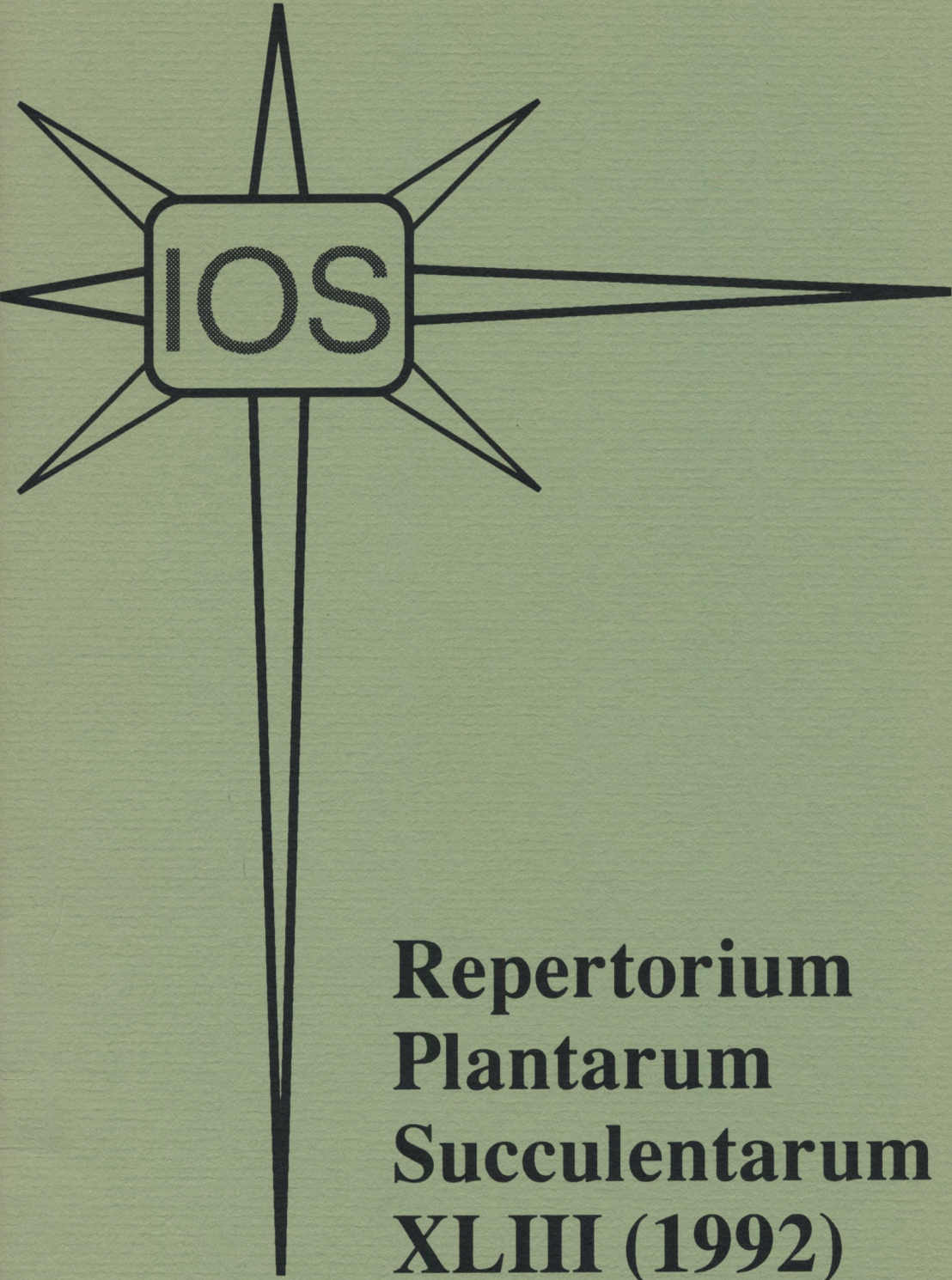


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IOS

**Repertorium
Plantarum
Succulentarum
XLIII (1992)**

Repertorium Plantarum Succulentarum XLIII (1992)

*Index nominum novarum plantarum succulentarum anno MCMXCII
editorum nec non bibliographia taxonomica ab U. Egli et N. P. Taylor
compositus.*

International Organization for Succulent Plant Study
Internationale Organisation für Sukkulantenforschung

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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 of K, Z, ZSS 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 one of 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.
- 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 given in the nomenclatural section and not repeated in the bibliographic section.
- Abbreviations for periodicals are those suggested in 'A Bibliography of Succulent Plant Periodicals' (U. Egli in Bradleya 3: 103-119, 1985, and supplements in l.c. 5: 101-104, 1987) for specialized periodicals, or those of Bibliographia Periodicorum Huntianum for 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 K, 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.
- Gültig veröffentlichte Namen werden in **Fettschrift** wiedergegeben unter Angabe des nomenklatorischen Typs (Name oder Belegexemplar je nach Rangstufe; gefolgt von den Herbarabkürzungen [entsprechend Index Herbariorum, ed. 8, und in Taxon publizierten Supplementen] der publizierten Hintelegungsorte für Holotyp [1. Abkürzung] und Isotypen). Ungültige, illegitime oder falsch angewandte Namen erscheinen in *Kursivschrift* unter Angabe (in Klammer) derjenigen Artikel des ICBN, die verletzt werden sind. In allen Fällen folgen die kompletten bibliographischen Angaben. Für Umkombinationen wird auch das Basionym angegeben.
- 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 'A Bibliography of Succulent Plant Periodicals' (U. Egli in Bradleya 3: 103-119, 1985, sowie Supplementen in l.c. 5: 101-104, 1987), für allgemeine botanische Zeitschriften nach Bibliographia Periodicorum Huntianum.

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Preface

The flux of new names of succulent plants seems to be never ending, and accordingly another rather massive *Repertorium* has been produced for the 1992-additions.

Some of the decisions of the compilers regarding the status of some new names and recently published typifications might seem contradictory to the Code and need an explanation:

The indication of a type is mandatory since 1. 1. 1958 (ICBN Art. 37.1), and since 1. 1. 1990, the words "typus" or "holotypus" or an equivalent in a modern language, or an abbreviation, has to be used (Art. 37.4), and the herbarium or institution where the type is deposited must be indicated (Art. 37.5). There has been no argument in recent years about the requirement of depositing a type *specimen* for all names of newly described taxa, and it is very unfortunate that at least one author has now started to describe new taxa on the base of (published) illustrations. Unfortunately, the Code allows this procedure (cf. Arts. 7.3, 9.1, 37.5), by leaving a 'loop hole' within the cited articles. The authors have no other choice than to accept these names as valid under the Code.

Acknowledgments

The compilers wish to thank Daniela Zappi for her help in locating and listing nomenclatural and bibliographic entries from the Library, Royal Botanic Gardens, Kew; and Rosemary Davis for providing additional new name entries from the closing months of 1992 from the Kew Index database. IOS-members Reto Nyffeler and Joachim Thiede have both supplied the compilers with important literature references, for which they are very grateful.

A word of thanks goes to all those authors who supplied the compilers directly with separate prints of their contributions. Separate prints are of great help in the compilation of the annual repertoria, especially if they are of contributions in 'non-succulent' periodicals. Separate prints received for the compilation of the *Repertorium* are filed in the library at ZSS for future reference.

