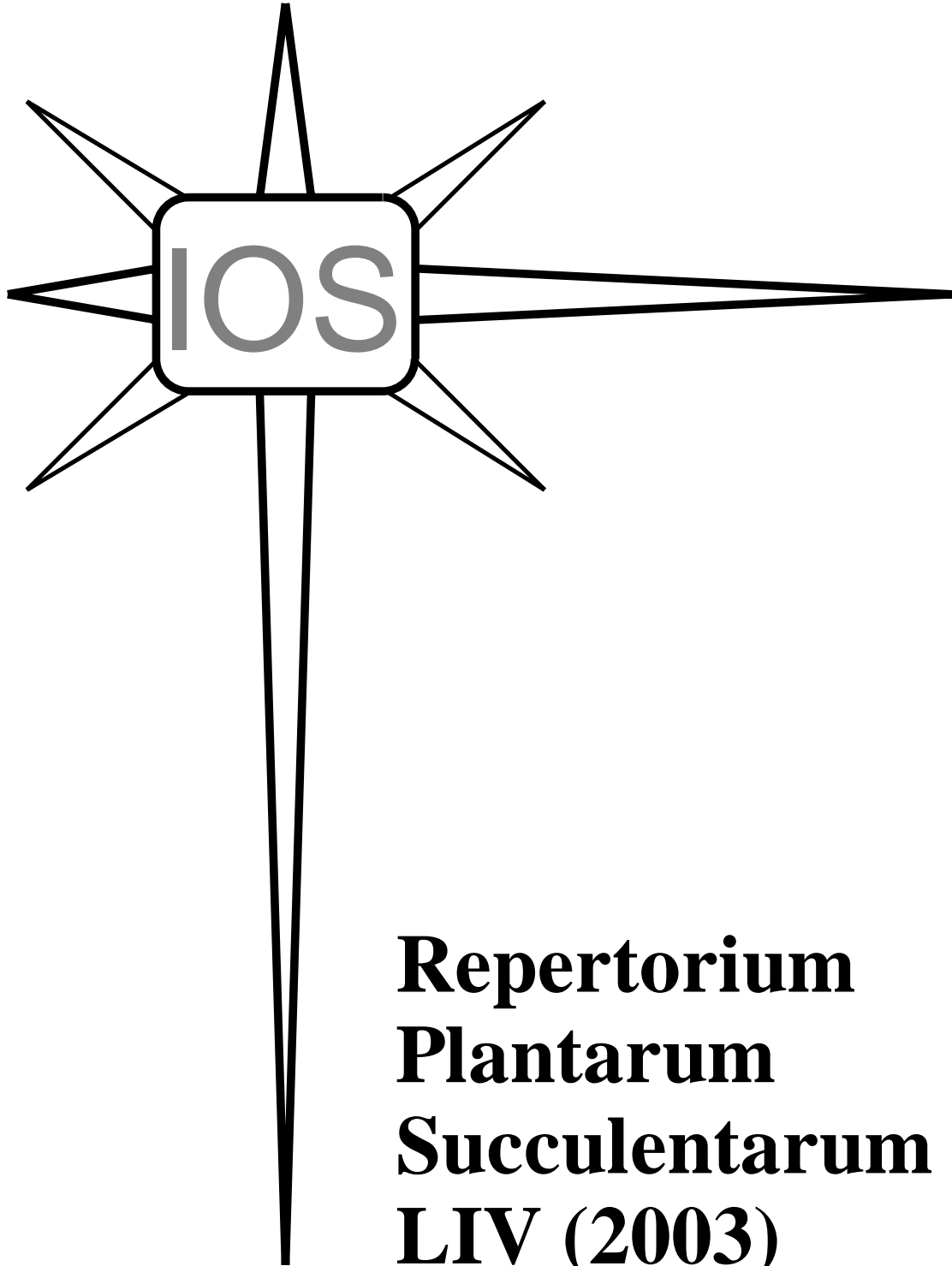


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**Repertorium  
Plantarum  
Succulentarum  
LIV (2003)**

# Repertorium Plantarum Succulentarum LIV (2003)

*Index nominum novarum plantarum succulentarum anno MMIII  
editorum nec non bibliographia taxonomica ab U. Eggli et D. C. Zappi  
compositus.*

International Organization for Succulent Plant Study  
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### Conventions used in Repertorium Plantarum Succulentarum

- Repertorium Plantarum Succulentarum attempts to list, under separate headings, newly published names of succulent plants and relevant literature on the systematics of these plants, on an annual basis. New names noted after the issue for the relevant year has gone to press are included in later issues. Specialist periodical literature is scanned in full (as available at the libraries at ZSS and Z or received by the compilers). Also included is information supplied to the compilers direct. It is urgently requested that any reprints of papers not published in readily available botanical literature be sent to the compilers.
- Validly published names are given in **bold face** type, accompanied by an indication of the nomenclatural type (name or specimen dependent on rank), followed by the herbarium acronyms of the herbaria where the holotype and possible isotypes are said to be deposited (first acronym for holotype), according to Index Herbariorum, ed. 8 and supplements as published in Taxon. Invalid, illegitimate, or incorrect names are given in *italic* type face. In either case a full bibliographic reference is given. For new combinations, the basionym is also listed. For invalid, illegitimate or incorrect names, the articles of the ICBN which have been contravened are indicated in brackets (note that the numbering of some regularly cited articles has changed in the Tokyo (1994) edition of ICBN).
- The compilers would like to point out that they do not accept any names that might be inadvertently validated in this volume of RPS.
- Bibliographic details of papers dealing only with the description of one or two new taxa are not repeated in the bibliographic section.
- Abbreviations for periodicals are those suggested in 'Bibliography of Succulent Plant Periodicals' (U. Eggli in Friciana 60: 1-139, 1998 ('1995')) for specialized periodicals, or those of Bibliographia Periodicorum Huntianum (including Supplement) for most other periodicals.

### Konventionen im Zusammenhang mit dem Repertorium Plantarum Succulentarum

- Das Repertorium Plantarum Succulentarum ist eine jährlich herausgegebene Zusammenstellung neuer Namen für sukkulente Pflanzen und der relevanten systematischen Literatur. Neue Namen, die nach der Drucklegung der Ausgabe des betreffenden Jahres bekannt werden, erscheinen in der nächsten erreichbaren Ausgabe. Spezialisierte Zeitschriften werden umfassend durchgesehen, soweit sie in den Bibliotheken von Z und ZSS vorhanden sind oder den Herausgebern privat vorliegen. Die Herausgeber bitten alle Autoren dringend, Separata relevanter Publikationen zur Verfügung zu stellen, vor allem wenn es sich um Beiträge in schwer zugänglichen Serien handelt.
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- Die Herausgeber weisen mit aller Deutlichkeit darauf hin, dass sie keinen Namen anerkennen, der zufälligerweise in dieser Ausgabe des RPS validiert worden sein könnte.
- Beiträge, welche nur Beschreibungen eines oder zweier Taxa enthalten, werden in der bibliographischen Liste nicht separat aufgeführt.
- Die Abkürzungen für spezialisierte Sukkulente-Zeitschriften richten sich nach 'Bibliography of Succulent Plant Periodicals' (U. Eggli in Friciana 60: 1-139, 1998 ('1995')), für allgemeine botanische Zeitschriften in der Regel nach Bibliographia Periodicorum Huntianum und Supplement.

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### **Compilers' Preface**

Thanks go once again to Reto Nyffeler and Beat Leuenberger for their special help with obscure literature and references to general botanical journals. As in previous years, Nigel P. Taylor as well as the Index Kewensis team and Katherine Challis have willingly discussed nomenclatural issues. Harry Mak has kindly supplied corrections to previous issues, and this help is also appreciated. Wolfgang Papsch has supplied bibliographical details of obscure references, and we are very grateful for his contributions. Finally, we are especially grateful to all those authors – members of IOS or not – that have supplied the ZSS library with separate prints of their papers. Their kindness has facilitated the compilation of this Repertorium. In this context, we should like to remind all those publishing on succulent plants in "general" botanical journals to supply a reprint to the IOS archives at the Sukkulenten-Sammlung Zürich.

### **Vorwort der Herausgeber**

Einmal mehr geht unser Dank an Reto Nyffeler und Beat Leuenberger für ihre Hilfe im Zusammenhang mit Beiträgen aus allgemeinen botanischen Zeitschriften und bei der Klärung unvollständiger Literaturzitate. Wie in den Vorjahren konnten wir für nomenklatorische Zweifelsfälle Nigel P. Taylor sowie das Index Kewensis Team und Katherine Challis in Anspruch nehmen, und für diese Hilfe sind wir sehr dankbar. Wolfgang Papsch hat uns verdankenswerterweise bei der Vervollständigung der bibliographischen Details einiger unklarer Zitate unterstützt. Schliesslich sind wir allen Autoren – seien es Mitglieder der IOS oder nicht – dankbar, welche die Bibliothek der Sukkulenten-Sammlung Zürich (ZSS) durch Separatdrucke ihrer Arbeiten unterstützt und dadurch die Zusammenstellung des Repertoriums erleichtert haben. In diesem Zusammenhang dürfen wir diejenigen Autoren, welche in "allgemeinen" botanischen Zeitschriften veröffentlichen, daran erinnern, das IOS-Archiv in der Sukkulenten-Sammlung Zürich mit einem Separatdruck ihrer Beiträge zu bedienen.

### Corrections to previous volumes

- The cultivar *Hylotelephium* 'Kurt Weckstrom' was first published as *H. populifolium* 'Kurt Weckstrom' (and was included as such in RPS 53), but since it is a hybrid, the name should be amended as shown above.
- The cultivar name *Haworthia* 'Moori Nosono' was subsequently (*Alsterworthia* Internat. 3(3): 14, 2003) corrected to 'Mori-no-Sono'.
- The name *Cylindropuntia densispina* in RPS 53 is erroneous, and it should have been listed as *Grusonia densispina*. This latter combination is ascribed to Pinkava in the original publication but must be attributed to Rebman in accordance with ICBN Art. 46.4, Ex. 19.

### Korrekturen zu früheren Bänden

- Der Cultivar *Hylotelephium* 'Kurt Weckstrom' wurde zuerst als *H. populifolium* 'Kurt Weckstrom' veröffentlicht (und im RPS 53 auch entsprechend aufgelistet), aber da es sich um eine Hybride handelt, sollte der Name wie vorstehend genannt korrigiert werden.
- Der Cultivarnamen *Haworthia* 'Moori Nosono' wurde nach der Erstpublikation zu 'Mori-no-Sono' korrigiert (*Alsterworthia* Internat. 3(3): 14, 2003).
- Der Name *Cylindropuntia densispina* im RPS 53 ist falsch und hätte als *Grusonia densispina* aufgeführt werden sollen. Diese Kombination wird in der Originalpublikation Pinkava zugeschrieben, aber gemäss ICBN Art. 46.4, Ex. 19, ist als Autor Rebmann zu nennen.

## NOMINA NOVA

## AGAVACEAE

- Agave rzedowskiana** P. Carrillo & al., *Brittonia* 55(3): 240-242, ills., 2003. Typus: *Carrillo-Reyes et Cabrera* 1503 (IBUG, GUADA, MEXU, NY).
- Hesperaloe chiangii** (G. D. Starr) B. L. Turner, *Lundellia* 5: 39, 2002. Basionym: *Hesperaloe funifera* ssp. *chiangii*. [Omitted previously.]
- Polianthes multicolor** E. Solano & Dávila, *Novon* 13(1): 119-121, ills., 2003. Typus: *Solano C. et Correa D.* 871 (MEXU, CHAPA, ENCB, FEZA, IEB, MO, NY, RSA, UAMI, US).
- Yucca cernua**, *Sida* 20(3): 892-893, ills., 2003. Typus: *Keith* 183 (TEX, BRIT, SHSU).

## AIZOACEAE

- Acrodon deminutus** Klak, *Bradleya* 21: 118, figs. 12-13 (p. 116), 2003. Typus: *Bruyns* 6854 (BOL).
- Antimima viatorum** (L. Bolus) Klak, *Bradleya* 21: 110, 2003. Basionym: *Mesembryanthemum viatorum*.
- Brianhunleya** Chesselet & al., *Bothalia* 33(2): 161, 2003. Typus: *Mesembryanthemum intrusum* Kensis.
- Brianhunleya intrusa** (Kensis) Chesselet & al., *Bothalia* 33(2): 161, 2003. Basionym: *Mesembryanthemum intrusum*.
- Brownanthus lignescens** Klak, *Bradleya* 21: 114-115, fig. 9 (p. 116), 2003. Typus: *Klak* 861 (BOL, K, MO).
- Cephalophyllum griseum** (S. A. Hammer & Schmiedel) H. E. K. Hartmann, *Cact. Succ. J. (US)* 75(4): 170, 2003. Basionym: *Hallianthus griseus*.
- Conophytum tomasii* Halda, *Acta Mus. Richnov. Sect. Nat.* 9(1): 11-12, fig. 15, 2003. Based on *Halda* 97080130. *Nom. illeg.* (Art. 52.1). [Dated 2002, publ. April 2003. First published invalidly (Art. 37.5) in *l.c.* 5(5): 184, 1998 (as 'tomasii'). Illegitimate since *C. hanae* Pavelka 1999 is cited in the synonymy, though that name is interpreted to be invalid under Art. 37.3 by Halda.]
- Delosperma alpinum** (N. E. Brown) S. A. Hammer & A. P. Dold, *Haseltonia* 9: 40, ills. (p. 35), 2003. Basionym: *Ectotropis alpina*. [Dated 2002, publ. Nov. 2003.]
- Drosanthemum quadratum** Klak, *Bradleya* 21: 117, fig. 10 (p. 116), 2003. Typus: *Bruyns* 7812 (BOL).
- Erepsia simulans** (L. Bolus) Klak, *Bradleya* 21: 110, 2003. Basionym: *Lampranthus simulans*.
- Esterhuysenia mucronata** (L. Bolus) Klak, *Bradleya* 21: 108, fig. 2, 2003. Basionym: *Lampranthus mucronatus*.

- Lampranthus procumbens** Klak, *Bradleya* 21: 119, figs. 14 (p. 116), 2003. Typus: *National Geographic - ICP Tour* 188 (BOL).
- Lithops aucampiae** ssp. **euniceae** 'Bellaketty' Piccione, *Cact. Succ. J. (US)* 75(4): 152-153, ills., 2003.
- Lithops dorotheae** 'Zorro' S. A. Hammer, *Mesemb Study Group Bull.* 18(3): 66, 2003.
- Lithops gracilidelineata** ssp. **brandbergensis** 'Vertigo' S. A. Hammer, *Mesemb Study Group Bull.* 18(3): 66, 2003.
- Phiambolia** Klak, *Bradleya* 21: 112, 2003. Typus: *Stoeberia hallii* L. Bolus.
- Phiambolia francisci** (L. Bolus) Klak, *Bradleya* 21: 112, fig. 6 (p. 109), 2003. Basionym: *Lampranthus francisci*. [Sphalm. 'franciscii'.]
- Phiambolia hallii** (L. Bolus) Klak, *Bradleya* 21: 112, fig. 5 (p. 109), 2003. Basionym: *Stoeberia hallii*.
- Phiambolia incumbens** (L. Bolus) Klak, *Bradleya* 21: 112, 2003. Basionym: *Ruschia incumbens*.
- Phiambolia mentiens** Klak, *Bradleya* 21: 113, figs. 4, 7 (p. 109), 2003. Typus: *Klak* 417a (BOL).
- Phiambolia persistens** (L. Bolus) Klak, *Bradleya* 21: 114, 2003. Basionym: *Mesembryanthemum persistens*.
- Phiambolia stayneri** (L. Bolus ex Tölken & Jessop) Klak, *Bradleya* 21: 113, 2003. Basionym: *Amphibolia stayneri*.
- Phiambolia unca** (L. Bolus) Klak, *Bradleya* 21: 114, fig. 8 (p. 109), 2003. Basionym: *Mesembryanthemum uncam*.
- ×**Prepopsis** S. A. Hammer, *Mesemb Study Group Bull.* 18(4): 78, 2003. [= *Prepodesma* × *Aloinopsis*.]
- ×**Woolgathera** S. A. Hammer, *Mesemb Study Group Bull.* 18(2): 33, 2003. *Nom. inval.* (Art. H6.2). [= *Wooleya* × *Enarganthe*.]