Vorwort

Die Flut neuer Namen für sukkulente Pflanzen scheint nie abzunehmen, und für die Neuheiten des Jahres 1992 ist eine dicke Ausgabe des *Repertoriums* nötig geworden.

Einige der Entscheide der Redaktoren betreffend des Status' einiger neuer Namen und kürzlich publizierter Typifikationen benötigen eine kurze Erklärung, denn auf den ersten Blick erscheinen sie unter dem Code als ungültig: Die Angabe des Typus ist seit dem 1. 1. 1958 obligatorisch (ICBN Art. 37.1), und seit dem 1. 1. 1990 muss das Wort "Typus" oder "Holotypus" oder ein Äquivalent in einer modernen Sprache, oder eine entsprechende Abkürzung, verwendet werden (Art. 37.4). Zusätzlich muss seither auch das Herbarium angegeben werden, in welchem der Typus aufbewahrt wird (Art. 37.5). In den vergangenen Jahren herrschte Einmütigkeit darüber, dass für alle Namen neuer Taxa ein *Typusbeleg* hinterlegt werden muss, und es ist sehr zu bedauern, dass nun wenigstens ein Autor begonnen hat, neue Taxa aufgrund (publizierter) Illustrationen zu veröffentlichen. Unglücklicherweise erlaubt der ICBN dieses Vorgehen (vgl. Arts. 7.3, 9.1 und 37.5), auch wenn dieses 'Hintertürchen' kaum der Absicht der zitierten Artikel entspricht. Die Redaktoren des *Repertoriums* wenden sich mit aller Entschiedenheit gegen dieses Vorgehen, sehen sich aber gezwungen, die entsprechenden Namen zu akzeptieren.

Die Herausgeber danken Daniela Zappi für ihre Hilfe bei der Lokalisierung und Auswertung von Publikationen in der Bibliothek der Royal Botanic Gardens, Kew; sowie Rosemary Davis für die zusätzlichen Angaben zu neuen Namen aus der Kew-Index-Datenbank für die letzten Monaten des Jahres 1992. Die IOS-Mitglieder Reto Nyffeler und Joachim Thiede haben die Herausgeber auf zahlreiche wichtige Literaturstellen aufmerksam gemacht, wofür diese sehr dankbar sind.

Ein Dank geht schliesslich an all diejenigen Autoren, welche die Herausgeber direkt mit Separatdrucken ihrer Arbeiten bedient haben. Diese Separatdrucke haben die Zusammenstellung des Repertoriums sehr erleichtert, vor allem wenn es sich um Veröffentlichungen in 'nicht-sukkulenten' Zeitschriften handelt. Die in diesem Zusammenhang erhaltenen Separata werden übrigens in der Bibliothek der ZSS aufbewahrt.

Corrections to previous volumes

- In RPS 42, the basionym for the combination *Mammillaria hutchisoniana* var. *bullardiana* is incorrectly given; the basionym name is *Neomammillaria bullardiana*. M. Lacoste has kindly pointed out this error to us.
- In RPS 42, *Agave* subgen. *Nizandensae* Ullrich is given in error for *Agave* ser. *Nizandensae* Ullrich, for which the compilers assume full responsibility.

Korrekturen zu früheren Bänden

- Das Basionym für die Kombination *Mammillaria hutchisoniana* var. *bullardiana* ist in RPS 42 falsch angegeben; richtig lautet der Basionym-Name *Neomammillaria bullardiana*. M. Lacoste hat uns freundlicherweise auf diesen Fehler hingewiesen.
- *Agave* subgen. *Nizandensae* Ullrich in RPS 42 ist ein fehlerhafter Eintrag für *Agave* ser. *Nizandensae* Ullrich. Der Herausgeber bedauert diesen Fehler sehr und übernimmt dafür die Verantwortung.

NOMINA NOVA

AGAVACEAE

- Agave** sect. **Guatemalenses** (Trelease) B. Ullrich, *Kakt. and. Sukk.* 43(9): 215, 1992. Basionym: *Agave* group *Guatemalenses*.
- Agave** sect. **Nizandensae** (B. Ullrich) B. Ullrich, *Succulenta* 70(6): 144, 1991. Basionym: *Agave* ser. *Nizandensae*.
- Agave** **asperrima** ssp. **maderensis** (Gentry) B. Ullrich, *Sida* 15(2): 254, 1992. Basionym: *Agave scabra* ssp. *maderensis*.
- Agave** **asperrima** ssp. **potosiensis** (Gentry) B. Ullrich, *Sida* 15(2): 254, 1992. Basionym: *Agave scabra* ssp. *potosiensis*.
- Agave** **asperrima** ssp. **zarcensis** (Gentry) B. Ullrich, *Sida* 15(2): 254, 1992. Basionym: *Agave scabra* ssp. *zarcensis*.
- Agave** **filifera** ssp. **multifilifera** (Gentry) B. Ullrich, *Brit. Cact. Succ. J.* 10(3): 66, 1992. Basionym: *Agave multifilifera*.
- Agave** **filifera** ssp. **schidigera** (Lemaire) B. Ullrich, *Brit. Cact. Succ. J.* 10(3): 65, 1992. Basionym: *Agave schidigera*.
- Agave** **palmeri** ssp. **chrysantha** (Peebles) B. Ullrich, *Die anderen Sukk.* No. 18: 4, 1992. Basionym: *Agave chrysantha*. [Dated 1991, received July 1992.]
- Agave** **parryi** ssp. **neomexicana** (Wootton & Standley) B. Ullrich, *Sida* 15(2): 259, 1992. Basionym: *Agave neomexicana*.
- Agave** **seemanniana** ssp. **pygmaea** (Gentry) B. Ullrich, *Brit. Cact. Succ. J.* 10(1): 27, 1992. Basionym: *Agave pygmaea*.
- Agave** **victoriae-reginae** cv. **Himesan-no-yuki** Kimmach & Trager, *Cact. Succ. J. (US)* 64(2): 87, 1992. [A dwarf selection made in Japan and grown at Huntington BG under HBG 71208.]
- Beaucarnea** **hiriartiae** L. Hernández S., *Acta Bot. Mex.* 18: 25-29, ill., 1992. Typus: *Hernández Sandoval et Martínez* 1629 (MEXU, TEX, UAT).
- Furcraea** **acaulis** (Kunth) B. Ullrich, *Quepo* 6: 69, 1992. Basionym: *Yucca acaulis*.
- Manfreda** **fusca** Ravenna, *Herbertia* 43(1): 17-19, ill., 1987. Typus: *Ravenna* 325 (herb. Ravenna) [Ex cult.]. [Omitted previously.]

AIZOACEAE

- Bijlia** H. E. K. Hartmann, *Cact. Succ. J. (US)* 64: 178, 1992. *Nom. illeg.* (Art. 64). Based on *Bijlia dilatata* H. E. K. Hartmann. [Non *Bijlia* N. E. Brown 1928.]
- Bijlia** **dilatata** H. E. K. Hartmann, *Cact. Succ. J. (US)* 64(4): 179, 1992. Based on *van der Bijl* s.n.. Incorrect name (Art. 11.3). [*Nom. nov. pro Bijlia cana sensu* N. E. Brown (non *Mesembryanthemum canum* Haworth); see the protologue for the complicated nomenclature surrounding this taxon.]
- Erepsia** sect. **Crassifoliae** Liede, *Beitr. Biol. Pfl.* 66(1): 155, 1992. *Nom. inval.* (Art. 32.3, 36.1). [Intended type: *Erepsia heteropetala* (Haworth) Schwantes. First published invalidly (Art. 37.1) *I.c.* 64(3): 466-467, 1990.]
- Erepsia** sect. **Intectatae** Liede, *Beitr. Biol. Pfl.* 66(1): 155, 1992. *Nom. inval.* (Art. 32.3, 36.1). [Intended type: *Erepsia esterhuyseniae* L. Bolus. First published invalidly (Art. 37.1) *I.c.* 64(3): 448, 1990.]
- Erepsia** sect. **Tectatae** Liede, *Beitr. Biol. Pfl.* 66(1): 155, 1992. *Nom. inval.* (Art. 32.3, 36.1). [Intended type: *Erepsia anceps* (Haworth) Schwantes. First published invalidly (Art. 37.1) *I.c.* 64(3): 452-453, 1990.]
- Ihlenfeldtia** H. E. K. Hartmann, *Bot. Jahrb. Syst.* 114(1): 47-48, 1992. Typus: *Cheiridopsis excavata* L. Bolus.
- Ihlenfeldtia** **excavata** (L. Bolus) H. E. K. Hartmann, *Bot. Jahrb. Syst.* 114(1): 48, 1992. Basionym: *Cheiridopsis excavata*.
- Ihlenfeldtia** **vanzylilii** (L. Bolus) H. E. K. Hartmann, *Bot. Jahrb. Syst.* 114(1): 49, 1992. Basionym: *Cheiridopsis vanzylilii*.
- Lithops** **aucampiae** cv. **Jackson's Jade** D. T. Cole, *Mesemb Study Group Bull.* 7(4): 87, 1992. [Given as cv. of *L. aucampiae* ssp. *aucampiae* var. *aucampiae*.]
- Ruschia** subgen. **Cymbifolia** Dehn, *Mitt. Inst. Allg. Bot. Hamburg* 24: 189, 1992. Typus: *Mesembryanthemum cymbifolium* Haworth.
- Ruschia** subgen. **Maxima** Dehn, *Mitt. Inst. Allg. Bot. Hamburg* 24: 189, 1992. Typus: *Mesembryanthemum maximum* Haworth.
- Ruschia** subgen. **Multiflora** Dehn, *Mitt. Inst. Allg. Bot. Hamburg* 24: 189, 1992. Typus: *Mesembryanthemum multiflorum* Haworth.
- Ruschia** subgen. **Sarmentosa** (Haworth) Dehn, *Mitt. Inst. Allg. Bot. Hamburg* 24: 190, 1992. Basionym: *Mesembryanthemum* sect. *Sarmentosa*.
- Ruschia** subgen. **Spinosa** (Haworth) Dehn, *Mitt. Inst. Allg. Bot. Hamburg* 24: 191, 1992. Basionym: *Mesembryanthemum* sect. *Spinosa*.
- Ruschia** subgen. **Stricta** Dehn, *Mitt. Inst. Allg. Bot. Hamburg* 24: 191, 1992. Typus: *Ruschia stricta* L. Bolus.
- Ruschia** subgen. **Tumidula** (Haworth) Dehn, *Mitt. Inst. Allg. Bot. Hamburg* 24: 192, 1992. Basionym: *Mesembryanthemum* sect. *Tumidula*.
- Ruschia** subgen. **Vaginata** (Haworth) Dehn, *Mitt. Inst. Allg. Bot. Hamburg* 24: 192, 1992. Basionym: *Mesembryanthemum* sect. *Vaginata*.
- Ruschia** **spinosa** (Linné) Dehn, *Mitt. Inst. Allg. Bot. Hamburg* 24: 191, 1992. Basionym: *Mesembryanthemum spinosum*.
- Ruschiiinae** Schwantes ex Dehn, *Mitt. Inst. Allg. Bot. Hamburg* 24: 185-186, 1992. Typus: *Ruschia* Schwantes. [First invalidly (Art. 36.1)]

published by Schwantes, Sukkulentenkunde 1: 34-40, 1947.]

- Vanheerdea** L. Bolus ex H. E. K. Hartmann, *Bradleya* 10: 15, 1992. Typus: *Rimaria roodiae* N. E. Brown. [First invalidly (Art. 36.1) published by L. Bolus, Notes Mesembr. 3: 136, 1938.]
- Vanheerdea primosii** (L. Bolus) L. Bolus ex H. E. K. Hartmann, *Bradleya* 10: 16, 1992. Basionym: *Rimaria primosii*. [Name first used invalidly (Art. 43.1) by L. Bolus, Notes Mesembr. 3: 136, 1938.]
- Vanheerdea roodiae** (N. E. Brown) L. Bolus ex H. E. K. Hartmann, *Bradleya* 10: 15, 1992. Basionym: *Rimaria roodiae*. [Name first used invalidly (Art. 43.1) by L. Bolus, Notes Mesembr. 3: 136, 1938.]

ALOACEAE

- Aloe** cv. **Firefly** J. Bleck ex Kimmach & Trager, *Cact. Succ. J. (US)* 64(2): 87, 1992. [The parentage of this hybrid is given as (*Aloe bakeri* × *Gasteria liliputana*) × (*A. descoingsii* × *A. rauhii*) in correspondence from ISI received with the actual plants at ZSS; accordingly, the cultivar name should be given as × *Gasteraloe* 'Firefly']
- Aloe** cv. **Lizard Lips** J. Bleck ex Kimmach & Trager, *Cact. Succ. J. (US)* 64(2): 87, 1992. [= (*Aloe descoingsii* × *A. calcairophylla*) × (*A. bellatula* × *A. rauhii*).]
- Aloe** cv. **Pink Lace** J. Bleck ex Kimmach & Trager, *Cact. Succ. J. (US)* 64(2): 88, 1992. [The parentage of this hybrid is given as *Aloe descoingsii* × (*A. albiflora* × *Gasteria liliputana*) in correspondence from ISI received with the actual plants at ZSS; accordingly, the cultivar name should be given as × *Gasteraloe* 'Pink Lace']
- Aloe brunneostrata** Lavranos & S. Carter, *Cact. Succ. J. (US)* 64(4): 206-208, ills., 1992. Typus: *Lavranos et Horwood* 10187 (K).
- Aloe gilbertii** T. Reynolds ex Sebsebe Demissew & Brandham, *Kew Bull.* 47(3): 509, 512, ills., 1992. Typus: *Gilbert et al.* 5307 (ETH, K, UPS).
- Aloe murina** Newton, *Taxon* 41(1): 31-33, ills., 1992. Typus: *Newton* 3497 (K, EA).
- Aloe parvidens** M. G. Gilbert & Sebsebe Demissew, *Kew Bull.* 47(4): 650, 1992. Typus: *Gilbert* 7714A (ETH, K).
- Aloe rugosifolia** M. G. Gilbert & Sebsebe Demissew, *Kew Bull.* 47(4): 652, 1992. [*Nom. nov. pro Aloe otallensis* var. *elongata* A. Berger.]
- Gasteria** ser. **Longifoliae** (Haworth) Van Jaarsveld, *Aloe* 29(1): 8, 1992. Basionym: *Gasteria* group *Longifoliae*.
- Gasteria** ser. **Multifariae** (Haworth) Van Jaarsveld, *Aloe* 29(1): 9, 1992. Basionym: *Gasteria* group *Multifariae*.
- Gasteria** ser. **Namaquana** Van Jaarsveld, *Aloe* 29(1): 17, 1992. Typus: *Gasteria pillansii*

Kensit.