## ALOEACEAE

- Aloe** 'Blimey Limey' J. Bleck *ex* Trager, *Cact. Succ. J. (US)* 75(2): 71, ill., 2003. [A complex hybrid including *A. bakeri* in the parentage.]
- Aloe** 'Jacobs Ladder' J. Bleck *ex* Trager, *Cact. Succ. J. (US)* 75(2): 72, ill., 2003. [A hybrid from cultivation with *A. dawei* as one possible parent.]
- Aloe** 'Tangerine' J. Bleck *ex* Trager, *Cact. Succ. J. (US)* 75(2): 73, ill., 2003. [Material of unknown origin, perhaps a spontaneous seedling of *Aloe* × *principis* (= *A. aborescens* × *A. ferox*).]
- Aloe austroarabica** McCoy & Lavranos, *Cact. Succ. J. (US)* 75(3): 123-124, ills., 2003. Typus: *McCoy* 969 (MO, P).
- Aloe bruynsii** P. I. Forster, *Bradleya* 21: 53-55, ills., 2003. Typus: *Bruyns* 5962A (BRI, BOL,

- K, MO, P).
- Aloe camperi** 'Cornuta' Trager, Cact. Succ. J. (US) 75(2): 71, ill., 2003. [A horticultural selection of material of unknown provenance. Epithet derived from *A. eru* var. *cornuta* A. Berger 1908.]
- Aloe clarkei** L. E. Newton, *Haseltonia* 9: 15-16, ill., 2003. Typus: *Clarke* s.n. in L. E. Newton 5676 (EA). [Dated 2002, publ. Nov. 2003.]
- Aloe craibii** G. F. Smith, *Bradleya* 21: 26-28, ill., 2003. Typus: *Condy et Craib* 148 (PRE).
- Aloe droseroides** Lavranos & T. A. McCoy, Cact. Succ. J. (US) 75(6): 256-258, ill., 2003. Typus: *Lavranos et McCoy* 31680 (MO, P, TAN).
- Aloe inexpectata** Lavranos & T. A. McCoy, Cact. Succ. J. (US) 75(6): 258-261, ill., 2003. Typus: *Lavranos et McCoy* 31681 (MO, P, TAN).
- Aloe mandotoensis** Castillon, J. Bot. Soc. Bot. France 21: 7, 2003. Typus: *Castillon* 3 (P).
- Haworthia** 'Brian Fearn' Mak, *Haworthiad* 17(3): 103, fig. 20 (p. 105), 2003. [= *H. truncata* var. *maughanii* × *H. cooperi* var. *pilifera*?]
- Haworthia** 'Crystal Tips' Mak, *Haworthiad* 17(3): 103, fig. 21 (p. 106), 2003. [An *H. truncata* hybrid.]
- Haworthia** 'Gray Salt' J. Bleck *ex* Trager, Cact. Succ. J. (US) 75(2): 77, ill., 2003. [= *H. truncata* × *H. angustifolia*.]
- Haworthia** 'Green Gem' T. Ohkuwa *ex* Mak, *Haworthiad* 17(3): 103-104, fig. 22 (p. 106), 2003. [= *H. truncata* var. *maughanii* × *H. bolusii* var. *blackbeardiana*.]
- Haworthia** 'Green Hairy Crab' Mak, *Haworthiad* 17(3): 104, fig. 23 (p. 106), 2003. [An *H. truncata* hybrid.]
- Haworthia** 'Rose Green' Mak, *Alsterworthia Internat.* 3(2): 7, ill., 2003. [= *Haworthia truncata* × *H. asperula*.]
- Haworthia** 'Ruby Star' Mak, *Alsterworthia Internat.* 3(2): 7, ill., 2003. [= *Haworthia mirabilis* var. *badia* × *H. retusa*.]
- Haworthia** 'Zenigata' Mak, *Alsterworthia Internat.* 3(1): 4, ill. (p. 3), 2003. [Based on *Haworthia zenigata* M. Hayashi 2001.]
- Haworthia azurea** M. Hayashi, *Haworthia Study* No. 9: 11-12, ill., 2003. Typus: *Hayashi* 03-257 (Res. Inst. Evol. Biol., Tokyo).
- Haworthia decipiens* var. *scottiana* M. Hayashi, *Haworthia Study* No. 9: 13, ill., 2003. *Nom. inval.* (Art. 36.1, 37.1).
- Haworthia devriesii** Breuer, *Avonia* 21(3): 47, ill., 2003. Typus: *de Vries* 643 in *Breuer* 6930 (Res. Inst. Evol. Biol. Tokyo). [First published as provisional name in *Alsterworthia Internat.* 2(3): 3, ill., 2002 (cf. RPS 53).]
- Haworthia elizae** Breuer, *Avonia* 21(3): 48-49, ill., 2003. Typus: *de Vries* 563 in *Breuer* 6936 (Res. Inst. Evol. Biol. Tokyo). [= *H. esterhuizenii* Breuer 2002 (*nom. inval.*), cf. l.c. p. 46.]
- Haworthia gracilis* var. *minor* (M. B. Bayer) M. Hayashi, *Haworthia Study* No. 9: 12, 2003. *Nom. inval.* (Art. 33.3), based on *Haworthia decipiens* var. *minor*.
- Haworthia intermedia** var. *maculata* (von Poellnitz) J. Esterhuizen, *Alsterworthia Internat.* 3(1): 12, ill., 2003. Basionym: *Haworthia schuldiana* var. *maculata*. [Sphalm. 'maculate'.]
- Haworthia intermedia** var. *notabilis* (von Poellnitz) J. Esterhuizen, *Alsterworthia Internat.* 3(1): 12, ill., 2003. Basionym: *Haworthia notabilis*.
- Haworthia kemari** M. Hayashi, *Haworthia Study* No. 9: 11, ill., 2003. Typus: *Hayashi* 03-283 (Res. Inst. Evol. Biol., Tokyo).
- Haworthia leightonii** var. *davidii* Breuer, *Avonia* 21(3): 49-50, ill., 2003. Typus: *Cumming* 4711 in *Breuer* 6970 (Res. Inst. Evol. Biol. Tokyo). [First published as provisional name in *Alsterworthia Internat.* 2(3): 4-5, ill., 2002 (cf. RPS 53).]
- Haworthia limifolia** var. *glaucophylla* M. B. Bayer, *Aloe* 40(2): 50, ill. (pp. 44, 49), 2003. Typus: *Venter* 13700 (NBG).
- Haworthia minima* 'Opalina' Mak, *Alsterworthia Internat.* 3(1): 4, 2003. *Nom. inval.* (Art. 43.1). [Based on *Haworthia opalina* M. Hayashi 2001.]
- Haworthia mucronata** var. *calitzdorpensis* Breuer, *Avonia* 21(3): 50-51, ill., 2003. Typus: *Cumming* 4712 in *Breuer* 6595 (Res. Inst. Evol. Biol. Tokyo). [First published as provisional name in *Alsterworthia Internat.* 2(3): 4-5, ill., 2002 (cf. RPS 53).]
- Haworthia odetteae** Breuer, *Avonia* 21(3): 51-52, ill., 2003. Typus: *Cumming* 8604 in *Breuer* 5998 (Res. Inst. Evol. Biol. Tokyo). [First published as provisional name in *Alsterworthia Internat.* 2(3): 5-6, ill., 2002 (cf. RPS 53).]
- Haworthia picta** 'Mosaic' M. Hayashi, *Haworthia Study* No. 9: 3, ill., 2003.
- Haworthia picta** var. *janvlokii* Breuer, *Avonia* 21(3): 52-53, ill., 2003. Typus: *de Vries* 055 in *Breuer* 5334 (Res. Inst. Evol. Biol. Tokyo). [First published as provisional name in *Alsterworthia Internat.* 2(3): 5-6, ill., 2002 (cf. RPS 53).]
- Haworthia picta** var. *tricolor* Breuer, *Avonia* 21(3): 53-54, ill., 2003. Typus: *Marx* 256 in *Breuer* 5338 (Res. Inst. Evol. Biol. Tokyo). [First published as provisional name in *Alsterworthia Internat.* 2(3): 5-6, ill., 2002 (cf. RPS 53).]
- Haworthia schoemaniai** M. Hayashi, *Haworthia Study* No. 9: 14, ill., 2003. Typus: *Hayashi* 03-309 (Res. Inst. Evol. Biol., Tokyo).
- Haworthia scottii** Breuer, *Avonia* 21(3): 55-56, ill., 2003. Typus: *Venter* 92-57 in *Breuer* 6510 (Res. Inst. Evol. Biol. Tokyo). [First published as provisional name in *Alsterworthia Internat.* 2(3): 5-6, ill., 2002 (cf. RPS 53).]
- Haworthia tradouwensis** Breuer, *Avonia* 21(3): 57-58, ill., 2003. Typus: *Venter* 93-59 in *Breuer* 7170 (Res. Inst. Evol. Biol. Tokyo). [First published as provisional name in *Alsterworthia Internat.* 2(3): 6-7, ill., 2002 (cf. RPS 53).]
- Haworthia tretyrensis** Breuer, *Avonia* 21(3): 58-59, ill., 2003. Typus: *de Vries* 219 in *Breuer* 5372 (Res. Inst. Evol. Biol. Tokyo). [Type

number first given incorrectly and corrected l.c. 22(1): 20, 2004. First published as provisional name in *Alsterworthia* Internat. 2(3): 6-7, ill., 2002 (cf. RPS 53).]

- Haworthia truncata** var. **minor** Breuer, *Avonia* 21(3): 59-60, ill., 2003. Typus: *de Vries* 124 in *Breuer* 5379 (Res. Inst. Evol. Biol. Tokyo). [First published as provisional name in *Alsterworthia* Internat. 2(3): 6-7, ill., 2002 (cf. RPS 53).]
- Haworthia virella** (M. B. Bayer) M. Hayashi, *Haworthia* Study No. 9: 12, 2003. Basionym: *Haworthia decipiens* var. *virella*.
- Haworthia viscosa** var. **variabilis** Breuer, *Avonia* 21(3): 61-62, ill., 2003. Typus: *Cumming* 8979 in *Breuer* 7193 (Res. Inst. Evol. Biol. Tokyo). [Erratum: l.c. 22(1): 20, 2004. First published as provisional name in *Alsterworthia* Internat. 2(3): 6-7, ill., 2002 (cf. RPS 53).]

## ASCLEPIADACEAE

- Brachystelma franksiae** ssp. **grandiflorum** A. P. Dold & Bruyns, *Bothalia* 33(1): 105-106, ill., 2003. Typus: *Dold* 4425 (GRA, BOL).
- Caralluma munbyana** ssp. **hispanica** (Coincy) M. B. Crespo & Mateo, *Acta Bot. Malacit.* 20: 285, 1995. Basionym: *Boucerosia munbyana* var. *hispanica*. [Previously omitted.]
- Ceropegia burgeri** M. G. Gilbert, *Nordic J. Bot.* 22(2): 208, ill. (p. 207), 2003. Typus: *Burger* 2071 (K, ETH). [Dated 2002 on the cover, received at Z 18. 3. 2003.]
- Ceropegia craibii** Victor, *Curtis's Bot. Mag.*, ser. nov., 18(4): 212-213, t. 430, 2001. Typus: *Condy* 119 (PRE). [Previously omitted.]
- Ceropegia erergotana** M. G. Gilbert, *Nordic J. Bot.* 22(2): 206-208, ill., 2003. Typus: *de Wilde et Gilbert* 446 (K, WAG). [Dated 2002 on the cover, received at Z 18. 3. 2003.]
- Ceropegia leptophylla** Bruyns, *Kew Bull.* 58(2): 430-432, ill., 2003. Typus: *Bruyns* 4906 (BOL, K).
- Ceropegia microgaster** M. G. Gilbert, *Nordic J. Bot.* 22(2): 206, ill. (p. 207), 2003. Typus: *Gilbert et Thulin* 775 (K, ETH, UPS). [Dated 2002 on the cover, received at Z 18. 3. 2003.]
- Ceropegia moyalensis** (H. Huber) M. G. Gilbert, *Nordic J. Bot.* 22(2): 209, 2003. Basionym: *Ceropegia stenoloba* var. *moyalensis*. [Dated 2002 on the cover, received at Z 18. 3. 2003.]
- Ceropegia namaquensis** Bruyns, *Kew Bull.* 58(2): 427-429, ill., 2003. Typus: *Bruyns* 8300 (BOL, K).
- Ceropegia recurvata** M. G. Gilbert, *Nordic J. Bot.* 22(2): 205, ill. (p. 207), 2003. Typus: *Gilbert et Thulin* 627 (K, ETH, MO, UPS). [Dated 2002 on the cover, received at Z 18. 3. 2003.]
- Dischidia boholensis** (Schlechter) Livshultz, *Taxon* 52(3): 597, ill. (p. 596, 598-599), 2003. Basionym: *Dolichostegia boholensis*.
- Dischidia cleistantha** Livshultz, *Novon* 13(1): 89-91, ill., 2003. Typus: *Merrill* 11639 (K, P, US).
- Echidnopsis fartaqensis** T. A. McCoy & Orlando, *Cact. Succ. J. (US)* 75(3): 116, ill. (pp. 116-119), 2003. Typus: *McCoy* 2452 (MO, P).
- Echidnopsis oviflora** T. A. McCoy, *Kakt. and Sukk.* 54(8): 214-215, ill. (pp. 211-213), 2003. Typus: *Specks* 1264 (MO, UPS).
- Echidnopsis specksii** T. A. McCoy, *Kakt. and Sukk.* 54(8): 215-216, ill. (pp. 213-216), 2003. Typus: *Specks* 787 (MO, UPS).
- Hermanschwartzia** Plowes, *Excelsa* No. 20: 12, 2003. Typus: *Pectinaria exasperata* Bruyns.
- Hermanschwartzia exasperata** (Bruyns) Plowes, *Excelsa* No. 20: 17, ill. (p. 13), 2003. Basionym: *Pectinaria exasperata*.
- Hoya bicolor** Kloppenburg, *Fraterna* 16(1): 1-4, ill. (incl. cover-ill.), 2003. Typus: *Anonymus in UPLB* s.n. (CAHUP 67050).
- Hoya fetuana** Kloppenburg, *Fraterna* 16(2): 1-4, ill., cover-ill., 2003. Typus: *Whistler* 2865 (UHAW).
- Hoya ×mathilde** Begine & Anonymus, *Fraterna* 16(1): 12-14, ill., 2003. [= *Hoya carmosa* × *H. serpens*.]
- Hoya nyhuusiae** Kloppenburg, *Fraterna* 16(3): 1-6, ill., 2003. Typus: *Nyhuus* 2003 (UC) [Ex cult. T. Nyhuus].]
- Huernia khalidbinsultanii** Plowes & T. A. McCoy, *Cact. Succ. J. (US)* 75(1): 19, ill. (pp. 20-21), 2003. Typus: *McCoy* 2446 (MO, P, SRGH).
- Huernia macrocarpa** ssp. **harerghensis** M. G. Gilbert, *Nordic J. Bot.* 22(2): 209, ill. (p. 207), 2003. Typus: *Gilbert* 4044 (K, ETH). [Dated 2002 on the cover, received at Z 18. 3. 2003.]
- Huernia mccoysi** Plowes, *Cact. Succ. J. (US)* 75(2): 83, ill. (pp. 81-83), 2003. Typus: *McCoy* 2284 (MO, SRGH).
- Neopectinaria** Plowes, *Excelsa* No. 20: 11-12, 2003. Typus: *Pectinaria saxatilis* N. E. Brown.
- Neopectinaria breviloba** (R. A. Dyer) Plowes, *Excelsa* No. 20: 12, ill. (p. 13), 2003. Basionym: *Pectinaria breviloba*.
- Neopectinaria pillansii** (N. E. Brown) Plowes, *Excelsa* No. 20: 12, ill. (p. 14), 2003. Basionym: *Pectinaria pillansii*.
- Neopectinaria saxatilis** (N. E. Brown) Plowes, *Excelsa* No. 20: 12, ill. (pp. 13-14), 2003. Basionym: *Pectinaria saxatilis*.
- Neopectinaria saxatilis** var. **tulipiflora** (C. A. Lückhoff) Plowes, *Excelsa* No. 20: 12, 2003. Basionym: *Pectinaria tulipiflora*.
- Neopectinaria stayneri** (M. B. Bayer) Plowes, *Excelsa* No. 20: 12, ill. (p. 14), 2003. Basionym: *Pectinaria stayneri*.
- Ophionella mirkinii** (Pillans) Plowes, *Excelsa* No. 20: 19, ill. (p. 14), 2003. Basionym: *Pectinaria mirkinii*.
- Orbea doldii** Plowes, *Asklepios* No. 86: 8-9, ill., 2003. Typus: *Dold* 4455 (GRA). [Dated Dec. 2002, received 10. March 2003.]
- Pachycymbium gilbertii** (Plowes) M. G. Gilbert, *Nordic J. Bot.* 22(2): 210, 2003. Basionym:



- Angolluma gilbertii*. [Dated 2002 on the cover, received at Z 18. 3. 2003.]
- Pachycymbium semitubiflorum** (L. E. Newton) M. G. Gilbert, *Nordic J. Bot.* 22(2): 210, 2003. Basionym: *Angolluma semitubiflora*. [Dated 2002 on the cover, received at Z 18. 3. 2003. Sphalm. 'semitubiforme'.]
- Pectinaria borealis** (Bruyns) Plowes, *Excelsa* No. 20: 17, ill. (p. 16), 2003. Basionym: *Pectinaria articulata* ssp. *borealis*.
- Pectinaria flavescens** Plowes, *Excelsa* No. 20: 17-18, ill. (p. 15), 2003. Typus: *Plowes* 7419 (SRGH).
- Pectinaria namaquensis** (N. E. Brown) Plowes, *Excelsa* No. 20: 17, ill. (p. 16), 2003. Basionym: *Pectinaria articulata* var. *namaquensis*.
- Rhytidocaulon splendidum** T. A. McCoy, *Cact. Succ. J. (US)* 75(4): 154-156, ill., 2003. Typus: *McCoy* 2503 (MO, P).
- Sarcostemma oresbium** Bruyns, *Kew Bull.* 58(2): 433-434, ill., 2003. Typus: *Bruyns* 8607 (BOL).
- Stapeliopsis khamiesbergensis** Bruyns, *Aloe* 39(3-4): 81-82, ill., 2003. Typus: *Bruyns* 8249 (BOL). [Dated 2002, received 19. Feb. 2003.]
- Stapeliopsis stayneri** (M. B. Bayer) Bruyns, *Aloe* 39(3-4): 82, 2003. Basionym: *Pectinaria stayneri*. [Dated 2002, received 19. Feb. 2003.]
- Vadulia** Plowes, *Excelsa* No. 20: 18, 2003. Typus: *Caralluma longipes* N. E. Brown.
- Vadulia longipes** (N. E. Brown) Plowes, *Excelsa* No. 20: 19, ill. (p. 16), 2003. Basionym: *Caralluma longipes*.
- Vadulia maughanii** (R. A. Dyer) Plowes, *Excelsa* No. 20: 19, ill. (p. 16), 2003. Basionym: *Caralluma maughanii*.