- Gasteria bicolor** var. **liliputana** (von Poellnitz) Van Jaarsveld, *Aloe* 29(1): 21, 1992. Basionym: *Gasteria liliputana*.
- Gasteria brachyphylla** (Salm-Dyck) Van Jaarsveld, *Aloe* 29(1): 19, 1992. Basionym: *Aloe brachyphylla*.
- Gasteria brachyphylla** var. **bayeri** Van Jaarsveld, *Aloe* 29(1): 20, fig. 21 (p. 19), 1992. Typus: *Bayer* 1751 (NBG).
- Gasteria carinata** var. **retusa** Van Jaarsveld, *Aloe* 29(1): 15, ill., 1992. Typus: *van Jaarsveld et Stayner* 4656 (NBG).
- Gasteria carinata** var. **verrucosa** (Miller) Van Jaarsveld, *Aloe* 29(1): 15, 1992. Basionym: *Aloe verrucosa*.
- Gasteria nitida** var. **armstrongii** (Schönland) Van Jaarsveld, *Aloe* 29(1): 12, 1992. *Nom. inval.* (Art. 33.2), based on *Gasteria armstrongii*.
- Gasteria pillansii** var. **ernesti-ruschii** (Dinter & von Poellnitz) Van Jaarsveld, *Aloe* 29(1): 17, 1992. Basionym: *Gasteria ernesti-ruschii*. [The basionym reference given is erroneous and is here (doubtfully !!) treated as a bibliographical error in the sense of ICBN Art. 33.2.]

APOCYNACEAE

- Adenium** cv. **Asha** A. Hansoti ex Kimmach & Trager, *Cact. Succ. J. (US)* 64(2): 87, 1992. [Selected from a second-generation hybrid of (*A. obesum* × *A. swazicum*) × *A. obesum*.]
- Adenium obesum** cv. **Crimson Picotee** Dimmitt ex Kimmach & Trager, *Cact. Succ. J. (US)* 64(2): 87, 1992. [= *A. obesum* var. *obesum* × *A. obesum* var. *multiflorum*.]

ASCLEPIADACEAE

- × **Brachystemon** P. V. Heath, *Calyx* 1(1): 20, 1992. [= *Brachystelma* × *Gonostemon*.]
- × **Brachystemon nolae-carriae** P. V. Heath, *Calyx* 1(1): 20, 1992. [Sphalm. 'nolae-carrae'. Based on × *Brachypelia* 'Nola Carr' C. Walker (= *Brachystelma barberae* × *Gonostemon (Stapelia) similis*. The holotype is said to be in the possession of C. Walker (*ex cult.*).]
- Caralluma decaisneana** ssp. **hesperidum** (Maire) Raynaud, *Bot. Chron.* 10: 717, 1991. Basionym: *Caralluma hesperidum*.
- Caralluma dummeri** fa. **colorata** Lodé, *Fichier Encycl. Cact.*, ser. 8: no. 737, ill., 1992. Typus: *Lodé* JLKEN1983 (Centre Prop. Espèces Menac. ARIDES) [Type permanently conserved ?]. [Probably invalid for lack of a permanently conserved type.]
- Ceropegia schumanniana** Swarupananand & Mangaly, *Nordic J. Bot.* 12(6): 699, 1992. Typus: *Swarupananand* 13911 (MH).
- × **Frernia** Barad, *Cact. Succ. J. (US)* 64(2): 88, in adnot., 1992. [= *Frerea* × *Huernia*.]
- × **Frernia** cv. **Beatrice** Barad, *Cact. Succ. J. (US)* 64(2): 88, 1992. [= *Frerea indica* × *Huernia*

- saudi-arabica* (Barad hybrid 107-83).]
- × **Gonostapelia** P. V. Heath, Calyx 1(1): 21, 1992. [= *Gonostemon* × *Stapelia* Linné. C. E. Jarvis et al. (Regnum Veg. 127: 90-91, 1993) propose *Stapelia hirsuta* Linné for conservation as type of *Stapelia*, thus making this hybrid name obsolete.]
- × **Gonostapelia barklyi** (N. E. Brown) P. V. Heath, Calyx 1(1): 21, 1992. Basionym: *Stapelia* × *barklyi*.
- × **Gonostapelia maculosa** (Donn) P. V. Heath, Calyx 1(1): 21, 1992. Basionym: *Stapelia* × *maculosa*.
- × **Gonostapelia maculosoides** (N. E. Brown) P. V. Heath, Calyx 1(1): 21, 1992. Basionym: *Stapelia* × *maculosoides*.
- × **Gonostapelia plowesii** P. V. Heath, Calyx 1(1): 21, 1992. Typus: *Plowes* 3798 (PRE). [Erroneously (by a slip of the pen), '× *Gonostemon*' is used as the generic name. = *Gonostemon* (*Stapelia*) *kwebensis* × *Stapelia grandidens*.]
- Gonostemon acuminatus** (Masson) P. V. Heath, Calyx 1(1): 18, 1992. Basionym: *Stapelia acuminata*.
- Gonostemon arenosus** (Luckhoff) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia arenosa*.
- Gonostemon asterias** (Masson) P. V. Heath, Calyx 1(1): 17, 1992. Basionym: *Stapelia asterias*.
- Gonostemon baylissii** (Leach) P. V. Heath, Calyx 1(1): 18, 1992. Basionym: *Stapelia baylissii*. [Sphalm. 'baylisii'.]
- Gonostemon clavicoronus** (Verdoorn) P. V. Heath, Calyx 1(1): 18, 1992. Basionym: *Stapelia clavicorona*.
- Gonostemon concinnus** (Masson) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia concinna*.
- Gonostemon deflexus** (Jacquin) P. V. Heath, Calyx 1(1): 18, 1992. Basionym: *Stapelia deflexa*.
- Gonostemon erectiflorus** (N. E. Brown) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia erectiflora*.
- Gonostemon erectiflorus** fa. **aberrans** P. V. Heath, Calyx 1(1): 19, 1992. [Nom. nov. pro *Stapelia erectiflora* var. *prostratiflora* Leach 1984.]
- Gonostemon flavopurpureus** (Marloth) P. V. Heath, Calyx 1(1): 18, 1992. Basionym: *Stapelia flavopurpurea*.
- Gonostemon garlepenis** (Pillans) P. V. Heath, Calyx 1(1): 17, 1992. Basionym: *Stapelia garlepenis*.
- Gonostemon gettiffei** (Pott) P. V. Heath, Calyx 1(1): 17, 1992. Basionym: *Stapelia gettiffei*.
- Gonostemon** × **giessii** P. V. Heath, Calyx 1(1): 20, 1992. Typus: *Giess* 3362 (WIND). [= *Gonostemon kwebensis* × *G. schinzii*.]
- Gonostemon giganteus** (N. E. Brown) P. V. Heath, Calyx 1(1): 17, 1992. Basionym: *Stapelia gigantea*.
- Gonostemon glabricaulis** (N. E. Brown) P. V. Heath, Calyx 1(1): 17, 1992. Basionym: *Stapelia glabricaulis*.
- Gonostemon glanduliflorus** (Masson) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia glanduliflora*.
- Gonostemon grandiflorus** (Masson) P. V. Heath, Calyx 1(1): 17, 1992. Basionym: *Stapelia grandiflora*.
- Gonostemon hirsutus** (Linné) P. V. Heath, Calyx 1(1): 17, 1992. Basionym: *Stapelia hirsuta*.
- Gonostemon kougabergensis** (Leach) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia kougabergensis*.
- Gonostemon kwebensis** (N. E. Brown) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia kwebensis*.
- Gonostemon leendertzae** (N. E. Brown) P. V. Heath, Calyx 1(1): 17, 1992. Basionym: *Stapelia leendertzae*.
- Gonostemon longipedicellatus** (A. Berger) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia kwebensis* var. *longipedicellata*.
- Gonostemon macowanii** (N. E. Brown) P. V. Heath, Calyx 1(1): 18, 1992. Basionym: *Stapelia macowanii*.
- Gonostemon macowanii** var. **conformis** (N. E. Brown) P. V. Heath, Calyx 1(1): 18, 1992. Basionym: *Stapelia conformis*.
- Gonostemon** × **meintjesii** (Verdoorn pro sp.) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia* × *meintjesii*.
- Gonostemon montanus** (Leach) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia montana*.
- Gonostemon montanus** var. **grossus** (Leach) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia montana* var. *grossa*.
- Gonostemon obductus** (Leach) P. V. Heath, Calyx 1(1): 17, 1992. Basionym: *Stapelia obducta*.
- Gonostemon olivaceus** (N. E. Brown) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia olivacea*.
- Gonostemon paniculatus** (Willdenow) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia paniculata*.
- Gonostemon parvulus** (Kers) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia parvula*.
- Gonostemon pearsonii** (N. E. Brown) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia pearsonii*.
- Gonostemon peglerae** (N. E. Brown) P. V. Heath, Calyx 1(1): 17, 1992. Basionym: *Stapelia peglerae*.
- Gonostemon pillansii** (N. E. Brown) P. V. Heath, Calyx 1(1): 18, 1992. Basionym: *Stapelia pillansii*.
- Gonostemon pillansii** var. **fontinalis** (Nel) P. V. Heath, Calyx 1(1): 18, 1992. Basionym: *Stapelia pillansii* var. *fontinalis*.
- Gonostemon praetermissus** (Leach) P. V. Heath, Calyx 1(1): 17-18, 1992. Basionym: *Stapelia praetermissa*.
- Gonostemon praetermissus** var. **luteolus** (Leach) P. V. Heath, Calyx 1(1): 18, 1992. Basionym: *Stapelia praetermissa* var. *luteola*.