#### ASPHODELACEAE

- Bulbine alveolata** S. A. Hammer, *Cact. Succ. J. (US)* 75(6): 251-253, ill., 2003. Typus: *Bruyns* 6015 (BOL).
- Bulbine latifolia** var. *curvata* van Jaarsveld, *Aloe* 40(1): 4-5, ill., 2003. Typus: *van Jaarsveld* 13806 (NBG).
- Bulbine meiringii** van Jaarsveld, *Aloe* 40(1): 5-6, ill. (p. 6-7), 2003. Typus: *van Jaarsveld et al.* 12762 (NBG).
- Bulbine melanovaginata** G. Williamson, *Aloe* 40(1): 16-17, ill., 2003. Typus: *Williamson* 5961 (NBG).
- Bulbine navicularifolia** G. Williamson, *Aloe* 40(1): 16, 18-19, ill., 2003. Typus: *Williamson* 5956 (NBG).
- Bulbine ophiophylla** G. Williamson, *Aloe* 40(1): 19, 20-23, ill., 2003. Typus: *Wisura* 636 (NBG).
- Bulbine ramosa** van Jaarsveld, *Aloe* 40(1): 6-7, ill., 2003. Typus: *van Jaarsveld et al.* 14147 (NBG).
- Bulbine semenaliundata** G. Williamson, *Aloe*

- 40(1): 8, 2003. Typus: *Williamson* 5931 (NBG). [*Nom. nov. pro Bulbine undulata* Williamson 2000 (*non* Jacquin) Sprengel 1825).]
- Bulbine thomasiae** van Jaarsveld, *Aloe* 40(1): 5, ill. (p. 6), 2003. Typus: *van Jaarsveld et Ems* 16631 (NBG).

#### ASTERACEAE

- Kleinia curvata** Thulin, *Nordic J. Bot.* 22(4): 420-421, fig. 1A-E, 2003. Typus: *Thulin et al.* 9167 (UPS). [Dated 2002, publ. 2003.]
- Kleinia gracilis** Thulin, *Nordic J. Bot.* 22(4): 423-424, fig. 2C-G, 2003. Typus: *Thulin et Warfa* 5969 (UPS, K). [Dated 2002, publ. 2003.]
- Kleinia lauchsii** Lavranos & T. A. McCoy, *Kakt. and. Sukk.* 54(2): 68-69, ill., 2003. Typus: *Lauchs et Butler* 895 (MO, P, UBT).
- Kleinia lunulata** (Chiovenda) Thulin, *Nordic J. Bot.* 22(4): 425, 2003. Basionym: *Monadenium lunulatum*. [Dated 2002, publ. 2003.]
- Kleinia nogalensis** (Chiovenda) Thulin, *Nordic J. Bot.* 22(4): 425, 2003. Basionym: *Senecio nogalensis*. [Dated 2002, publ. 2003.]
- Kleinia ogadensis** Thulin, *Nordic J. Bot.* 22(4): 422-424, fig. 2A-B, 2003. Typus: *Kuchar et Mahdi Kidar* 19455 (UPS). [Dated 2002, publ. 2003.]
- Kleinia sabulosa** Thulin, *Nordic J. Bot.* 22(4): 421-422, fig. 1F-I, 2003. Typus: *Kuchar* 16255 (UPS, K). [Dated 2002, publ. 2003.]
- Kleinia tortuosa** Thulin, *Nordic J. Bot.* 22(4): 424-425, 2003. Typus: *Thulin* 10960 (UPS, K). [Dated 2002, publ. 2003.]
- Kleinia tuberculata** Thulin, *Nordic J. Bot.* 22(4): 419-420, 2003. Typus: *Beckett* 649 (K). [Dated 2002, publ. 2003.]
- Othonna euphorbioides** ssp. *jarmilae* Halda, *Acta Mus. Richnov. Sect. Nat.* 9(1): 70, fig. 80, 2003. Typus: *Halda* s.n. (PR 4711). [Dated 2002, publ. April 2003.]

#### CACTACEAE

- Acanthocalycieae* Lakowski, *Swiat Kakt.* 38(1-2): 69, 2003. *Nom. inval.* (Art. 36.1, 37.1). Based on *Acanthocalycium*.
- Acanthocalyciinae* Lakowski, *Swiat Kakt.* 38(1-2): 69, 2003. *Nom. inval.* (Art. 36.1, 37.1). Based on *Acanthocalycium*.
- Acanthocereae* Lakowski, *Swiat Kakt.* 38(1-2): 66, 2003. *Nom. inval.* (Art. 36.1, 37.1). Based on *Acanthocereus*. [Sphalm. 'Acanthocereae'.]
- Acanthocereinae* Lakowski, *Swiat Kakt.* 38(1-2): 66, 2003. *Nom. inval.* (Art. 36.1, 37.1). Based on *Acanthocereus*.
- Ariocarpus agavoides** ssp. *pulcher* Halda & Horáček, *Acta Mus. Richnov. Sect. Nat.* 10(2): 149, ill. (inside cover, figs. 2-3), 2003. Typus: *Halda* 85112066 (PR 11901).

- Ariocarpus agavoides** ssp. **sanluisensis** Sotomayor & al., Brit. Cact. Succ. J. 21(2): 99-101, ill., 2003. Typus: *Anonymus* s.n. (SLPM).
- Ariocarpus** × **dubniorum** Halda & Malina, Acta Mus. Richnov. Sect. Nat. 9(1): 52-53, fig. 63, 2003. Typus: *Duben* s.n. (PR 4708). [Dated 2002, publ. April 2003. = *Ariocarpus scaphi-rostris* × *A. agavoides*.]
- Ariocarpus fissuratus** ssp. **lloydii** (Rose) U. Guzmán, Cact. Syst. Init. No. 16: 16, 2003. Basionym: *Ariocarpus lloydii*.
- Ariocarpus kotschoubeyanus** ssp. **neotulensis** Halda, Acta Mus. Richnov. Sect. Nat. 9(1): 51-52, fig. 62, 2003. Typus: *Halda* 4706 (PR 4706). [Dated 2002, publ. April 2003.]
- Ariocarpus kotschoubeyanus* ssp. *skarupkeanus* Halda & Horáček, Acta Mus. Richnov. Sect. Nat. 9(1): 3-4, fig. 4, 2003. Based on *Halda* 4707. *Nom. illeg.* (Art. 52.1). [Dated 2002, publ. April 2003. Given as *nom. nov. pro Ariocarpus kotschoubeyanus* var. *elephantidens* Skarupke 1973, *nom. inval.*, and with the additional synonym *A. kotschoubeyanus* ssp. *elephantidens*. This latter name was published as combination for the 1973-name by Halda & Horáček in 1998 but is to be treated as valid *nom. nov.* for this name, which makes ssp. *skarupkeanus* illegitimate.]
- Ariocarpus xnelissae** Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 150, ill. (inside front cover, fig. 6), 2003. Typus: PR 11902 [Ex cult. P. Panarotto, 10. 9. 2002.]. [= *Ariocarpus agavoides* × *A. retusus* ssp. *scapharostroides*.]
- Ariocarpus retusus** ssp. **pectinatus** Weisbarth, Kakt. and. Sukk. 54(11): 291, ill., 2003. Typus: *Lau* s.n. (ULM 17099).
- Arrojadoa marylanae** Soares Filho & M. Machado, Brit. Cact. Succ. J. 21(3): 114-117, ill., 2003. Typus: *Machado* 28 (HUEFS).
- Astrophytum** Subgen. **Stigmatodactylus** D. R. Hunt, Cact. Syst. Init. No. 16: 4, 2003. Typus: *Astrophytum caput-medusae* D. R. Hunt. First used invalidly (Art. 10, i.e. based on the invalid name *Digitostigma caput-medusae* Velazco & Nevárez) in l.c. No. 15: 6, 2003.
- Astrophytum asterias** 'Golden Planet' Mikhailsov, Byull. KRKS No. 1: 3-4, ill., 2003.
- Astrophytum caput-medusae** D. R. Hunt, Cact. Syst. Init. No. 16: 4, 2003. Typus: *Nevárez et Velazco* s.n. (UNL). [First used invalidly as combination for *Digitostigma caput-medusae* Velazco & Nevárez 2003 (*nom. inval.*, Art. 43.1) in l.c. No. 15: 6, 2003.]
- Austrocylindropuntia lagopus** (K. Schumann) F. Ritter ex I. Crook & al., Bradleya 21: 89, ill., 2003. Basionym: *Opuntia lagopus*. [First published invalidly (Art. 33.3) by F. Ritter, Kakt. Südamer. 4: 1242-1243, 1981, and erroneously included as valid in RPS 32 but invalid according to Crook & Mottram, Bradleya 17: 120, 1999.]
- Blossfeldia** Subgen. **Yavia** (R. Kiesling & Piltz) Halda, Cactaceae etc. 13(1): 22, 2003. Basionym: *Yavia*.
- Blossfeldia cryptocarpa** (R. Kiesling & Piltz) Halda, Cactaceae etc. 13(1): 23, ill., 2003. Basionym: *Yavia cryptocarpa*.
- × **Borkersia** Halda & al., Acta Mus. Richnov. Sect. Nat. 10(2): 150, 2003. [= *Akersia* × *Borzicactus*.]
- × **Borkersia soniae** Halda & al., Acta Mus. Richnov. Sect. Nat. 10(2): 150-151, ill. (inside front cover, fig. 4), 2003. Typus: PR 11903 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *Akersia roseiflora* × *Borzicactus madisoniorum* 'Alba'.]
- Borzicactus janae** Halda & Horáček, Cactaceae etc. 13(1): 17-19, ill., 2003. Typus: *Halda et Horáček* s.n. (PR 4723).
- Borzicactus tupizensis* (Vaupel) Halda & Horáček, Cactaceae etc. 13(1): 17, 2003. *Nom. inval.* (Art. 33.3), based on *Cereus tupizensis*.
- Browningiinae* Lakowski, Swiat Kakt. 38(1-2): 68, 2003. *Nom. inval.* (Art. 36.1, 37.1). Based on *Browningia*.
- Calymmanthieae* Lakowski, Swiat Kakt. 38(1-2): 66, 2003. *Nom. inval.* (Art. 36.1, 37.1). Based on *Calymmanthium*. [Sphalm. 'Calymmanthieae'.]
- Calymmanthioideae* Lakowski, Swiat Kakt. 38(1-2): 66, 2003. *Nom. inval.* (Art. 36.1, 37.1). Based on *Calymmanthium*. [Sphalm. 'Calymmanthioideae'.]
- Cereus pierre-braussianus** Esteves, Cact. Succ. J. (US) 75(6): 266-270, ill., 2003. Typus: *Esteves Pereira* 13 (UFG).
- × **Chamaebivia** Halda & al., Acta Mus. Richnov. Sect. Nat. 10(2): 151, 2003. [= *Chamaecereus* × *Lobivia*.]
- × **Chamaebivia francescae** Halda & al., Acta Mus. Richnov. Sect. Nat. 10(2): 151, 2003. Typus: PR 11905 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *Chamaecereus silvestrii* × *Lobivia ferox*.]
- × **Chamaezicactus** Halda & al., Acta Mus. Richnov. Sect. Nat. 10(2): 151, 2003. [= *Chamaecereus* × *Borzicactus*.]
- × **Chamaezicactus cintiae** Halda & al., Acta Mus. Richnov. Sect. Nat. 10(2): 151-152, ill. (inside back cover, fig. 12), 2003. Typus: PR 11904 [Ex cult. P. Panarotto, 25. 6. 2003.]. [Apparently sphalm. 'Chamaeborzicactus' as evident from the typography and sequence of presentation. = *Chamaecereus silvestrii* × *Borzicactus samaipatanus*.]
- Cleistocactus erectispinus** (Rauh & Backeberg) Ostolaza, Brit. Cact. Succ. J. 21(2): 92, ill. (p. 89), 2003. Basionym: *Loxanthocereus erectispinus*.
- Cleistocactus sextonianus** (Backeberg) D. R. Hunt, Cact. Syst. Init. No. 15: 8, 2003. Basionym: *Erdisia sextoniana*. [First published in Bradleya 9: 86, 1991, but based on the invalidly published *Cereus sextonianus* Backeberg 1933.]
- Cochemiea pondii** ssp. **maritima** (G. E. Lindsay) U. Guzmán, Cact. Syst. Init. No. 16: 16, 2003. Basionym: *Cochemiea maritima*.
- Cochemiea pondii** ssp. **setispina** (Engelmann ex J. M. Coulter) U. Guzmán, Cact. Syst. Init. No. 16: 16, 2003. Basionym: *Cactus setispinus*.

- Copiapoa humilis** ssp. **tenuissima** (F. Ritter ex D. R. Hunt) D. R. Hunt, Cact. Syst. Init. No. 16: 6, 2003. Basionym: *Copiapoa hypogaea* ssp. *tenuissima*.
- Coryphantha** Ser. **Corniferae** Dicht & A. Lüthy, *Coryphantha*, Kakt. Nordamer., 91, 2003. Typus: *Coryphantha cornifera* (De Candolle) Lemaire.
- Coryphantha hintoniorum** ssp. **geoffreyi** Dicht & A. Lüthy, Kakt. and. Sukk. 54(2): 44-45, ills., 2003. Typus: *Hinton et al.* 27206 (Herb. Hinton).
- Coryphantha pallida** ssp. **pseudoradians** (Bravo) U. Guzmán & Vázquez-Benítez, Cact. Syst. Init. No. 16: 16, 2003. Basionym: *Coryphantha pseudoradians*.
- Coryphantha pycnantha** var. **sniceri** (Halda & al.) Halda & al., Acta Mus. Richnov. Sect. Nat. 9(1): 55, fig. 65, 2003. Basionym: *Escobaria sniceri*. [Dated 2002, publ. April 2003.]
- Coryphantha recurvata** ssp. **canatlanensis** Dicht & A. Lüthy, Kakt. and. Sukk. 54(3): 57-60, ills., 2003. Typus: *Hinton s.n.* (Herb. Hinton 27666).
- Coryphanthinae* Buxbaum ex Lakowski, Swiat Kakt. 38(1-2): 72, 2003. *Nom. inval.* (Art. 36.1, 37.1). Based on *Coryphantha*.
- Cylindropuntia acanthocarpa** ssp. **coloradensis** (L. D. Benson) U. Guzmán, Cact. Syst. Init. No. 16: 16, 2003. Basionym: *Opuntia acanthocarpa* var. *coloradensis*.
- Cylindropuntia acanthocarpa** ssp. **major** (Engelmann & Rose) U. Guzmán, Cact. Syst. Init. No. 16: 16, 2003. Basionym: *Opuntia echinocarpa* var. *major*.
- Cylindropuntia alcahes** ssp. **burrageana** (Britton & Rose) U. Guzmán, Cact. Syst. Init. No. 16: 16, 2003. Basionym: *Opuntia burrageana*.
- Cylindropuntia alcahes* ssp. **gigantensis** (E. F. Anderson) U. Guzmán, Cact. Syst. Init. No. 16: 16, 2003. *Nom. inval.*, based on *Cylindropuntia alcahes* var. *gigantensis*, *nom. inval.* (Art. 36.1, 37.1). [Bracket author given as Rebman, but no valid publication could be found for this name.]
- Cylindropuntia alcahes* ssp. **mcgillii** (E. F. Anderson) U. Guzmán, Cact. Syst. Init. No. 16: 16, 2003. *Nom. inval.*, based on *Cylindropuntia alcahes* var. *mcgillii*, *nom. inval.* (Art. 36.1, 37.1). [Bracket author given as Rebman, but no valid publication could be found for this name.]
- Cylindropuntia bigelovii** ssp. **ciribe** (Engelmann ex J. M. Coulter) U. Guzmán, Cact. Syst. Init. No. 16: 16, 2003. Basionym: *Opuntia ciribe*.
- Cylindropuntia californica** ssp. **delgadilloana** (Rebman & Pinkava) U. Guzmán, Cact. Syst. Init. No. 16: 16, 2003. Basionym: *Cylindropuntia delgadilloana*.
- Cylindropuntia californica** ssp. **parkeri** (Engelmann ex J. M. Coulter) U. Guzmán, Cact. Syst. Init. No. 16: 16, 2003. Basionym: *Opuntia echinocarpa* var. *parkeri*.
- Cylindropuntia californica** ssp. **rosarica** (G. E. Lindsay) U. Guzmán, Cact. Syst. Init. No. 16: 16, 2003. Basionym: *Opuntia rosarica*.
- Cylindropuntia ganderi* ssp. **catavinensis** (E. F. Anderson) U. Guzmán, Cact. Syst. Init. No. 16: 16, 2003. *Nom. inval.*, based on *Cylindropuntia ganderi* var. *catavinensis*, *nom. inval.* (Art. 36.1, 37.1). [Bracket author given as Rebman, but no valid publication could be found for this name.]
- Cylindropuntia imbricata** ssp. **argentea** (M. S. Anthony) U. Guzmán, Cact. Syst. Init. No. 16: 16, 2003. Basionym: *Opuntia imbricata* var. *argentea*.
- Cylindropuntia imbricata** ssp. **cardenche** (Griffiths) U. Guzmán, Cact. Syst. Init. No. 16: 16, 2003. Basionym: *Opuntia cardenche*.
- Cylindropuntia imbricata** ssp. **lloydii** (Rose) U. Guzmán, Cact. Syst. Init. No. 16: 17, 2003. Basionym: *Opuntia lloydii*.
- Cylindropuntia molesta** ssp. **clavellina** (Engelmann ex J. M. Coulter) U. Guzmán, Cact. Syst. Init. No. 16: 17, 2003. Basionym: *Opuntia clavellina*.
- Cylindropuntia thurberi** ssp. **alamosensis** (Britton & Rose) U. Guzmán, Cact. Syst. Init. No. 16: 17, 2003. Basionym: *Opuntia alamosensis*.
- Digitostigma* Velazco & Nevárez, Cact. Suc. Mex. 47(4): 79-80, 2003. *Nom. inval.* (Art. 37.5, 42.1c). Based on *Digitostigma caput-medusae* Velazco & Nevárez. [Dated 2002, received 24. Feb. 2003. English translation in Brit. Cact. Succ. J. 21(2): 58-65, ills., 2003.]
- Digitostigma caput-medusae* Velazco & Nevárez, Cact. Suc. Mex. 47(4): 80-84, ills., 2003. Based on *Nevárez et Velazco s.n.* *Nom. inval.* (Art. 36.1, 43.1). [Dated 2002, received 24. Feb. 2003.]
- Disocactus ackermannii** (Haworth) Ralf Bauer, Cact. Syst. Init. No. 17: 16, 2003. Basionym: *Epiphyllum ackermannii*. [First published invalidly (Art. 33.6, Ex. 11) as combination for *Cactus ackermannii* Lindley by Barthlott, Bradleya 9: 87, 1991.]
- Disocactus ackermannii** ssp. **conzattianus** (T. MacDougall) Ralf Bauer, Cact. Syst. Init. No. 17: 17, 2003. Basionym: *Nopalxochia conzattiana*. [Combination first invalidly (Art. 43.1, as the combination at species rank was then invalid under Art. 33.6, Ex. 11) published by U. Guzmán, Cact. Syst. Init. No. 16: 17, 2003.]
- Disocactus speciosus** ssp. **blomianus** (Kimmach) Ralf Bauer, Cact. Syst. Init. No. 17: 15, 2003. Basionym: *Heliocereus aurantiacus* var. *blomianus*.
- Disocactus speciosus** ssp. **cinnabarinus** (Eichlam ex Weingart) Ralf Bauer, Cact. Syst. Init. No. 17: 15, 2003. Basionym: *Cereus cinnabarinus*.
- Echinocactus horizontalonius** ssp. **nicholii** (L. D. Benson) U. Guzmán, Cact. Syst. Init. No. 16: 17, 2003. Basionym: *Echinocactus horizontalonius* var. *nicholii*.
- Echinocereus adustus** ssp. **roemerianus** (Rischer, Echinocereenfreund 16(2): 44, ills. (pp. 42-49), 2003. Typus: *Römer 10* (MEXU).

- Echinocereus klapperi** ssp. **bacanorensis** (Rischer & Trocha) Rischer, *Echinocereenfreund* 16(1): 22, ill. (p. 6, 10), 2003. Basionym: *Echinocereus salm-dyckianus* ssp. *bacanorensis*.
- Echinocereus scheeri** ssp. **obscuriensis** (A. B. Lau) U. Guzmán, *Cact. Syst. Init.* No. 16: 17, 2003. Basionym: *Echinocereus scheeri* var. *obscuriensis*.
- Echinocereus triglochidiatus** ssp. **acifer** (Otto ex Salm-Dyck) U. Guzmán, *Cact. Syst. Init.* No. 16: 17, 2003. Basionym: *Cereus acifer*.
- Echinocereus triglochidiatus** ssp. **coccineus** (Engelmann) U. Guzmán, *Cact. Syst. Init.* No. 16: 17, 2003. Basionym: *Echinocereus coccineus*.
- Echinocereus triglochidiatus** ssp. **huitcholensis** (F. A. C. Weber) U. Guzmán, *Cact. Syst. Init.* No. 16: 17, 2003. Basionym: *Cereus huitcholensis*.
- Echinocereus triglochidiatus** ssp. **pacificus** (Engelmann ex Orcutt) U. Guzmán, *Cact. Syst. Init.* No. 16: 17, 2003. Basionym: *Cereus phoeniceus* var. *pacificus*.
- Echinocereus triglochidiatus** ssp. **polyacanthus** (Engelmann) U. Guzmán, *Cact. Syst. Init.* No. 16: 17, 2003. Basionym: *Echinocereus polyacanthus*.
- Echinomastus erectocentrus** ssp. **acunensis** (W. T. Marshall) U. Guzmán, *Cact. Syst. Init.* No. 16: 17, 2003. Basionym: *Echinomastus acunensis*.
- Echinomastus intertextus** ssp. **dasyacanthus** (Engelmann) U. Guzmán, *Cact. Syst. Init.* No. 16: 17, 2003. Basionym: *Echinocactus intertextus* var. *dasyacanthus*.
- Echinomastus unguispinus** ssp. **durangensis** (Runge) U. Guzmán, *Cact. Syst. Init.* No. 16: 17, 2003. Basionym: *Echinocactus durangensis*.
- Echinomastus unguispinus** ssp. **minimus** (A. B. Lau) U. Guzmán, *Cact. Syst. Init.* No. 16: 17, 2003. Basionym: *Echinomastus unguispinus* var. *minimus*.
- Echinopsis bolligeriana** Mächler & Helmut Walter, *Kakt. and. Sukk.* 54(10): 269, ill. (pp. 267-273), 2003. Typus: *Walter* 213 (SGO).
- Echinopsis bonnieae** (Halda & al.) Halda & Malina, *Acta Mus. Richnov. Sect. Nat.* 9(1): 57, fig. 67, 2003. Basionym: *Lobivia bonnieae*. [Dated 2002, publ. April 2003.]
- Echinopsis breviflora** (Backeberg) M. Lowry, *Cact. Syst. Init.* No. 16: 7, 2003. Basionym: *Lobivia breviflora*.
- Echinopsis chiloensis** ssp. **litoralis** (Johow) M. Lowry, *Cact. Syst. Init.* No. 16: 8, 2003. Basionym: *Cereus litoralis*.
- Echinopsis maximiliana** ssp. **caespitosa** (J. A. Purpus) M. Lowry, *Cact. Syst. Init.* No. 16: 7, 2003. Basionym: *Echinopsis caespitosa*.
- Echinopsis maximiliana** ssp. **westii** (Hutchison) M. Lowry, *Cact. Syst. Init.* No. 16: 7, 2003. Basionym: *Lobivia westii*.
- Echinopsis saltensis** ssp. **schreiteri** (A. Castellanos) M. Lowry, *Cact. Syst. Init.* No. 16: 7, 2003. Basionym: *Lobivia schreiteri*.
- Epiphyllum baueri** Dorsch, *Haseltonia* 9: 6-8, ill., 2003. Typus: *Bauer* 32 (ZSS, COL, K). [Dated 2002, publ. Nov. 2003.]
- Epiphyllum crenatum** ssp. **kinnachii** (Bravo ex Kinnach) U. Guzmán, *Cact. Syst. Init.* No. 16: 17, 2003. Basionym: *Epiphyllum crenatum* var. *kinnachii*.
- Epiphyllum hookeri** ssp. **columbiense** (F. A. C. Weber) Ralf Bauer, *Cact. Syst. Init.* No. 17: 26, 2003. Basionym: *Phyllocactus phyllanthus* var. *columbiense*.
- Epiphyllum hookeri** ssp. **guatemalense** (Britton & Rose) Ralf Bauer, *Cact. Syst. Init.* No. 17: 25, 2003. Basionym: *Epiphyllum guatemalense*.
- Epiphyllum hookeri** ssp. **pittieri** (F. A. C. Weber) Ralf Bauer, *Cact. Syst. Init.* No. 17: 26, 2003. Basionym: *Phyllocactus pittieri*.
- Epiphyllum phyllanthus** ssp. **guatemalensis** (Britton & Rose) U. Guzmán, *Cact. Syst. Init.* No. 16: 17, 2003. Basionym: *Epiphyllum guatemalense*.
- Epiphyllum phyllanthus** ssp. **hookeri** (Haworth) U. Guzmán, *Cact. Syst. Init.* No. 16: 17, 2003. Basionym: *Epiphyllum hookeri*.
- Epiphyllum phyllanthus** ssp. **rubrocoronatum** (Kinnach) Ralf Bauer, *Cact. Syst. Init.* No. 17: 25, 2003. Basionym: *Epiphyllum phyllanthus* var. *rubrocoronatum*.
- Epiphyllum thomsonianum** ssp. **costaricense** (F. A. C. Weber) Ralf Bauer, *Cact. Syst. Init.* No. 17: 22, 2003. Basionym: *Phyllocactus costaricensis*.
- Epithelantha micromeris** ssp. **bokei** (L. D. Benson) U. Guzmán, *Cact. Syst. Init.* No. 16: 17, 2003. Basionym: *Epithelantha bokei*.
- Eriogyne eriosyzoides** (F. Ritter) Ferryman, *Cact. Syst. Init.* No. 16: 11, 2003. Basionym: *Horridocactus eriosyzoides*.
- Eriogyne eriosyzoides** ssp. **atroviridis** (F. Ritter) Ferryman, *Cact. Syst. Init.* No. 16: 11, 2003. Basionym: *Pyrrhocactus atroviridis*.
- Eriogyne iquiquensis** (F. Ritter) Ferryman, *Cact. Syst. Init.* No. 16: 11, 2003. Basionym: *Pyrrhocactus iquiquensis*.
- Eriogyne islayensis** ssp. **grandis** (Rauh & Backeberg) G. J. Charles, *Cact. Syst. Init.* No. 16: 11, 2003. Basionym: *Islaya grandis*.
- Eriogyne napina** ssp. **aerocarpa** (F. Ritter) Ferryman, *Cact. Syst. Init.* No. 16: 11, 2003. Basionym: *Chileorebutia aerocarpa*.
- Eriogyne napina** ssp. **glabrescens** (F. Ritter) Ferryman, *Cact. Syst. Init.* No. 16: 11, 2003. Basionym: *Chileorebutia glabrescens*.
- Eriogyne napina** ssp. **tenebrica** (F. Ritter) Ferryman, *Cact. Syst. Init.* No. 16: 11, 2003. Basionym: *Thelocephala tenebrica*.
- Eriogyne paucicostata** (F. Ritter) Ferryman, *Cact. Syst. Init.* No. 16: 11, 2003. Basionym: *Horridocactus paucicostatus*.
- Eriogyne paucicostata** ssp. **floccosa** (F. Ritter) Ferryman, *Cact. Syst. Init.* No. 16: 11, 2003. Basionym: *Pyrrhocactus floccosus*.
- Eriogyne pygmaea** (F. Ritter) Ferryman, *Cact. Syst. Init.* No. 16: 11, 2003. Basionym: *Pyrrhocactus pygmaea*.

- rhocactus pygmaeus*.
- Eriosyce pygmaea** ssp. **calderana** (F. Ritter) Ferryman, Cact. Syst. Init. No. 16: 11, 2003. Basionym: *Pyrrhocactus calderanus*.
- Eriosyce strausiana** ssp. **pachacoensis** (Rausch) Ferryman, Cact. Syst. Init. No. 16: 11, 2003. Basionym: *Pyrrhocactus pachacoensis*.
- Eriosyce strausiana** var. **bisii** Halda & al., Acta Mus. Richnov. Sect. Nat. 9(1): 57-58, fig. 68, 2003. Typus: *Bis et Sladkovský* s.n. (PR 11700). [Dated 2002, publ. April 2003. Sphalm. 'straussiana'.]
- Espostoa utcubambensis** G. J. Charles, Brit. Cact. Succ. J. 21(2): 69-73, ills., 2003. Typus: *Charles et al.* 573.01 (MOL [sub "Herb. Jard. Bot. Octavio Velarde Nuñez, Univ. Nac. Agrar. La Molina"]).
- Eulychniinae* Lakomski, Swiat Kakt. 38(1-2): 68-69, 2003. *Nom. inval.* (Art. 36.1, 37.1). Based on *Eulychnia*.
- Ferocactus echidne** var. **rhodanthus** G. Unger, Kakt. and. Sukk. 54(6): 141-142, ills., 2003. Typus: *Reppenhagen* 1939 (MEXU, WU).
- Ferocactus townsendianus* 'Variegatus Surprise' Mikhaltsov, Byull. KRKS No. 1: 2, ill., 2003. *Nom. inval.* (Art. ICNCP 19.13).
- Glandulicactus uncinatus** ssp. **wrightii** (Engelmann) U. Guzmán, Cact. Syst. Init. No. 16: 17, 2003. Basionym: *Echinocactus uncinatus* var. *wrightii*.
- Gymnocalyciinae* Buxbaum ex Lakomski, Swiat Kakt. 38(1-2): 71, 2003. *Nom. inval.* (Art. 36.1, 37.1). Based on *Gymnocalycium*.
- Gymnocalycium** Subsect. **Microsemineum** H. Till, *Gymnocalycium* 16(2): 517, 2003. Typus: *G. saglionis* (Cels) Britton & Rose. Name first published invalidly (Art. 36.1, 52.1) as combination for Subgen. *Microsemineum* in l.c. 14(2): 401, 2001.
- Gymnocalycium** Subsect. **Terminalia** H. Till, *Gymnocalycium* 16(2): 517, 2003. Typus: *G. mihanovichii* (Fric ex Gürke) Britton & Rose. Name first published illegitimately as combination for Sect. *Terminalia* Schütz (nom. illeg., Art. 52.1) in l.c. 14(2): 401, 2001.
- Gymnocalycium anisitsii** ssp. **holdii** Amerhauser, *Gymnocalycium* 16(3): 531, ills., 2003. Typus: *Amerhauser* 98-1401 (LPB).
- Gymnocalycium anisitsii** var. **griseopallidum** H. Till & Amerhauser, *Gymnocalycium* 16(3): 529, ills., 2003. Typus: *Amerhauser* 95-986 (LPB).
- Gymnocalycium anisitsii** var. **pseudomalacocarpus** H. Till & Amerhauser, *Gymnocalycium* 16(3): 531, ills., 2003. Typus: *Amerhauser* 98-1406 (LPB). [Sphalm. 'pseudo-malacocarpus'.]
- Gymnocalycium bruchii** ssp. **lafaldense** (Vaupel) Neuhuber, *Gymnocalycium* 16(2): 502, 2003. Basionym: *Gymnocalycium lafaldense*.
- Gymnocalycium bruchii** ssp. **pawlovskiyi** Neuhuber, *Gymnocalycium* 16(2): 503-505, ills., 2003. Typus: *Neuhuber* 93-751/2193 (BA, WU).
- Gymnocalycium bruchii** ssp. **susannae** Neuhuber, *Gymnocalycium* 16(2): 509-510, ills., 2003. Typus: *Neuhuber* 90-216 (BA, WU).
- Gymnocalycium bruchii** var. **glaucum** Neuhuber, *Gymnocalycium* 16(2): 506-508, ills., 2003. Typus: *Neuhuber* 90-230 (BA, WU).
- Gymnocalycium capillense* fa. *deeszianum* (Döhlz) H. Till, *Gymnocalycium* 16(1): 494-495, ills., 2003. *Nom. inval.* (Art. 34.1a), based on *Gymnocalycium deeszianum*. [The combination is not accepted subsequently (p. 497).]
- Gymnocalycium capillense** var. **mucidum** (Oehme) H. Till, *Gymnocalycium* 16(1): 498, ills. (pp. 495-496), 2003. Basionym: *Gymnocalycium mucidum*.
- Gymnocalycium capillense** var. **sigelianum** (Schick) H. Till, *Gymnocalycium* 16(1): 497, ills. (pp. 494-495), 2003. Basionym: *Echinocactus sigelianus*.
- Gymnocalycium castellanosi** ssp. **acorrugatum** (J. G. Lambert) R. Kiesling & Metzger, in R. Kiesling, Fl. San Juan 2: 178, ill., 2003. Basionym: *Gymnocalycium acorrugatum*.
- Gymnocalycium damsii** ssp. **evae** Halda & al., Acta Mus. Richnov. Sect. Nat. 9(1): 58-59, fig. 69, 2003. Typus: *Halda et Horáček* s.n. (PR 11701). [Dated 2002, publ. April 2003.]
- Gymnocalycium fischeri** Halda & al., Acta Mus. Richnov. Sect. Nat. 9(1): 60, fig. 70, 2003. Typus: *Sorma* 1 (PR 11702). [Dated 2002, publ. April 2003.]
- Gymnocalycium fischeri** ssp. **suyuquense** F. Berger, *Gymnocalycium* 16(4): 539, ills., 2003. Typus: *Berger* 97-55/218 (CORD).
- Gymnocalycium fleischerianum** (Meregalli & al.) L. Vala, *Gymnocalycium* 18(3): 520, ills., 2003. Basionym: *Gymnocalycium paraguayense* fa. *fleischerianum*. [Name first published invalidly (Art. 36.1) in Backeberg & Knuth, Kaktus-ABC, 288, 1935, and again invalidly (Art. 37.1, 9.5) by Backeberg, Die Cact. 3: 1703, ill., 1959, and subsequently used by several authors. The name was originally attributed to Jajo 1934.]
- Gymnocalycium friedrichii* 'Mars' Mikhaltsov, Byull. KRKS No. 1: 4, ill., 2003. Incorrect name (Art. ICNCP 19.1). [= *G. friedrichii* 'Zebra Violet' × *G. friedrichii* 'Hibotan'.]
- Gymnocalycium friedrichii* 'Zebra Violet' Mikhaltsov, Byull. KRKS No. 1: 2, ill., 2003. Incorrect name (Art. ICNCP 19.1). [Derived from the cross *G. friedrichii* 'Moserianum' × *G. friedrichii*.]
- Gymnocalycium gibbosum** ssp. **ferdinandi** Halda & al., Acta Mus. Richnov. Sect. Nat. 9(1): 61, fig. 71, 2003. Typus: *Procházka* 21/55 (PR 11703). [Dated 2002, publ. April 2003. Sphalm. 'ferdinandii'.]
- Gymnocalycium gibbosum** ssp. **gastonii** Halda & Milt, Acta Mus. Richnov. Sect. Nat. 9(1): 62, fig. 72, 2003. Typus: *Procházka* 22/56 (PR 11704). [Dated 2002, publ. April 2003.]
- Gymnocalycium gibbosum** ssp. **radekii** Halda & Milt, Acta Mus. Richnov. Sect. Nat. 9(1): 63-64, fig. 73, 2003. Typus: *Procházka* 70/157 (PR 11705). [Dated 2002, publ. April 2003.]