- Gonostemon pulvinatus** (Masson) P. V. Heath, Calyx 1(1): 17, 1992. Basionym: *Stapelia pulvinata*.
- Gonostemon remotus** (R. A. Dyer) P. V. Heath, Calyx 1(1): 18, 1992. Basionym: *Stapelia remota*.
- Gonostemon rubiginosus** (Nel) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia rubiginosa*.
- Gonostemon rufus** (Masson) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia rufa*.
- Gonostemon schinzii** (A. Berger & Schlechter) P. V. Heath, Calyx 1(1): 18, 1992. Basionym: *Stapelia schinzii*.
- Gonostemon schinzii** var. **angolensis** (Kers) P. V. Heath, Calyx 1(1): 18, 1992. Basionym: *Stapelia schinzii* var. *angolensis*.
- Gonostemon schinzii** var. **bergerianus** (Dinter) P. V. Heath, Calyx 1(1): 18, 1992. Basionym: *Stapelia bergeriana*. [Sphalm. 'bergeriana'.]
- Gonostemon scitulus** (Leach) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia scitula*.
- Gonostemon similis** (N. E. Brown) P. V. Heath, Calyx 1(1): 19, 1992. Basionym: *Stapelia similis*.
- Gonostemon surrectus** (N. E. Brown) P. V. Heath, Calyx 1(1): 18, 1992. Basionym: *Stapelia surrecta*.
- Gonostemon tsoensis** (N. E. Brown) P. V. Heath, Calyx 1(1): 17, 1992. Basionym: *Stapelia tsoensis*.
- Gonostemon unicornis** (Luckhoff) P. V. Heath, Calyx 1(1): 17, 1992. Basionym: *Stapelia unicornis*.
- Gonostemon vetulus** (Masson) P. V. Heath, Calyx 1(1): 18, 1992. Basionym: *Stapelia vetula*.
- Gonostemon villetiae** (Luckhoff) P. V. Heath, Calyx 1(1): 18, 1992. Basionym: *Stapelia villetiae*.
- × **Gonotriche** P. V. Heath, Calyx 1(1): 21, 1992. [= *Gonostemon* × *Tromotriche*.]
- × **Gonotriche bella** (A. Berger) P. V. Heath, Calyx 1(1): 21, 1992. Basionym: *Stapelia* × *bella*.
- Hoodia alstonii** (N. E. Brown) Plowes, Asklepios No. 56: 7, 1992. Basionym: *Trichocaulon alstonii*.
- Hoodia annulata** (N. E. Brown) Plowes, Asklepios No. 56: 8, 1992. Basionym: *Trichocaulon annulatum*.
- Hoodia coleii** Plowes, Asklepios No. 56: 8, 1992. [Nom. nov. pro *Trichocaulon pillansii* N. E. Brown 1904, non *Hoodia pillansii* N. E. Brown.]
- Hoodia delaetianum** (Dinter) Plowes, Asklepios No. 56: 8, 1992. Basionym: *Trichocaulon delaetianum*. [Sphalm. 'delaetii'.]
- Hoodia flava** (N. E. Brown) Plowes, Asklepios No. 56: 8, 1992. Basionym: *Trichocaulon flavum*.
- Hoodia foetida** Plowes, Asklepios No. 56: 9, 1992. [Nom. nov. pro *Trichocaulon triebneri* Nel 1935, non *Hoodia triebneri* Schuldt.]
- Hoodia mossamedensis** (Leach) Plowes, Asklepios No. 56: 9, 1992. Basionym: *Trichocaulon mossamedense*.
- Hoodia officinalis** (N. E. Brown) Plowes, Asklepios No. 56: 9, 1992. Basionym: *Trichocaulon officinale*.
- Hoodia pedicellata** (Schinz) Plowes, Asklepios No. 56: 9, 1992. Basionym: *Trichocaulon pedicellatum*.
- Hoodia pilifera** (Linné fil.) Plowes, Asklepios No. 56: 10, 1992. Basionym: *Stapelia pilifera*.
- Hoodia rustica** (N. E. Brown) Plowes, Asklepios No. 56: 10, 1992. Basionym: *Trichocaulon rusticum*.
- × **Hoodiostemon** P. V. Heath, Calyx 1(1): 20, 1992. [= *Hoodia* × *Gonostemon*.]
- × **Hoodiostemon beukmanii** (Verdoorn) P. V. Heath, Calyx 1(1): 20, 1992. Basionym: *Stapelia beukmanii*. [Sphalm. 'beukmanii'.]
- Hoya brittonii** Kloppenburg, Fraterna 1992(4): appendix I, 3 pp., ills., 1992. Typus: Britton 19519 (PNH).
- Hoya calycina** ssp. **glabrifolia** P. I. Forster & Liddle, Austrobaileya 3(4): 633, 1992. Typus: Brass 13465 (BRI, A, BO, L).
- Hoya gigantanganensis** Kloppenburg, Fraterna 1992(4): appendix II, 3 pp., ills., 1992. Typus: Kondo et Edano 36787 (PNH).
- Hoya magnifica** P. I. Forster & Liddle, Austrobaileya 3(4): 629-630, fig. 1, 1992. Typus: Streimann et Kairo NGF39381 (CANB, A, BO, BRI, K, L, LAE).
- Hoya quisumbingii** Kloppenburg, Fraterna 1992(4): appendix III, 3 pp., ills., 1992. Typus: Quisumbing et al. 79412 (PNH).
- Hoya wightii** ssp. **palniensis** K. T. Matthew, Hoyan 14(1: Part 2): 2-3, 5, ills., 1992. Typus: Matthew RHT-49777 (K, CAL, K, MH, RHT, SHC).
- Leachia* Plowes, Asklepios No. 56: 11, 1992. Nom. illeg. (Art. 64.1). Based on *Stapelia cactiformis* Hooker. [Non *Leachia* Cassini 1822 (*Asteraceae*). Renamed *Leachiella* Plowes 1992.]
- Leachia cactiformis* (Hooker) Plowes, Asklepios No. 56: 12, 1992. Incorrect name (Art. 11.3, 68.1), based on *Stapelia cactiformis*.
- Leachia dinteri* (A. Berger) Plowes, Asklepios No. 56: 12, 1992. Incorrect name (Art. 11.3, 68.1), based on *Trichocaulon dinteri*.
- Leachia felina* (D. T. Cole) Plowes, Asklepios No. 56: 12, 1992. Incorrect name (Art. 11.3, 68.1), based on *Trichocaulon felinum*.
- Leachia marlothii* (N. E. Brown) Plowes, Asklepios No. 56: 12, 1992. Incorrect name (Art. 11.3, 68.1), based on *Trichocaulon marlothii*.
- Leachia meloformis* (Marloth) Plowes, Asklepios No. 56: 12, 1992. Incorrect name (Art. 11.3, 68.1), based on *Trichocaulon meloforme*.
- Leachia perlata* (Dinter) Plowes, Asklepios No. 56: 14, 1992. Incorrect name (Art. 11.3, 68.1), based on *Trichocaulon perlatum*.
- Leachia picta* (N. E. Brown) Plowes, Asklepios No. 56: 14, 1992. Incorrect name (Art. 11.3, 68.1), based on *Trichocaulon pictum*. [Sphalm. 'pictum'.]
- Leachia similis* (N. E. Brown) Plowes, Asklepios

- No. 56: 14, 1992. Incorrect name (Art. 11.3, 68.1), based on *Trichocaulon simile*.
- Leachia sociarum* (White & Sloane) Plowes, Asklepios No. 56: 14, 1992. Incorrect name (Art. 11.3, 68.1), based on *Trichocaulon sociarum*. [Sphalm. 'sociara'.]
- Leachia tirasmontana* Plowes, Asklepios 57: 16, 1992. *Nom. inval.* (Art. 32.1, 36.1). [Mentioned as nude name only.]
- Leachiella* Plowes, Asklepios No. 57: 15, 1992. *Nom. illeg.* (Art. 64.1). Based on *Stapelia cactiformis* Hooker. [Non *Leachiella* P. Kugrens 1982 (*Rhodophyceae*). *Nom. nov. pro Leachia* Plowes 1992 non *Leachia* Cassini 1822 (*Asteraceae*).]
- Leachiella cactiformis* (Hooker) Plowes, Asklepios No. 57: 15, 1992. Incorrect name (Art. 11.3), based on *Stapelia cactiformis*.
- Leachiella dinteri* (A. Berger) Plowes, Asklepios No. 57: 16, 1992. Incorrect name (Art. 11.3), based on *Trichocaulon dinteri*.
- Leachiella felina* (D. T. Cole) Plowes, Asklepios No. 57: 16, 1992. Incorrect name (Art. 11.3), based on *Trichocaulon felinum*.
- Leachiella marlothii* (N. E. Brown) Plowes, Asklepios No. 57: 16, 1992. Incorrect name (Art. 11.3), based on *Trichocaulon marlothii*.
- Leachiella meloformis* (Marloth) Plowes, Asklepios No. 57: 16, 1992. Incorrect name (Art. 11.3), based on *Trichocaulon meloforme*.
- Leachiella perlata* (Dinter) Plowes, Asklepios No. 57: 16, 1992. Incorrect name (Art. 11.3), based on *Trichocaulon perlatum*.
- Leachiella picta* (N. E. Brown) Plowes, Asklepios No. 57: 16, 1992. Incorrect name (Art. 11.3), based on *Trichocaulon pictum*. [Sphalm. 'pictum'.]
- Leachiella similis* (N. E. Brown) Plowes, Asklepios No. 57: 16, 1992. Incorrect name (Art. 11.3), based on *Trichocaulon simile*.
- Leachiella sociarum* (White & Sloane) Plowes, Asklepios No. 57: 16, 1992. Incorrect name (Art. 11.3), based on *Trichocaulon sociarum*. [Sphalm. 'sociara'.]
- × *Orbeostemon* P. V. Heath, Calyx 1(1): 20, 1992. [= *Orbeopsis* × *Gonostemon*.]
- × *Orbeostemon leachii* P. V. Heath, Calyx 1(1): 20-21, 1992. Typus: *Plowes* 2477 (PRE). [= *Gonostemon* (*Stapelia*) *kwebensis* × *Orbeopsis caudata*.]
- × *Orbeostemon tarantuloides* (R. A. Dyer pro sp.) P. V. Heath, Calyx 1(1): 20, 1992. Basionym: *Stapelia tarantuloides*.
- Sarcostemma brevipedicellatum* P. I. Forster, Aust. Syst. Bot. 5(1): 59-62, ills., 1992. Typus: *Forster* 1420 (BRI, AD, CANB, CBG, DNA, K, MEL, PERTH, PRE, QRS) [Ex cult.].
- Sarcostemma mulanjense* Liede & Meve, Novon 2: 223-226, ills., map, 1992. Typus: *Chapman et Chapman* 6892 (MO).
- Sarcostemma viminale* ssp. *australe* (R. Brown) P. I. Forster, Aust. Syst. Bot. 5(1): 64, ills., 1992. Basionym: *Sarcostemma australe*.
- Sarcostemma viminale* ssp. *brunonianum* (Wight & Amott) P. I. Forster, Aust. Syst. Bot. 5(1): 63, ills., 1992. Basionym: *Sarcostemma brunonianum*.
- Stapelia grandidens* (Verdoorn) P. V. Heath, Calyx 1(1): 16, 1992. Basionym: *Caralluma grandidens*.
- Stapelia halipedicola* P. V. Heath, Calyx 1(1): 16, 1992. [Nom. nov. pro *Orbea halipedicola* Leach.]
- Stapelia halipedicola* var. *borealis* P. V. Heath, Calyx 1(1): 16, 1992. [Nom. nov. pro *Orbea halipedicola* Leach ssp. *septentrionalis* Leach.]
- Stapelia paradoxa* (Verdoorn) P. V. Heath, Calyx 1(1): 16, 1992. Basionym: *Stultitia paradoxa*.
- Stapelia rangeana* (Dinter & A. Berger) P. V. Heath, Calyx 1(1): 16, 1992. Basionym: *Caralluma rangeana*.
- Stapelia speciosa* P. V. Heath, Calyx 1(1): 16, 1992. [Nom. nov. pro *Orbea speciosa* Leach.]
- Stapelia umbracula* (Henderson) P. V. Heath, Calyx 1(1): 16, 1992. Basionym: *Stultitia umbracula*.
- Stapelia verrucosa* var. *fuscata* (N. E. Brown) P. V. Heath, Calyx 1(1): 16, 1992. Basionym: *Stapelia fuscata*.
- × *Tavastemon* P. V. Heath, Calyx 1(1): 21, 1992. [= *Tavaresia* × *Gonostemon*.]
- × *Tavastemon meintjesii* (R. A. Dyer) P. V. Heath, Calyx 1(1): 21, 1992. Basionym: *Tavaresia* × *meintjesii*.
- × *Trichodentea* P. V. Heath, Calyx 1(1): 22, 1992. [= *Trichocaulon* × *Tridentea*.]
- × *Trichodentea atlantica* (Dinter) P. V. Heath, Calyx 1(1): 22, 1992. *Nom. inval.*, based on *Echidnopsis* × *atlantica*, *nom. inval.* (Art. nom. nud.).
- × *Tromostapelia* P. V. Heath, Calyx 1(1): 21, 1992. [= *Tromotriche* × *Stapelia*.]
- × *Tromostapelia mutabilis* (Jacquin) P. V. Heath, Calyx 1(1): 21, 1992. Basionym: *Stapelia* × *mutabilis*.
- × *Tromostapelia mutabilis* var. *bicolor* (Rüst) P. V. Heath, Calyx 1(1): 21, 1992. Basionym: *Stapelia* × *mutabilis* var. *bicolor*.
- × *Tromostapelia mutabilis* var. *cupularis* (N. E. Brown) P. V. Heath, Calyx 1(1): 21-22, 1992. Basionym: *Stapelia* × *cupularis*.
- × *Tromostapelia mutabilis* var. *discolor* (Todaro) P. V. Heath, Calyx 1(1): 22, 1992. Basionym: *Stapelia* × *discolor*.
- × *Tromostapelia mutabilis* var. *trifida* (Todaro) P. V. Heath, Calyx 1(1): 22, 1992. Basionym: *Stapelia* × *trifida*.