- Gymnocalycium mihanovichii** 'Master Watanabe' Mikhaltsov, Byull. KRKS No. 1: 1, ill., 2003. [Derived from the cross *G. mihanovichii* × *G. friedrichii* 'Red'.]
- Gymnocalycium miltii** Halda & al., Acta Mus. Richnov. Sect. Nat. 9(1): 64-65, fig. 76, 2003. Typus: *Procházka* 95/219 (PR 11706). [Dated 2002, publ. April 2003.]
- Gymnocalycium pazoutianum** 'Stanislav Buzek' Halda, Acta Mus. Richnov. Sect. Nat. 9(1): 20, 2003.
- Gymnocalycium ragonesei** 'Miroslav Zubr' Halda, Acta Mus. Richnov. Sect. Nat. 9(1): 64, fig. 75, 2003. [Dated 2002, publ. April 2003. Sphalm. 'ragonesii'.]
- Gymnocalycium spegazzinii** ssp. *armatum* (F. Ritter) Halda & Sorma, Acta Mus. Richnov. Sect. Nat. 9(1): 65, fig. 74, 2003. Basionym: *Gymnocalycium armatum*.
- Gymnocalycium walteri** H. Till, Gymnocalycium 16(4): 543-544, ill., 2003. Typus: *Till* 96-1139 (CORD).
- Haageocereus acranthus** ssp. *defflexispinus* (Rauh & Backeberg) Ostolaza, Brit. Cact. Succ. J. 21(2): 94, ill. (p. 91), 2003. Basionym: *Haageocereus defflexispinus*.
- Haageocereus acranthus** ssp. *zonatus* (Rauh & Backeberg) Ostolaza, Brit. Cact. Succ. J. 21(2): 94, ill. (p. 91), 2003. Basionym: *Haageocereus zonatus*.
- Haageocereus pseudomelanostele** ssp. *acanthocladus* (Rauh & Backeberg) Ostolaza, Brit. Cact. Succ. J. 21(2): 94, ill. (p. 91), 2003. Basionym: *Haageocereus acanthocladus*.
- Heliocereus schrankii** ssp. *luzmariae* (Scheinvar) U. Guzmán, Cact. Syst. Init. No. 16: 17, 2003. Basionym: *Heliocereus luzmariae*.
- Hildewintera colademononis** Diers & Krahn, Kakt. and. Sukk. 54(8): 221, ill., 2003. Typus: *Krahn* 950 (KOELN).
- Hildewintera polonica* V. Foik & Foik, Cactaceae etc. 13(2): 68-69, ill., 2003. Based on *Kiesling et al.* 10067. *Nom. inval.* (Art. 37.6). [Erratum (attempted validation of the name by correcting the incomplete type citation, failing because no direct reference to the previously published Latin diagnosis is given [Art. 36.1]) l.c. 14(2): 50, 2004.]
- Hylocereus megalanthus** (K. Schumann ex Vaupel) Ralf Bauer, Cact. Syst. Init. No. 17: 28, 2003. Basionym: *Cereus megalanthus*.
- Hylocereus setaceus** (Salm-Dyck ex De Candolle) Ralf Bauer, Cact. Syst. Init. No. 17: 29, 2003. Basionym: *Cereus setaceus*.
- Hylocereus tricae** (D. R. Hunt) Ralf Bauer, Cact. Syst. Init. No. 17: 29, 2003. Basionym: *Selenicereus tricae*.
- Leptocereinae* Lakowski, Swiat Kakt. 38(1-2): 68, 2003. *Nom. inval.* (Art. 36.1, 37.1). Based on *Leptocereus*.
- Lophophora diffusa** ssp. *kubesae* Halda & al., Acta Mus. Richnov. Sect. Nat. 9(1): 66-67, figs. 77, 2003. Typus: *Halda* s.n. (PR 11707). [Dated 2002, publ. April 2003. Sphalm. 'kubesai'. Russian translation (with erroneous source reference as "l.c. 7(1): 36, 2000") in Kakt. Tolko 2003(2): 23-25, ill., 2003.]
- Lophophora diffusa** var. *swobodaiana* Halda & al., Acta Mus. Richnov. Sect. Nat. 9(1): 67-69, figs. 78, 2003. Typus: *Swoboda* s.n. (PR 11708). [Dated 2002, publ. April 2003. Published at the rank of var. but given as "ssp. nov.".]
- Maihueiopsis recurvata** (Gilmer & H.-P. Thomas) R. Kiesling, in R. Kiesling, Fl. San Juan 2: 175, ill., 2003. Basionym: *Cumulopuntia recurvata*.
- Mammillaria crinita** ssp. *painteri* (Rose ex Quehl) U. Guzmán, Cact. Syst. Init. No. 16: 18, 2003. Basionym: *Mammillaria painteri*.
- Mammillaria discolor** ssp. *longispina* (Reppenhagen) Rogozinski & Plein, Mitteilungsbl. AfM 27(2): 84, ill. (p. 76-77), 2003. Basionym: *Mammillaria discolor* var. *longispina*.
- Mammillaria discolor** ssp. *ochoterenae* (Bravo) U. Guzmán, Cact. Syst. Init. No. 16: 18, 2003. Basionym: *Neomammillaria ochoterenae*.
- Mammillaria dixanthocentron** ssp. *flavicentra* (Backeberg ex Mottram) U. Guzmán, Cact. Syst. Init. No. 16: 18, 2003. Basionym: *Mammillaria flavicentra*.
- Mammillaria gigantea** ssp. *flavovirens* Rogozinski & Plein, Mitteilungsbl. AfM 27(3): 138-143, ill., 2003. Typus: *Rogozinski* 573 (UAT 21632).
- Mammillaria gigantea** ssp. *hamiltonhoytia* (Bravo) Rogozinski & Plein, Mitteilungsbl. AfM 27(3): 144, ill. (pp. 146-147), 2003. Basionym: *Neomammillaria hamiltonhoytia*.
- Mammillaria glassii** ssp. *nominis-dulcis* (A. B. Lau) U. Guzmán, Cact. Syst. Init. No. 16: 18, 2003. Basionym: *Mammillaria glassii* var. *nominis-dulcis*.
- Mammillaria glassii** ssp. *siberiensis* (A. B. Lau) U. Guzmán, Cact. Syst. Init. No. 16: 18, 2003. Basionym: *Mammillaria glassii* var. *siberiensis*.
- Mammillaria haageana** ssp. *meissneri* (C. Ehrenberg) U. Guzmán, Cact. Syst. Init. No. 16: 18, 2003. Basionym: *Mammillaria meissneri*.
- Mammillaria haageana** ssp. *vaupelii* (Tiegel) U. Guzmán, Cact. Syst. Init. No. 16: 18, 2003. Basionym: *Mammillaria vaupelii*.
- Mammillaria pennispinosa** ssp. *brachytrichion* (J. Lüthy) U. Guzmán, Cact. Syst. Init. No. 16: 18, 2003. Basionym: *Mammillaria brachytrichion*.
- Mammillaria prolifera** ssp. *multiceps* (Salm-Dyck) U. Guzmán, Cact. Syst. Init. No. 16: 18, 2003. Basionym: *Mammillaria multiceps*.
- Mammillaria saboae** ssp. *roczeckii* Rischer & Wolfgang Krüger, Mitteilungsbl. AfM 27(2): 50-51, ill. (pp. 51-55, 60), 2003. Typus: *Roczek* 1 (UAT 21346).
- Mammillaria vetula** ssp. *lacostei* Plein & Heiner. Weber, Mitteilungsbl. AfM 27(4): 210-212, ill. (pp. 204-205), 2003. Typus: *Plein* 222 (UAT 21633).
- Mammillaria vetula** ssp. *magneticola* (J. Meyerán) U. Guzmán, Cact. Syst. Init. No. 16: 18,

2003. Basionym: *Mammillaria magneticola*.
- Mammillaria voburnensis** ssp. **collinsii** (Britton & Rose) U. Guzmán, Cact. Syst. Init. No. 16: 18, 2003. Basionym: *Neomammillaria collinsii*.
- Mammillariinae* Lakowski, Swiat Kakt. 38(1-2): 72, 2003. *Nom. illeg.* (Art. 52.1). Based on *Mammillaria*.
- Matucana weberbaueri** var. **flammea** (Donald) Slaba, Kaktusy 39(1): 7, ills. (p. 5), 2003. Basionym: *Borzicactus weberbaueri* var. *flammeus*.
- Melocactus andinus** ssp. **hernandezii** (Fernández-Alonso & Xhonneux) N. P. Taylor, Cact. Syst. Init. No. 16: 14, 2003. Basionym: *Melocactus hernandezii*.
- Melocactus braunii** Esteves, Brit. Cact. Succ. J. 21(3): 139-142, ills., 2003. Typus: *Esteves* 479 (UFG 27.002).
- Melocactus mammillaris** Schleissing, Wollaus 16(2): 6-7, ill., 2003. [*Nomen nuxax.*]
- Navajoa peeblesiana* var. *maia* (Hochstätter) Hochstätter, Cactaceae Rev. 6(1): 11, ill. (p. 13), 2003. Incorrect name, based on *Navajoa peeblesiana* fa. *maia*, incorrect name (Art. 11.4).
- Navajoa peeblesiana* var. *menzelii* (Hochstätter) Hochstätter, Cactaceae Rev. 6(1): 11, ill. (p. 13), 2003. Incorrect name, based on *Navajoa peeblesiana* fa. *menzelii*, incorrect name (Art. 11.4).
- Neowerdermannia vorwerkii* var. *comanche* Ramirez Pinto, Cact. Adventures No. 60: 19, ill., 2003. *Nom. inval.* (Art. 36.1, 37.1).
- Neowerdermannia vorwerkii* var. *eucaliptana* Ramirez Pinto, Cact. Adventures No. 60: 19, ill., 2003. *Nom. inval.* (Art. 36.1, 37.1).
- Neowerdermannia vorwerkii* var. *penas* Ramirez Pinto, Cact. Adventures No. 60: 18, ill., 2003. *Nom. inval.* (Art. 36.1, 37.1). [Sphalm. 'peñas'.]
- Neowerdermannia vorwerkii* var. *urmiriensis* Ramirez Pinto, Cact. Adventures No. 60: 18, ill., 2003. *Nom. inval.* (Art. 36.1, 37.1).
- Notocactus oxycostatus** var. **occidentalis** N. Gerloff, Internoto 24(3/4): 76-79, ills., 2003. Typus: *Arzberger* 46 (FPG). [Type erroneously given as "lectotypus".]
- Notocactus oxycostatus** var. **schuldtii** (Kreuzinger) N. Gerloff, Internoto 24(3/4): 80, ills., 2003. Basionym: *Notocactus ottonis* var. *schuldtii*.
- Notocactus rudibueneri** var. **glomeratus** (N. Gerloff) N. Gerloff & Neduchal, Internoto 24(3/4): 52, 2003. Basionym: *Notocactus glomeratus*.
- Notocactus scopa** fa. **albicans** (Arechavaleta) N. Gerloff & Neduchal, Internoto 24(3/4): 55, ills., 2003. Basionym: *Echinocactus scopa* var. *albicans*.
- Notocactus scopa** fa. **cobrensis** (N. Gerloff) N. Gerloff & Neduchal, Internoto 24(3/4): 56, 2003. Basionym: *Notocactus scopa* var. *cobrensis*.
- Notocactus scopa** fa. **machadoensis** (W.-R. Abraham) N. Gerloff & Neduchal, Internoto 24(3/4): 57, ills., 2003. Basionym: *Notocactus scopa* var. *machadoensis*.
- Notocactus scopa** fa. **marchesii** (W.-R. Abraham) N. Gerloff & Neduchal, Internoto 24(3/4): 58, ills., 2003. Basionym: *Notocactus scopa* var. *marchesii*.
- Notocactus scopa** fa. **succineus** (F. Ritter) N. Gerloff & Neduchal, Internoto 24(3/4): 59, ills., 2003. Basionym: *Notocactus succineus*.
- Notocactus scopa** fa. **xicoi** (W.-R. Abraham) N. Gerloff & Neduchal, Internoto 24(3/4): 60, ills., 2003. Basionym: *Notocactus scopa* var. *xicoi*.
- Notocactus scopa** fa. **xiphacanthus** (W.-R. Abraham) N. Gerloff & Neduchal, Internoto 24(3/4): 61, ill. (p. 60), 2003. Basionym: *Notocactus scopa* var. *xiphacanthus*.
- Notocactus vilanovensis** C. E. Koch, Internoto 24(2): 14-17, ills. (incl. pp. 13, 18-19), 2003. Typus: *Koch* CK001 (PACA).
- Opuntia ×andersonii** H. M. Hernández & al., *Haskelltonia* 9: 62-65, ills., 2003. Typus: *Hernández et al.* 3318 (MEXU, ASU, MEXU, MO). [= *O. engelmannii* × *O. microdasys*. Dated 2002, publ. Nov. 2003.]
- Opuntia engelmannii** ssp. **aciculata** (Griffiths) U. Guzmán & Mandujano, Cact. Syst. Init. No. 16: 18, 2003. Basionym: *Opuntia aciculata*.
- Opuntia engelmannii** ssp. **lindheimeri** (Engelmann) U. Guzmán & Mandujano, Cact. Syst. Init. No. 16: 18, 2003. Basionym: *Opuntia lindheimeri*.
- Opuntia engelmannii** var. **rastrera** (F. A. C. Weber) Pinkava, J. Arizona-Nevada Acad. Sci. 36(1): 20, 2003. Basionym: *Opuntia rastrera*.
- Opuntia macrorhiza** ssp. **pottsii** (Salm-Dyck) U. Guzmán & Mandujano, Cact. Syst. Init. No. 16: 18, 2003. Basionym: *Opuntia pottsii*.
- Opuntia megarrhiza** ssp. **pachyrrhiza** (H. M. Hernández & al.) U. Guzmán & Mandujano, Cact. Syst. Init. No. 16: 18, 2003. Basionym: *Opuntia pachyrrhiza*.
- Opuntia microdasys** ssp. **rufida** (Engelmann) U. Guzmán & Mandujano, Cact. Syst. Init. No. 16: 18, 2003. Basionym: *Opuntia rufida*.
- Opuntia stricta** ssp. **esparzae** Scheinvar, Cact. Suc. Mex. 47(4): 98-102, ills., 2003. Typus: *Scheinvar et al.* 5772 (MEXU). [Dated 2002, received 24. Feb. 2003.]
- Parodia orthacantha** (Link & Otto) Hofacker, Kakt. and. Sukk. 54(9): 225, ills., 2003. Basionym: *Echinocactus orthacanthus*.
- Parodia setifera** fa. **betaniana** (F. Ritter) Käsinger, Mitteilungsbl. Inter-Parodia-Kette No. 20: 5, ill., 2003. Basionym: *Parodia betaniana*.
- Parodia setifera** var. **cabracorralensis** Käsinger, Mitteilungsbl. Inter-Parodia-Kette No. 20: 4, ill., 2003. Typus: *Käsinger* 118 (GOET).
- Parodia setifera* var. *jujuyensis* Käsinger, Mitteilungsbl. Inter-Parodia-Kette No. 20: 3, ill., 2003. Based on *Käsinger* 41. *Nom. inval.* (Art. 37.2, 8.2).
- Pediocactus nigrispinus** ssp. **indranus** (Hochstätter) Hochstätter, Cactaceae Rev. 6(1): 11, ill. (p. 10), 2003. Basionym: *Pediocactus simpso-*

- nii* var. *indranus*.
- Peniocereus greggii** ssp. **transmontanus** (Engelmann) U. Guzmán, *Cact. Syst. Init.* No. 16: 18, 2003. Basionym: *Cereus greggii* var. *transmontanus*.
- Peniocereus papillosus** (Britton & Rose) U. Guzmán, *Cact. Syst. Init.* No. 16: 18, 2003. Basionym: *Wilcoxia papillosa*.
- Pereskiopsiseae* Lakowski, *Swiat Kakt.* 38(1-2): 65, 2003. *Nom. inval.* (Art. 36.1, 37.1). Based on *Pereskiopsis*.
- Pereskiopsisoidae* Lakowski, *Swiat Kakt.* 38(1-2): 65, 2003. *Nom. inval.* (Art. 36.1, 37.1). [*Nom. illeg.* (Art. 52.1), as *Opuntioideae* are included in the synonymy.]
- Pseudorhipsalis amazonica** (K. Schumann) Ralf Bauer, *Haseltonia* 9: 101, 2003. Basionym: *Wittia amazonica*. [Dated 2002, publ. Nov. 2003.]
- Pseudorhipsalis amazonica** ssp. **chocoensis** Ralf Bauer, *Haseltonia* 9: 108, *ills.* (pp. 107, 110), 2003. Typus: *Bauer* 29 (ZSS, COL). [Dated 2002, publ. Nov. 2003.]
- Pseudorhipsalis amazonica** ssp. **panamensis** (Britton & Rose) Ralf Bauer, *Haseltonia* 9: 106, 2003. Basionym: *Wittia panamensis*. [Dated 2002, publ. Nov. 2003.]
- Pygmaocereus bieblii** Diers, *Kakt. and. Sukk.* 46(11): 256-260, *ills.*, SEM-*ills.*, 1995. Typus: *Biebl* 89-1 (KOELN). [Erroneously omitted previously.]
- Rapicactus beguinii** (N. P. Taylor) J. Lüthy, *Cactus & Co.* 7(1): 39, 2003. Basionym: *Thelocactus beguinii*.
- Rapicactus beguinii** ssp. **hintoniorum** (A. Hofer) J. Lüthy, *Cactus & Co.* 7(1): 39, 2003. Basionym: *Turbincarpus beguinii* ssp. *hintoniorum*.
- Rapicactus mandragora** ssp. **pailanus** (Halda & Panarotto) J. Lüthy, *Cactus & Co.* 7(1): 39, 2003. Basionym: *Turbincarpus pailanus*.
- Rapicactus subterraneus** ssp. **booleanus** (G. S. Hinton) J. Lüthy, *Cactus & Co.* 7(1): 39, 2003. Basionym: *Turbincarpus booleanus*.
- Rapicactus subterraneus** ssp. **zaragosae** (Glass & R. A. Foster) J. Lüthy, *Cactus & Co.* 7(1): 39, 2003. Basionym: *Gymnocactus subterraneus* var. *zaragosae*.
- Rebutia cintia** Hjertson, *Cact. Syst. Init.* No. 15: 10, 2003. Typus: *Kníže* 1768 (PR 11441). [*Nom. nov. pro Cintia knizei* Riha 1996.]
- Rebutia deminuta** ssp. **kupperiana** (Bödeker) Hjertson, *Cact. Syst. Init.* No. 15: 9, 2003. Basionym: *Rebutia kupperiana*.
- Rebutia einsteinii** ssp. **aureiflora** (Bödeker) Hjertson, *Cact. Syst. Init.* No. 15: 10, 2003. Basionym: *Rebutia aureiflora*.
- Rebutia marieae** L. Fischer & Halda, *Acta Mus. Richnov. Sect. Nat.* 9(1): 71-72, fig. 82, 2003. Typus: *Fischer* s.n. (PR 11710). [Dated 2002, publ. April 2003.]
- Rebutia neocumingii** ssp. **lanata** (F. Ritter) D. R. Hunt, *Cact. Syst. Init.* No. 15: 11, 2003. Basionym: *Weingartia lanata*.
- Rebutia neocumingii** ssp. **pulquinensis** (Cárdenas) D. R. Hunt, *Cact. Syst. Init.* No. 15: 11, 2003. Basionym: *Weingartia pulquinensis*.
- Rebutia odehnalii** Halda & al., *Acta Mus. Richnov. Sect. Nat.* 9(1): 72-73, fig. 83, 2003. Typus: *Halda et al.* s.n. (PR 11711). [Dated 2002, publ. April 2003.]
- Rebutia pulvinosa** ssp. **albiflora** (F. Ritter) Hjertson, *Cact. Syst. Init.* No. 15: 9, 2003. Basionym: *Rebutia albiflora*.
- Rebutia pulvinosa** ssp. **perplexa** (Donald) Hjertson, *Cact. Syst. Init.* No. 15: 9, 2003. Basionym: *Rebutia perplexa*.
- Rhipsalis agudoensis** N. P. Taylor, *Cact. Syst. Init.* No. 16: 12, 2003. Typus: *Horst et Uebelmann* HU 821 (K) [Ex cult. Uhlig-Kakteen, Kern, Germany.]
- Selenicereinae* Lakowski, *Swiat Kakt.* 38(1-2): 67, 2003. *Nom. inval.* (Art. 36.1, 37.1). Based on *Selenicereus*.
- Selenicereus grandiflorus** ssp. **donkelaarii** (Salm-Dyck) Ralf Bauer, *Cact. Syst. Init.* No. 17: 46, 2003. Basionym: *Cereus donkelaarii*.
- Selenicereus grandiflorus** ssp. **hondurensis** (K. Schumann ex Weingart) Ralf Bauer, *Cact. Syst. Init.* No. 17: 45, 2003. Basionym: *Cereus hondurensis*.
- Selenicereus grandiflorus** ssp. **lautneri** Ralf Bauer, *Cact. Syst. Init.* No. 17: 45, 2003. Typus: *Lautner* 90/55 (ZSS).
- Selenicereus pteranthus** fa. **macdonaldiae** (Hooker) Ralf Bauer, *Cact. Syst. Init.* No. 17: 44, 2003. Basionym: *Cereus macdonaldiae*.
- Stenocactus dichroacanthus** ssp. **violaciflorus** (Quehl) U. Guzmán & Vázquez-Benítez, *Cact. Syst. Init.* No. 16: 18, 2003. Basionym: *Echinocactus violaciflorus*.
- Stenocactus multicostatus** ssp. **zacatecasensis** (Britton & Rose) U. Guzmán & Vázquez-Benítez, *Cact. Syst. Init.* No. 16: 18, 2003. Basionym: *Echinofossulocactus zacatecasensis*.
- Strophocactus chontalensis** (Alexander) Ralf Bauer, *Cact. Syst. Init.* No. 17: 54, 2003. Basionym: *Nyctocereus chontalensis*.
- Strophocactus testudo** (Karwinsky ex Zuccarini) Ralf Bauer, *Cact. Syst. Init.* No. 17: 55, 2003. Basionym: *Cereus testudo*.
- Sulcorebutia augustinii** var. **jakubeciana** Halda & al., *Acta Mus. Richnov. Sect. Nat.* 10(2): 152, 2003. Typus: *Halda* 03112015 (PR 11906).
- Sulcorebutia christiei** B. Bates & al., *Acta Mus. Richnov. Sect. Nat.* 10(2): 152-154, *ills.* (p. 170: fig. 1 and inside back cover, figs. 7, 17), 2003. Typus: *Bates et Halda* 03111574 (PR 11907).
- Sulcorebutia confusa** Halda & al., *Acta Mus. Richnov. Sect. Nat.* 10(2): 154-155, *ills.* (p. 170: fig. 3 and inside back cover, figs. 8-9), 2003. Typus: *Halda* 03111822 (PR 11908).
- Sulcorebutia dorana** Gertel, *Kakt. and. Sukk.* 54(2): 31-33, *ills.*, 2003. Typus: *Jucker* 807 (ZSS, LPB).
- Sulcorebutia heinzii** Halda & al., *Acta Mus. Richnov. Sect. Nat.* 10(2): 155-156, *ills.* (p. 170: fig. 4 and inside back cover, fig. 16), 2003. Typus: *Halda* 03112012 (PR 11909).



- Sulcorebutia losenickyana** var. **albispina** (Rausch) Slaba, *Kaktusy* 39(2): 39, 2003. Basionym: *Sulcorebutia vasqueziana* var. *albispina*.
- Sulcorebutia pulchra** ssp. **lenkae** Halda & al., *Acta Mus. Richnov. Sect. Nat.* 10(2): 156, ill. (inside back cover, fig. 11), 2003. Typus: *Halda* 03111629 (PR 11910).
- Sulcorebutia tarabucoensis** ssp. **patriciae** B. Bates & al., *Acta Mus. Richnov. Sect. Nat.* 10(2): 156-157, ill. (p. 170: fig. 6 and inside back cover, figs. 13-14), 2003. Typus: *Bates et Halda* 03111688 (PR 11911).
- Sulcorebutia vasqueziana** ssp. **pedroensis** B. Bates & al., *Acta Mus. Richnov. Sect. Nat.* 10(2): 157, ill. (inside back cover, fig. 10), 2003. Typus: *Bates et Halda* 03111752 (PR 11912).
- Tacinga inamoena** ssp. **subcylindrica** M. Machado & N. P. Taylor, *Bradleya* 21: 13-15, ill., 2003. Typus: *Machado* 25 (HUEFS).
- Thelocactus bicolor** ssp. **swobodae** Halda & Horáček, *Acta Mus. Richnov. Sect. Nat.* 9(1): 73-74, fig. 84, 2003. Typus: *Swoboda* s.n. (PR 4712). [Dated 2002, publ. April 2003. Sphalm. 'swobodai'.]
- Thelocactus ×mirandus** Halda & Panarotto, *Acta Mus. Richnov. Sect. Nat.* 10(2): 158, ill. (inside back cover, fig. 15), 2003. Typus: *Halda* 85041503 (PR 11913). [= *Thelocactus buekii* × *T. multicephalus*.]
- Thelocactus rinconensis** 'Jaroslav Vasina' Halda, *Acta Mus. Richnov. Sect. Nat.* 9(1): 75, 2003. [Dated 2002, publ. April 2003.]
- Thelocactus rinconensis** 'Jaroslav Zwak' Halda, *Acta Mus. Richnov. Sect. Nat.* 9(1): 74, fig. 85, 2003. [Dated 2002, publ. April 2003.]
- Thelocactus tulensis** ssp. **vaskoanus** (Halda & al.) Halda & al., *Acta Mus. Richnov. Sect. Nat.* 9(1): 45, fig. 56, 2003. Basionym: *Thelocactus vaskoanus*. [Dated 2002, publ. April 2003.]
- Turbincarpus** Ser. **Lophophoroides** J. Lüthy, *Cact. Syst. Init. No.* 14: 22-23, 2002. Typus: *Turbincarpus lophophoroides* (Werdermann) Buxbaum & Backeberg. Erroneously omitted previously.
- Turbincarpus ×admirabilis** Halda & Panarotto, *Acta Mus. Richnov. Sect. Nat.* 10(2): 160, 2003. Typus: PR 11932 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. laui* × *T. knuthianus*.]
- Turbincarpus ×adronatus** Halda & Panarotto, *Acta Mus. Richnov. Sect. Nat.* 10(2): 160, ill. (outside back cover, fig. 18), 2003. Typus: PR 11931 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. laui* × *T. pseudopectinatus* ssp. *jarmilae*.]
- Turbincarpus ×aemulus** Halda & Panarotto, *Acta Mus. Richnov. Sect. Nat.* 10(2): 160-161, ill. (outside back cover, fig. 20), 2003. Typus: PR 11930 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. schmiedickeanus* var. *panarottoi* × *T. valdezianus* var. *albiflorus*.]
- Turbincarpus ×aequalis** Halda & Panarotto, *Acta Mus. Richnov. Sect. Nat.* 10(2): 161, ill. (outside back cover, fig. 32), 2003. Typus: PR 11915 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. schmiedickeanus* var. *panarottoi* × *T. ysabelae*.]
- Turbincarpus ×agatolepis** Halda & Panarotto, *Acta Mus. Richnov. Sect. Nat.* 10(2): 161, 2003. Typus: PR 11916 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. schmiedickeanus* var. *dickinsoniae* × *T. klinkerianus*.]
- Turbincarpus ×albellus** Halda & Panarotto, *Acta Mus. Richnov. Sect. Nat.* 10(2): 161, ill. (outside back cover, fig. 26), 2003. Typus: PR 11917 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. knuthianus* × *T. pseudopectinatus*.]
- Turbincarpus ×amabilis** Halda & Panarotto, *Acta Mus. Richnov. Sect. Nat.* 10(2): 162, ill. (outside back cover, fig. 27), 2003. Typus: PR 11918 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. pseudopectinatus* × *T. saueri* ssp. *nelissae*.]
- Turbincarpus ×amiantus** Halda & Panarotto, *Acta Mus. Richnov. Sect. Nat.* 10(2): 162, 2003. Typus: PR 11919 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. hoferi* × *T. pseudopectinatus*.]
- Turbincarpus ×amoenus** Halda & Panarotto, *Acta Mus. Richnov. Sect. Nat.* 10(2): 162, ill. (outside back cover, fig. 25), 2003. Typus: PR 11920 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. pseudopectinatus* × *T. paoli*.]
- Turbincarpus ×ampliflorus** Halda & Panarotto, *Acta Mus. Richnov. Sect. Nat.* 10(2): 162-163, 2003. Typus: PR 11921 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. pseudopectinatus* × *T. alonsoi*.]
- Turbincarpus ×anomalous** Halda & Panarotto, *Acta Mus. Richnov. Sect. Nat.* 10(2): 163, ill. (outside back cover, fig. 31), 2003. Typus: PR 11923 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. booleanus* × *T. subterraneus*.]
- Turbincarpus ×anosmus** Halda & Panarotto, *Acta Mus. Richnov. Sect. Nat.* 10(2): 163, ill. (outside back cover, fig. 28), 2003. Typus: PR 11922 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. schmiedickeanus* var. *panarottoi* × *T. bonatzii*. The illustration seems to show the same plant as in fig. 35 (= *T. ×calopsis*).]
- Turbincarpus ×antiquorum** Halda & Panarotto, *Acta Mus. Richnov. Sect. Nat.* 10(2): 163, 2003. Typus: PR 11924 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. pseudopectinatus* ssp. *jarmilae* × *T. hoferi*.]
- Turbincarpus ×ascocalyx** Halda & Panarotto, *Acta Mus. Richnov. Sect. Nat.* 10(2): 164, ill. (outside back cover, fig. 33), 2003. Typus: PR 11935 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. klinkerianus* × *T. schmiedickeanus* var. *panarottoi*.]
- Turbincarpus ×assimilis** Halda & Panarotto, *Acta Mus. Richnov. Sect. Nat.* 10(2): 164, ill. (outside back cover, fig. 22), 2003. Typus: PR 11925 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. alonsoi* × *T. schmiedickeanus* var. *panarottoi*.]
- Turbincarpus ×asteroides** Halda & Panarotto, *Acta Mus. Richnov. Sect. Nat.* 10(2): 164, 2003. Typus: PR 11936 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. klinkerianus* × *T. viereckii*.]