ASTERACEAE

- Kleinia descoingsii* (Humbert) C. Jeffrey, Kew Bull. 47(1): 98, 1992. Basionym: *Notonia descoingsii*.
- Kleinia gypsophila* Lebrun & Stork, Bull. Mus. Nation. Hist. Nat. Paris, sect. B, Adansonia 11(4): 413-416, ills., 1989. Typus: *Rippstein* 1232 (ALF). [Omitted previously.]
- Senecio laticipes* Bruyns, South Afr. J. Bot. 58(1):

51-52, ills., 1992. Typus: *Bayer* 3299 (BOL, PRE).

Senecio sarcooides C. Jeffrey, *Kew Bull.* 47(1): 96, 1992. [*Nom. nov. pro Senecio succulentus* De Candolle 1838 non Forsskål 1775.]

Senecio toxotis C. Jeffrey, *Kew Bull.* 47(1): 95, 1992. [*Nom. nov. pro Senecio archeri* (Compton) H. Jacobsen non Cuatrecasas.]

CACTACEAE

× **Acanthinopsis** P. V. Heath, *Calyx* 1(3): 94, 1992. [= *Acanthocalycium* × *Echinopsis*.]

Aporocactus flagelliformis var. **leptophis** (De Candolle) P. V. Heath, *Calyx* 2(2): 60, 1992. Basionym: *Cereus leptophis*.

Aporocactus flagelliformis var. **pfeifferi** P. V. Heath, *Calyx* 2(2): 60, 1992. [*Nom. nov. pro Cereus flagriformis* Pfeiffer 1837.]

Aporocactus martianus var. **conzattii** (Britton & Rose) P. V. Heath, *Calyx* 2(2): 60, 1992. Basionym: *Aporocactus conzattii*.

Ariocarpus bravoanus H. M. Hernández & E. F. Anderson, *Bradleya* 10: 1-4, ills., cover-ill., 1992. Typus: *Hernández et al.* 1977 (MEXU, DES, K, MO, PATZ).

+ **Ariocereus** P. V. Heath, *Calyx* 1(3): 98, 1992. [*Ariocarpus* + *Trichocereus* graft chimaera.]

+ **Ariocereus ewaldii** P. V. Heath, *Calyx* 1(3): 98, 1992. [= *Ariocarpus kotschoubeyanus* + *Trichocereus spachianus* (graft chimaera).]

Arthrocareus damazioi (K. Schumann) P. V. Heath, *Calyx* 2(2): 65, 1992. Basionym: *Cereus damazioi*. [Validity / legitimacy of basionym and combination debatable.]

Aztekiem hintonii Glass & Fitz Maurice, *Cact. Suc. Mex.* 37(1): 13-16, ills. (incl. p. 28), 1992. Typus: *Hinton* s.n. (herb. CanTe AC Nr. 02).

× **Beahmara** P. V. Heath, *Calyx* 1(2): 68, 1992. [= *Epiphyllum* × *Opuntia* × *Selenicereus*.]

× **Buchheimara** P. V. Heath, *Calyx* 1(3): 109, 1992. [= *Echinocereus* × *Heliocereus* × *Nopalxochia*.]

× **Callisonara** P. V. Heath, *Calyx* 1(3): 98, 1992. [= *Arequipa* × *Heliocereus* × *Nopalxochia*.]

Carnegiea sect. **Macea** P. V. Heath, *Calyx* 2(3): 108, 1992. Typus: *Pilocereus fulviceps* F. A. C. Weber. *Nom. nov. pro Pseudomitrocereus* Buxbaum 1961.

Carnegiea euphorbioides var. **olfersii** (Salm-Dyck) P. V. Heath, *Calyx* 2(3): 108, 1992. Basionym: *Cereus olfersii*.

Carnegiea fulviceps (F. A. C. Weber ex K. Schumann) P. V. Heath, *Calyx* 2(3): 108, 1992. Basionym: *Pilocereus fulviceps*.

Carnegiea gigantea fa. **aberrans** P. V. Heath, *Calyx* 2(3): 108, 1992. Typus: [icono] *Cact. Succ. J. (US)* 34: 174, fig. 114, 1962.

Carnegiea gigantea fa. **cristata** P. V. Heath, *Calyx* 2(3): 108, 1992. Typus: [icono] *Cact. Succ. J. (US)* 1(1): front cover, 1929. [Previously used as nude name by Haselton and Y. Ito.]