- Turbinicus** × *attenuatus* Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 164, 2003. Typus: PR 11926 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. hoferi* × *T. valdezius*.]
- Turbinicus** × *azanthus* Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 165, 2003. Typus: PR 11927 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. schmiedickeanus* var. *panarottoi* × *T. saueri* ssp. *nelissae*.]
- Turbinicus** *beguinii* ssp. *haenkeanus* Halda & al., Acta Mus. Richnov. Sect. Nat. 10(2): 158-159, ill. (outside back cover, fig. 30), 2003. Typus: Halda et Horáček 85042077 (PR 11914). [The figure is captioned as *T. beguinii* ssp. *roezlii* but refers to the type of ssp. *haenkeanus* according to the list of illustrations on p. 169.]
- Turbinicus** *beguinii* ssp. *pailanus* (Halda & Panarotto) U. Guzmán, Cact. Syst. Init. No. 16: 18, 2003. Basionym: *Turbinicus pailanus*.
- Turbinicus* *beguinii* ssp. *roezlii* Halda & al., Acta Mus. Richnov. Sect. Nat. 10(2): caption to fig. 30 (outside back cover), 2003. *Nom. inval.* (Art. 36.1, 37.1). [Erroneously used caption for *T. beguinii* ssp. *haenkeanus*.]
- Turbinicus** × *bellatulus* Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 165, ill. (outside back cover, fig. 29), 2003. Typus: PR 11928 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. alonsoi* × *T. valdezius*.]
- Turbinicus** × *bicolor* Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 165, 2003. Typus: PR 11929 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. paoli* × *T. alonsoi*.]
- Turbinicus** × *brachypus* Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 165, ill. (outside back cover, fig. 24, sub 'bradyus'), 2003. Typus: PR 11937 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. valdezius* × *T. ellisae*.]
- Turbinicus** × *callichromus* Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 166, ill. (outside back cover, fig. 19), 2003. Typus: PR 11938 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. alonsoi* × *T. rioverdensis*.]
- Turbinicus** × *calopsis* Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 167, ill. (outside back cover, fig. 35), 2003. Typus: PR 11943 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. beguinii* ssp. *smithii* × *T. pseudopectinatus*. The illustration seems to show the same plant as fig. 28 (= *T. xanosmus*).]
- Turbinicus** × *calozonus* Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 166, 2003. Typus: PR 11946 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. macrochele* × *T. pseudopectinatus*.]
- Turbinicus** × *calvescens* Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 167, ill. (outside back cover, fig. 34), 2003. Typus: PR 11940 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. pseudopectinatus* × *T. jauernigii*. The illustration seems to show the same plant as fig. 23 (= *T. x candidulus*).]
- Turbinicus** × *camellii florus* Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 166, 2003. Typus: PR 11945 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. ellisae* × *T. pseudopectinatus*.]
- Turbinicus** × *campanularis* Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 167, 2003. Typus: PR 11939 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. ellisae* × *T. schmiedickeanus* var. *panarottoi*.]
- Turbinicus** × *candidulus* Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 167, ill. (outside back cover, fig. 23), 2003. Typus: PR 11941 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. bonatzii* × *T. valdezius*. The illustration seems to show the same plant as fig. 34 (= *T. x calvescens*).]
- Turbinicus** × *carneolus* Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 168, 2003. Typus: PR 11944 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. pseudopectinatus* × *T. vierdeckii*.]
- Turbinicus** × *cintiae* Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 168, ill. (outside back cover, fig. 21), 2003. Typus: PR 11933 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. pseudopectinatus* × *T. schmiedickeanus* var. *panarottoi*.]
- Turbinicus** × *concinnus* Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 168, 2003. Typus: PR 11942 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. saueri* ssp. *nelissae* × *T. ysabelae*.]
- Turbinicus** × *delicatus* Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 169, 2003. Typus: PR 11947 [Ex cult. P. Panarotto, 25. 6. 2003.]. [= *T. alonsoi* × *T. ellisae*.]
- Turbinicus** × *dubniorum* Halda & al., Acta Mus. Richnov. Sect. Nat. 9(1): 75, fig. 86, 2003. Typus: *Duben* s.n. (PR 4713). [Dated 2002, publ. April 2003. = *T. alonsoi* × *T. krainzianus* 'Roseus'.]
- Turbinicus** *ellisae* Halda & al., Acta Mus. Richnov. Sect. Nat. 9(1): 76-77, figs. 88, 2003. [Dated 2002, publ. April 2003. *Nom. nov. pro Turbinicus schwarzii* var. *rubriflorus* G. Frank 1993. Russian translation in Kakt. Tolko 2002(4<sup>n</sup>): 6-7, ill., 2003.]
- Turbinicus** *horripilus* ssp. *kvetae* (Chvastek & Halda) J. Lüthy ex Chvastek & Halda, Acta Mus. Richnov. Sect. Nat. 9(1): 76, fig. 87, 2003. Basionym: *Gymnocactus horripilus* ssp. *kvetae*. [Dated 2002, publ. April 2003. First published invalidly (Art. 33.3) by J. Lüthy, Cacti CITES App. 1, P-085.048, 2002 ('2001').]
- Turbinicus** *paoli* (Halda & Kupcák) Halda & Malina, Acta Mus. Richnov. Sect. Nat. 10(2): 159, 2003. Basionym: *Turbinicus rioverdensis* ssp. *paoli*. [Sphalm. 'paolii'.]
- Turbinicus** *pseudopectinatus* 'Orion' Mikhailov, Byull. KRKS No. 1: 3, ill., 2003.
- Turbinicus** × *pulcherrimus* Halda & Panarotto, Acta Mus. Richnov. Sect. Nat. 10(2): 159, 2003. Typus: Panarotto s.n. (PR 11934). [= *T. pseudopectinatus* ssp. *jarmilae* × *T. klinkerianus*.]

- Turbinacarpus rioverdensis** ssp. **paoli** Halda & Kupcák, Acta Mus. Richnov. Sect. Nat. 9(1): 77-78, fig. 89, 2003. Typus: *Swoboda* s.n. (PR 11712). [Dated 2002, publ. April 2003.]
- Turbinacarpus schmiedickeanus* ssp. *pseudomacrochele* (Backeberg) Halda & Kupcák, Acta Mus. Richnov. Sect. Nat. 9(1): 79, 2003. *Nom. inval.* (Art. 33.3), based on *Strombocactus pseudomacrochele*. [Dated 2002, publ. April 2003.]
- Turbinacarpus schmiedickeanus** var. **alenae** Halda & Kupcák, Acta Mus. Richnov. Sect. Nat. 9(1): 79-80, figs. 91, 2003. Typus: *Swoboda* s.n. (PR 4714). [Dated 2002, publ. April 2003.]
- Turbinacarpus schmiedickeanus** var. **kupcakii** (Halda & Horáček) Halda & Horáček, Acta Mus. Richnov. Sect. Nat. 9(1): 78, figs. 90, 2003. Basionym: *Turbinacarpus macrochele* ssp. *kupcakii*. [Dated 2002, publ. April 2003. Repeated in Kakt. Tolko 2003(4): 21, 2003.]
- Weberocereus glaber** ssp. **mirandae** (Bravo) U. Guzmán, Cact. Syst. Init. No. 16: 18, 2003. Basionym: *Selenicereus mirandae*.
- Weberocereus tunilla** ssp. **biolleyi** (F. A. C. Weber) Ralf Bauer, Kakt. and. Sukk. 54(9): 243, ill., 2003. Basionym: *Rhipsalis biolleyi*.

CRASSULACEAE

- Adromischus liebenbergii** ssp. **mzimvubuensis** van Jaarsveld, Aloe 40(2): 40, ill. (pp. 38-39), 2003. Typus: *van Jaarsveld et al.* 101 (PRE).
- Adromischus liebenbergii** ssp. **orientalis** van Jaarsveld, Aloe 40(2): 38-39, ill., 2003. Typus: *van Jaarsveld et Ems* 16908 (PRE).
- Cotyledon pendens** van Jaarsveld, Aloe 40(2): 36, ill. (p. 39), 2003. Typus: *van Jaarsveld et Ems* 16889 (PRE).
- Crassula** 'Emerald Carpet' G. D. Rowley, Crassula, 196, 2003. [= *Crassula perfoliata* var. *falcata* × *C. ausensis*.]
- Crassula** × **affinis** (P. V. Heath) G. D. Rowley, Crassula, 215, 2003. Basionym: *Globulea* × *affinis*.
- Crassula** × **christyi** (P. V. Heath) G. D. Rowley, Crassula, 215, 2003. Basionym: *Globulea* × *christyi*.
- Crassula exilis** ssp. **picturata** (Boom) G. D. Rowley, Crassula, 115, ill. (p. 114), 2003. Basionym: *Crassula picturata*.
- Crassula exilis** ssp. **schmidtii** (Regel) G. D. Rowley, Crassula, 115, ill., 2003. Basionym: *Crassula schmidtii*.
- Crassula** × **flexa** (P. V. Heath) G. D. Rowley, Crassula, 215, 2003. Basionym: *Globulea* × *flexa*.
- Crassula foveata** van Jaarsveld, Bothalia 33(1): 116-117, ill., 2003. Typus: *van Jaarsveld et Ems* 16652 (NBG).
- Crassula** × **garciae** (P. V. Heath) G. D. Rowley, Crassula, 215, 2003. Basionym: *Creusa* × *garciae*.
- Crassula grisea** var. **bakeri** (Schönland) G. D. Rowley, Crassula, 119, ill., 2003. Basionym: *Crassula bakeri*.
- Crassula** × **hybrida** (P. V. Heath) G. D. Rowley, Crassula, 215, 2003. Basionym: *Tetraphyle* × *hybrida*. [This name seems to have been used also as a catalogue name by Gräser for what was later named *Crassula* × *graeseri*.]
- Crassula multicava** ssp. **floribunda** 'Panache' G. D. Rowley, Crassula, 136, 2003.
- Crassula multicava* ssp. *multicava* 'Variegata' G. D. Rowley, Crassula, 136, 2003. *Nom. inval.* (Art. ICNCP 19.13).
- Crassula orbicularis** var. **rosularis** (Haworth) G. D. Rowley, Crassula, 149, ill., 2003. Basionym: *Crassula rosularis*.
- Crassula perforata** 'Nealeana' G. D. Rowley, Crassula, 156, 2003. [Based on *Crassula nealeana* V. Higgins.]
- Crassula** × **putativa** (P. V. Heath) G. D. Rowley, Crassula, 215, 2003. Basionym: *Septas* × *putativa*.
- Crassula sarmentosa** 'Comet' G. D. Rowley, Crassula, 167, ill., 2003. [A variegated form that is also cultivated under the inadmissible name 'Variegata'.]
- Crassula setulosa** 'Milfordiae' G. D. Rowley, Crassula, 170, 2003. [Based on *Crassula milfordiae* Byles.]
- Echeveria chilensis** var. **backebergii** (von Poellnitz) Pino, Haseltonia 9: 55, ill., 2003. Basionym: *Echeveria backebergii*. [Dated 2002, publ. Nov. 2003.]
- Echeveria oreophila** Kimmach, Cact. Succ. J. (US) 74(6): 290-293, ill., 2003. Typus: *Bauer et Kimmach* 10 (SM, HNT). [Issue for Dec. 2002, mailed 15. Jan. 2003.]
- Echeveria utcubambensis** Hutchison ex Kimmach, Cact. Succ. J. (US) 74(6): 287-289, ill., 2003. Typus: *Hutchison et Wright* 4011 (US [UC?], HNT, SM). [Issue for Dec. 2002, mailed 15. Jan. 2003. Holotype location given as US at the end of the Latin diagnosis, as UC at the end of the English description.]
- Echeveria wurdackii** Hutchison ex Kimmach, Cact. Succ. J. (US) 74(6): 285-286, ill., 2003. Typus: *Wurdack* 1163 (UC). [Issue for Dec. 2002, mailed 15. Jan. 2003. Collection number of the type erroneously given at the end of the Latin diagnosis (cf. correct citation at the end of the English description).]
- Graptopetalum glassii** Acevedo-Rosas & Cházaro, Novon 13(4): 378-379, ill., 2003. Typus: *Acevedo-Rosas et al.* 1724 (XAL, MO, NY).
- Graptopetalum saxifragoides** var. **farinifera** Kimmach, Cact. Succ. J. (US) 75(4): 158-159, ill., 2003. Typus: *Lautner* 18 (HNT, MEXU).
- Graptopetalum superbum** (Kimmach) Acevedo-Rosas, Novon 13(4): 380, 2003. Basionym: *Graptopetalum pentandrum* ssp. *superbum*.
- Hylotelephium** 'Autumn Charm' B. Horvath, Sedum Soc. Newslett. No. 67: 21-22, ill., 2003. [An horticultural selection from *Sedum (Hylotelephium)* 'Autumn Joy'.]
- Kalanchoe ceratophylla** var. **indochinensis** H. Ohba, J. Jap. Bot. 78(5): 254, 2003. Typus:

- Spire* 878 (P).
- Kalanchoe spathulata** var. **annamica** (Gagnepain) H. Ohba, J. Jap. Bot. 78(5): 251, 2003. Basionym: *Kalanchoe annamica*.
- Kalanchoe spathulata** var. **baguioensis** H. Ohba, J. Jap. Bot. 78(5): 251, 2003. Typus: *Merrill* 11647 (US, BM, SING, US).
- Kalanchoe spathulata** var. **dixoniana** (Hamet) H. Ohba, J. Jap. Bot. 78(5): 252, 2003. Basionym: *Kalanchoe dixoniana*.
- Kalanchoe spathulata** var. **garambiensis** (Kudo) H. Ohba, J. Jap. Bot. 78(5): 252, 2003. Basionym: *Kalanchoe garambiensis*.
- Kalanchoe spathulata** var. **schumacheri** (Koorders) H. Ohba, J. Jap. Bot. 78(5): 252, 2003. Basionym: *Kalanchoe schumacheri*.
- Kalanchoe spathulata** var. **simlensis** H. Ohba, J. Jap. Bot. 78(5): 252-253, 2003. Typus: *Thomson* s.n. (K, P).
- Kalanchoe spathulata** var. **staintonii** H. Ohba, J. Jap. Bot. 78(5): 253-254, 2003. Typus: *Stainton* 5182 (BM).
- Pachyphytum rzedowskii** I. García & al., *Anales Inst. Biol. UNAM, Ser. Bot.* 73: 148-150, ill., 2002. Typus: *Torres et Ramírez* 13705 (IEB, MEXU).
- ×**Pachyveria** ‘King Midas’ M. Holmes, *Cact. Succ. J. (Woollahra)* 24(2): 24-25, ill., 2003. [= *Pachyphytum oviferum* (female) × *Echeverria pulidonis*.]
- ×**Sedeveria** ‘Robert Grimm’ R. Stephenson, *Sedum Soc. Newslett.* No. 66: 89-91, ill., 2003. [Of unknown origin, perhaps with *Sedum nussbaumerianum* as one parent.]
- Sedum** ‘Brazil’ R. Stephenson, *Sedum Soc. Newslett.* No. 64: 42-46, fig. 140, 2003. [= *Sedum morgianum* × *S. pachyphyllum*, created by B. M. Zonneveld, Leiden.]
- Sedum alpestre** ssp. **erythraeum** (Grisebach) ‘t Hart, in *Strid & Tan* (eds.), *Fl. Hellenica* 2: 319, 2002. Basionym: *Sedum erythraeum*.
- Sedum eriocarpum** ssp. **apertiflorum** ‘t Hart, in *Strid & Tan* (eds.), *Fl. Hellenica* 2: 324, 2002. Typus: ‘t Hart 29-24 (U) [Ex cult. Utrecht, 15. 6. 1983.]. [Incidental validation of a name first published invalidly (Art. 37.6) in *Ot. Sist. Bot. Dergisi* 2(2): 7, 1996 (‘1995’).]
- Sedum eriocarpum** ssp. **orientale** ‘t Hart, in *Strid & Tan* (eds.), *Fl. Hellenica* 2: 325, 2002. Typus: *van Ham* 39.1 (U) [Ex cult. Utrecht 7. 5. 1990.]. [Incidental validation of a name first published invalidly (Art. 37.6) in *Ot. Sist. Bot. Dergisi* 2(2): 8-9, 1996 (‘1995’).]
- Sedum eriocarpum** ssp. **spathulifolium** ‘t Hart, in *Strid & Tan* (eds.), *Fl. Hellenica* 2: 325, 2002. Typus: ‘t Hart 27104 (U) [Ex cult. Utrecht 28. 5. 1986.]. [Incidental validation of a name first published invalidly (Art. 37.6) in *Ot. Sist. Bot. Dergisi* 2(2): 7-8, 1996 (‘1995’).]
- Sedum japonicum** ssp. **boninense** (Yamamoto ex Tuyama) H. Ohba, J. Jap. Bot. 78(5): 300, 2003. Basionym: *Sedum boninense*.
- Sedum japonicum** ssp. **oryzifolium** (Makino) H. Ohba, J. Jap. Bot. 78(5): 300, 2003. Basionym: *Sedum oryzifolium*.
- Sedum japonicum** ssp. **uniflorum** H. Ohba, J. Jap. Bot. 78(5): 300, 2003. Typus: *Arnott* s.n. (K). [Nom. nov. pro *Sedum uniflorum* Hooker & Arnott 1838 (*non Sedum uniflorum* Rafinesque 1810).]
- Sedum japonicum** var. **oryzifolium** (Makino) H. Ohba, J. Jap. Bot. 78(5): 300, 2003. Basionym: *Sedum oryzifolium*.
- Sedum japonicum** var. **pumilum** (H. Ohba) H. Ohba, J. Jap. Bot. 78(5): 300, 2003. Basionym: *Sedum uniflorum* var. *pumilum*.
- Sedum litoreum** var. **creticum** ‘t Hart, in *Strid & Tan* (eds.), *Fl. Hellenica* 2: 323, 2002. Typus: ‘t Hart 27274 (U) [Ex cult. Utrecht, 30. 5. 1984.]. [Incidental validation of a name first published invalidly (Art. 37.6) in *Ot. Sist. Bot. Dergisi* 2(2): 3, 1996 (‘1995’).]
- Sedum mucizonia** ssp. **abylaeum** (Font Quer & Maire) Marhold, *Willdenowia* 33(1): 70, 2003. Basionym: *Cotyledon mucizonia* ssp. *abylaea*.
- Sedum pacense** J. Meyrán, *Cact. Suc. Mex.* 48(2): 52-55, ill., 2003. Typus: *Anaya s.n. in Meyrán* 5900 (MEXU, ENCB).
- Sedum** ×**patrickii** ‘t Hart, in *Strid & Tan* (eds.), *Fl. Hellenica* 2: 320-321, 2002. Typus: ‘t Hart 28797 (U) [Ex cult. BG Utrecht.]. [= *S. apoleipon* × *S. laconicum*.]
- Sedum rupestre** ‘Angelina’ Walter Wolf, *Sedum Soc. Newslett.* No. 66: 83-84, ill., 2003. [Raised from material from a private garden in Croatia.]
- Sedum spathulifolium** ‘Red Raver’ R. Stephenson, *Sedum Soc. Newslett.* No. 67: 13-14, ill., 2003. [A horticultural selection.]

## CUCURBITACEAE

- Neosalsmitra hederifolia** (Decaisne) W. J. de Wilde & Duyfjes, *Blumea* 48(1): 108, ill., 2003.
- Neosalsmitra schefferiana** ssp. **podagrica** (van Steenis) W. J. de Wilde & Duyfjes, *Blumea* 48(1): 114, 2003. Basionym: *Neosalsmitra podagrica*.
- Zygosicyos pubescens** (Keraudren) G. D. Rowley, *Cact. Succ. J. (US)* 74(6): 273, ill., 2003. Basionym: *Xerosicyos pubescens*. [Issue for Dec. 2002, mailed 15. Jan. 2003.]

## DIDIEREACEAE

- Didiereoideae** Applequist & R. S. Wallace, *Adansonia*, sér. 3, 25(1): 15, 2003. Typus: *Didierea* Baillon.
- Portulacarioideae** Applequist & R. S. Wallace, *Adansonia*, sér. 3, 25(1): 15, 2003. Typus: *Portulacaria* Jacquin.

## DRACAENACEAE

- Sansevieria guineensis* 'Manolín' A. Butler, *Sansevieria* No. 5: 12, ill., 2003. *Nom. inval.* (Art. 43.1). [Dated Dec. 2002, received 3. Feb. 2003. An horticultural selection from cultivated material.]
- Sansevieria guineensis* 'Sarah Huffman' A. Butler, *Sansevieria* No. 6: 10, ills., 2003. [Obtained in cultivation and of unknown descent.]
- Sansevieria hallii* 'Blue Bat' A. Butler, *Sansevieria* No. 5: 10, ill., 2003. [Dated Dec. 2002, received 3. Feb. 2003. An horticultural introduction from Zimbabwe.]
- Sansevieria scimitariformis* D. J. Richards, *Sansevieria* No. 5: 8-9, ills., 2003. Typus: *Richards* 2259 (SRGH). [Dated Dec. 2002, received 3. Feb. 2003.]
- Sansevieria subspicata* 'Striated' A. Butler, *Sansevieria* No. 5: 10, ill., 2003. [Dated Dec. 2002, received 3. Feb. 2003. A horticultural selection from cultivated material.]
- Sansevieria trifasciata* 'Forescate Solid Gold' Chahinian, *Sansevieria* No. 6: 11, ill., 2003. [A descendant of *Sansevieria* 'Forescate'.]
- Sansevieria trifasciata* 'Futura Hendrika' Chahinian, *Sansevieria* No. 5: 4, ill., 2003. [Dated Dec. 2002, received 3. Feb. 2003.]
- Sansevieria trifasciata* 'Futura Striolated' Chahinian, *Sansevieria* No. 6: 12, ill., 2003. [A descendant of *Sansevieria trifasciata* 'Futura'.]
- Sansevieria trifasciata* 'Futura Variegated' Al-Witri, *Sansevieria* No. 6: 13, ill., 2003. [Obtained in cultivation.]
- Sansevieria trifasciata* 'Grey Lady Aurea' Chahinian, *Sansevieria* No. 6: 12, ill., 2003. [A descendant of *Sansevieria trifasciata* 'Grey Lady Striated'.]
- Sansevieria trifasciata* 'Grey Lady Striated' Chahinian, *Sansevieria* No. 5: 5, ill., 2003. [Dated Dec. 2002, received 3. Feb. 2003.]
- Sansevieria trifasciata* 'Hahnii Solid Gold II' Chahinian, *Sansevieria* No. 5: 3-4, ill., 2003. [Dated Dec. 2002, received 3. Feb. 2003.]
- Sansevieria trifasciata* 'Jade Dwarf Midnight' Chahinian, *Sansevieria* No. 7: 3, ill., 2003. [Obtained in cultivation.]
- Sansevieria trifasciata* 'Lime Veil' Chahinian, *Sansevieria* No. 6: 11, ill., 2003. [Obtained in cultivation.]
- Sansevieria trifasciata* 'Lucille Polan' Chahinian, *Sansevieria* No. 5: 3, ill., 2003. [Dated Dec. 2002, received 3. Feb. 2003.]
- Sansevieria trifasciata* 'Madras' Chahinian, *Sansevieria* No. 7: 4, ill., 2003. [Obtained in cultivation.]
- Sansevieria trifasciata* 'Nero' Chahinian, *Sansevieria* No. 7: 4, ill., 2003. [Obtained in cultivation.]
- Sansevieria trifasciata* 'Solid Gold' Chahinian, *Sansevieria* No. 7: 3, ill., 2003. [Obtained in cultivation.]
- Sansevieria trifasciata* 'Thick Jade Dwarf' Chahinian, *Sansevieria* No. 5: 4-5, ill., 2003.

[Dated Dec. 2002, received 3. Feb. 2003. Obtained in cultivation.]

## EUPHORBIACEAE

- Euphorbia calcarata* (Schlechtendal) V. W. Steinmann, *Acta Bot. Mex.* 65: 48, 2003. Basionym: *Pedilanthus calcaratus*.
- Euphorbia coalcomanensis* (Croizat) V. W. Steinmann, *Acta Bot. Mex.* 65: 48, 2003. Basionym: *Pedilanthus coalcomanensis*.
- Euphorbia colligata* V. W. Steinmann, *Acta Bot. Mex.* 65: 48, 2003. Typus: *Sacamano* s.n. (MO). [*Nom. nov. pro Pedilanthus connatus* Dressler & Sacamano 1992 (*non Euphorbia connata* Boissier 1862).]
- Euphorbia konzattii* V. W. Steinmann, *Acta Bot. Mex.* 65: 48, 2003. Typus: *Konzatti et al.* 3106 (US, MEXU). [*Nom. nov. pro Pedilanthus pulchellus* Dressler 1957 (*non Euphorbia pulchella* Lagasca & Rodrigues 1802).]
- Euphorbia cymbifera* (Schlechtendal) V. W. Steinmann, *Acta Bot. Mex.* 65: 48, 2003. Basionym: *Pedilanthus cymbifer*.
- Euphorbia cyri* V. W. Steinmann, *Acta Bot. Mex.* 65: 48, 2003. Typus: *Pringle* 4912 (GH, F, MO, PH, S, UC, US). [*Nom. nov. pro Pedilanthus tomentellus* B. L. Robinson & Greenman 1895 (*non Euphorbia tomentella* Engelm ex Boissier 1862).]
- Euphorbia diazlanana* (J. Lomelí & Sahagún) V. W. Steinmann, *Acta Bot. Mex.* 65: 48, 2003. Basionym: *Pedilanthus diazlananus*.
- Euphorbia dressleri* V. W. Steinmann, *Acta Bot. Mex.* 65: 48, 2003. Typus: *Hinton* 10973 (GH, AHFH, K, MICH, NY, UC). [*Nom. nov. pro Pedilanthus gracilis* Dressler 1957 (*non Euphorbia gracilis* Loiseleur 1807).]
- Euphorbia filiflora* var. *nana* G. Williamson, *Bradleya* 21: 49, ills. (pp. 50-52), 2003. Typus: *Williamson* 5933 (BOL).
- Euphorbia finckii* (Boissier) V. W. Steinmann, *Acta Bot. Mex.* 65: 48, 2003. Basionym: *Pedilanthus finckii*. [Sphalm. 'finkii'.]
- Euphorbia lomelii* V. W. Steinmann, *Acta Bot. Mex.* 65: 49, 2003. Typus: *Barclay* 3114 (BM, F). [*Nom. nov. pro Pedilanthus macrocarpus* Benth 1884 (*non Euphorbia macrocarpa* Boissier & Buhse 1860).]
- Euphorbia peritropoides* (Mills) V. W. Steinmann, *Acta Bot. Mex.* 65: 49, 2003. Basionym: *Pedilanthus peritropoides*.
- Euphorbia personata* (Croizat) V. W. Steinmann, *Acta Bot. Mex.* 65: 49, 2003. Basionym: *Pedilanthus personatus*.
- Euphorbia tehuacana* (Brandege) V. W. Steinmann, *Acta Bot. Mex.* 65: 49, 2003. Basionym: *Pedilanthus tehuacanus*.
- Euphorbia tithymaloides* ssp. *angustifolia* (Poi-teau) V. W. Steinmann, *Acta Bot. Mex.* 65: 49, 2003. Basionym: *Pedilanthus angustifolius*.
- Euphorbia tithymaloides* ssp. *bahamensis* (Millspaugh) V. W. Steinmann, *Acta Bot. Mex.* 65:

49, 2003. *Nom. inval.* (Art. 33.3), based on *Pedilanthus bahamensis*. [The basionym was wrongly cited and is here corrected.]

**Euphorbia tithymaloides** ssp. **jamaicensis** (Millspaugh & Britton) V. W. Steinmann, Acta Bot. Mex. 65: 49, 2003. Basionym: *Pedilanthus jamaicensis*.

**Euphorbia tithymaloides** ssp. **padifolia** (Linné) V. W. Steinmann, Acta Bot. Mex. 65: 49, 2003. Basionym: *Euphorbia tithymaloides* var. *padifolia*.

**Euphorbia tithymaloides** ssp. **parasitica** (Klotzsch & Garcke) V. W. Steinmann, Acta Bot. Mex. 65: 50, 2003. Basionym: *Pedilanthus parasiticus*.

**Euphorbia tithymaloides** ssp. **retusa** (Benth) V. W. Steinmann, Acta Bot. Mex. 65: 50, 2003. Basionym: *Pedilanthus retusus*.

**Euphorbia tithymaloides** ssp. **smallii** (Millspaugh) V. W. Steinmann, Acta Bot. Mex. 65: 50, 2003. Basionym: *Pedilanthus smallii*.

#### HYACINTHACEAE

**Albuca thermanum** van Jaarsveld, Bothalia 33(1): 116, ill., 2003. Typus: *van Jaarsveld* 14152 (NBG).

**Spetaea** Wetschnig & Pfosser, Taxon 52(1): 75, 2003. Typus: *Spetaea lachenalii* flora Wetschnig & Pfosser.

**Spetaea lachenalii** flora Wetschnig & Pfosser, Taxon 52(1): 75, ills. (p. 76), 2003. Typus: *Drège* 1997 (B, W).

#### LAMIACEAE

**Tetradenia kaokoensis** van Jaarsveld & A. E. van Wyk, Bothalia 33(1): 107-108, ills., 2003. Typus: *van Jaarsveld et al.* 16617 (WIND, NBG, PRE).

#### LENTIBULARIACEAE

**Pinguicula konzattii** Zamudio & van Marm, Acta Bot. Mex. 62: 16-18, ills., 2003. Typus: *Zamudio et Ocampo* 10933 (IEB).

#### NOLINACEAE

**Beaucarnea compacta** L. Hernández & Zamudio, Brittonia 55(3): 226-228, ills., 2003. Typus: *Zamudio et al.* 10465 (IEB, CHAPA, ENCB, MEXU, QMEX).

**Calibanus glassianus** L. Hernández & Zamudio, Brittonia 55(3): 228-230, ills., 2003. Typus: *Pérez-Calix et al.* 3719 (IEB, CHAPA, ENCB, MEXU, QMEX).

#### PIPERACEAE

**Peperomia cereoides** Pino & Cieza, Cact. Succ. J. (US) 75(1): 27, ills. (pp. 28-30), 2003. Typus: *Pino* 689 (USM).

**Peperomia humbertii** G. Mathieu, Syst. Geogr. Pl. 73: 74, fig. 2 (p. 73), 2003. Typus: *Mathieu* 480 (BR, G, MO, P, TAN).

**Peperomia liclicensis** Pino & Klopfenstein, Cact. Succ. J. (US) 75(1): 31, ills. (pp. 32-33), 2003. Typus: *Pino* 694 (USM).

**Peperomia nivalis** var. **compacta** Pino & Cieza, Cact. Succ. J. (US) 75(1): 34-35, ills., 2003. Typus: *Pino* 701 (USM).

**Peperomia pluvisilvatica** G. Mathieu, Syst. Geogr. Pl. 73: 77, fig. 4 (p. 76), 2003. Typus: *Mathieu* 456 (BR, B, G, K, MO, P, TAN).

**Peperomia ratticaudata** G. Mathieu, Syst. Geogr. Pl. 73: 78, fig. 5 (p. 80), 2003. Typus: *Mathieu* 488 (BR, B, BM, G, K, MO, P, TAN).

**Peperomia terebinthina** G. Mathieu, Syst. Geogr. Pl. 73: 79, fig. 6 (p. 80), 2003. Typus: *Mathieu* 457 (BR, B, G, MO, P, TAN).

#### PORTULACACEAE

**Anacampseros retusa** fa. **parva** G. Williamson, Excelsa No. 20: 29-30, ills., 2003. Typus: *Williamson* 6018 (BOL).

**Anacampseros retusa** fa. **rubra** G. Williamson, Excelsa No. 20: 27-28, ills., 2003. Typus: *Williamson* 6019 (BOL).

**Anacampseros retusa** ssp. **lanuginosa** G. Williamson, Excelsa No. 20: 29, 31-32, ills., 2003. Typus: *Williamson* 6017 (BOL).

**Lewisiopsis** Govaerts, World Checklist Seed Pl. 3(1): 21, 1999. Typus: *Calandrinia tweedyi* A. Gray. [Omitted previously.] [*Nom. nov. pro Lewisia* Subgen. *Strophiolium*.]

**Lewisiopsis tweedyi** (A. Gray) Govaerts, World Checklist Seed Pl. 3(1): 21, 1999. Basionym: *Calandrinia tweedyi*. [Omitted previously.]

**Phemeranthus oligospermus** (Brandege) G. Ocampo, Acta Bot. Mex. 63: 56, 2003. Basionym: *Talinum oligospermum*.

**Portulaca dhofarica** M. G. Gilbert, Kew Bull. 55(4): 788, fig. 2C-D (p. 778), 2000. Typus: *Lawton* 2390 (K). [Omitted previously.]

**Portulaca kuriensis** M. G. Gilbert, Kew Bull. 55(4): 789, fig. 2E-F (p. 778), 2000. Typus: *Smith et Lavranos* 683 (K). [Omitted previously.]

**Portulaca mathewsii** G. Ocampo, Sida 20(4): 1358-1359, ills., 2003. Typus: *González* 44 (IEB, MEXU, QMEX, XAL).

**Portulaca umbraticola** var. **lanceolata** (J. F. Matthews & D. W. Ketron) B. L. Turner, in B. L. Turner & al., Atlas Vasc. Pl. Texas 1: 8, 2003. Basionym: *Portulaca lanceolata*. [Intended as combination for *Portulaca lanceolata* Engelman 1850 (*non* Haworth 1803) but to be treated as combination as here given.]

**PORTULACARIACEAE**

**Portulacariaceae** (Fenzl) Doweld, Prosyll. Tracheophyt., xlii, 2001. Basionym: *Portulacariaceae*. [Omitted previously.]

**TALINACEAE**

**Talinaceae** (Fenzl) Doweld, Prosyll. Tracheophyt., xlii, 2001. Basionym: *Talineae*. [Omitted previously.]

**VITACEAE**

**Cyphostemma uwanda** Verdcourt, Kew Bull. 58(2): 503-504, ill., 2003. Typus: *Chuwa* 2759 (K, DSM, NHT, NGORONGORO).

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