Carnegiea laui P. V. Heath, *Calyx* 2(3): 109,

1992. Typus: [icono] *Brit. Cact. Succ. J.* 4: 101, fig. 3, 1986.

Carnegiea macrocephala (F. A. C. Weber ex K. Schumann) P. V. Heath, *Calyx* 2(3): 109, 1992. Basionym: *Cephalocereus macrocephalus*.

Carnegiea mezcalsensis (Bravo) P. V. Heath, *Calyx* 2(3): 109, 1992. Basionym: *Cephalocereus mezcalsensis*.

Carnegiea mezcalsensis var. **multareolata** (E. Y. Dawson) P. V. Heath, *Calyx* 2(3): 109, 1992. Basionym: *Cephalocereus mezcalsensis* var. *multareolatus*.

Carnegiea nova P. V. Heath, *Calyx* 2(3): 109, 1992. Typus: [icono] *Brit. Cact. Succ. J.* 4: front cover, 1986.

Carnegiea scoparia (Poselger) P. V. Heath, *Calyx* 2(3): 109, 1992. Basionym: *Cereus scoparius*.

Carnegiea squamulosa (Scheinvar & Sánchez-Mejorada) P. V. Heath, *Calyx* 2(3): 108, 1992. Basionym: *Neobuxbaumia squamulosa*.

Carnegiea tetetzo (F.A.C. Weber ex J. M. Coulter) P. V. Heath, *Calyx* 2(3): 108, 1992. Basionym: *Cereus tetetzo*.

Carnegiea tetetzo var. **nuda** (E. Y. Dawson) P. V. Heath, *Calyx* 2(3): 108, 1992. Basionym: *Cephalocereus nudus*.

Cephalocereus chrysacanthus fa. **cristatus** P. V. Heath, *Calyx* 2(3): 110, 1992. Typus: [icono] *Cact. Succ. J. (US)* 10: 12, fig. 9, 1938. [Based on *Pilocereus chrysacanthus* fa. *cristatus* Y. Ito (*nom. nud.*).]

Cephalocereus columna-trajani (Karwinski) P. V. Heath, *Calyx* 2(3): 109, 1992. Basionym: *Cereus columna-trajani*.

Cephalocereus leucocephalus fa. **cristatus** P. V. Heath, *Calyx* 2(3): 110, 1992. Typus: [icono] Y. Ito, *The Cact.*, 195, fig. 109-(b)-1-(1)-(A), 1981. [Based on *Pilocereus leucocephalus* fa. *cristatus* Y. Ito (*nom. nud.*).]

Cephalocereus nobilis fa. **cristatus** P. V. Heath, *Calyx* 2(3): 110, 1992. Typus: [icono] Y. Ito, *The Cact.*, 197, fig. 109-(b)-2-1-(A), 1981. [Based on *Pilocereus nobilis* fa. *cristatus* Y. Ito 1981 (*nom. nud.*).]

Cephalocereus palmeri fa. **cristatus** P. V. Heath, *Calyx* 2(3): 110, 1992. Typus: [icono] Y. Ito, *The Cact.*, 197, fig. 109-(b)-1-1-(A), 1981. [Based on *Pilocereus palmeri* fa. *cristatus* Y. Ito 1981 (*nom. nud.*).]

Cephalocereus senilis fa. **cristatus** (Mathsson) P. V. Heath, *Calyx* 2(3): 109, 1992. Basionym: *Pilocereus senilis* var. *cristatus*.

Cephalocereus senilis fa. **fasciatus** P. V. Heath, *Calyx* 2(3): 109, 1992. Typus: [icono] *Cact. Succ. J. (US)* 16: 182, fig. 167 lower right, 1944.

× **Cephalocereus impossibilis** P. V. Heath, *Calyx* 2(3): 111, 1992. *Nom. inval.* (Art. 37.1). [= *Cephalocereus palmeri* × *Heliocereus speciosus*. Type not clearly cited.]

Cereus subgen. **Mirabella** (F. Ritter) N. P. Taylor, *Bradleya* 10: 25, 1992. Basionym: *Mirabella*.

Cereus subgen. **Oblongicarpus** (Croizat) D. R. Hunt & N. P. Taylor, *Bradleya* 10: 18, 1992. Basionym: *Pilocereus* sect. *Oblongicarpus*.

- × **Chamaecactus** P. V. Heath, Calyx 1(3): 104, 1992. [= *Chamaecereus* × *Notocactus*.]
- × **Chamaecereopsis** P. V. Heath, Calyx 1(3): 103, 1992. [= *Chamaecereus* × *Echinopsis*.]
- × **Chamaecladodia** P. V. Heath, Calyx 1(3): 104, 1992. [= *Chamaecereus* × *Leptocladodia*; existence reported in the literature but highly unlikely.]
- × **Cleistochamaecereus** P. V. Heath, Calyx 1(3): 103, 1992. [= *Cleistocactus* × *Chamaecereus*.]
- × **Cockeara** P. V. Heath, Calyx 1(2): 84, 1992. [= *Aporocactus* × *Epiphyllum* × *Heliocereus* × *Nopalxochia* × *Selenicereus*.]
- × **Coleocereus** P. V. Heath, Calyx 1(3): 106, 1992. [= *Coleocephalocereus* × *Stephanocereus*.]
- Copiapoa cinerea* [?] *longistaminea* (F. Ritter) Meregalli, *Piante Grasse* 11(4): 19, 1992. *Nom. inval.* (Art. 35.1), based on *Copiapoa longistaminea*. [No rank indicated for this name.]
- Copiapoa copiapensis* (Pfeiffer) Meregalli, *Piante Grasse* 11(4): 22, 1992. *Nom. inval.* (Art. 34.1), based on *Echinocactus copiapensis*.
- Copiapoa intricata* Meregalli, *Piante Grasse* 11(4): 34, 1992. *Nom. inval.* (Art. 34.1), based on *Echinocactus intricatus*, *nom. illeg.* (Art. 64.1).
- Copiapoa macracantha* (Salm-Dyck) Meregalli, *Piante Grasse* 11(4): 38, 1992. *Nom. inval.* (Art. 34.1), based on *Echinocactus macracanthus*.
- × **Courantara** P. V. Heath, Calyx 1(3): 116, 1992. [= *Epiphyllum* × *Heliocereus* × *Selenicereus*.]
- Discocactus cephaliaciculosus* ssp. *nudicephalus* P. J. Braun & E. Esteves Pereira, *Kakt. and. Sukk.* 43(10): 218-224, *ills.*, 1992. Based on *Esteves Pereira* 148. *Nom. inval.* (Art. 43.1).
- × **Echinobutia** P. V. Heath, Calyx 1(3): 112, 1992. [= *Echinopsis* × *Rebutia*.]
- Echinocactus grusonii** cv. **Kahlkopf** Unger, *Grosse Kugelkakt.* Nordamer., 78, 1992. [Based on *Echinocactus grusonii* var. *subinermis* Y. Ito 1981 (*nom. inval.*, Art. 37.1).]
- Echinocactus grusonii** cv. **Krauskopf** Unger, *Grosse Kugelkakt.* Nordamer., 78, 1992. [Based on *Echinocactus grusonii* var. *intertextus* Y. Ito 1981 (*nom. inval.*, Art. 37.1).]
- Echinocactus grusonii** cv. **Strubbelkopf** Unger, *Grosse Kugelkakt.* Nordamer., 78, 1992. [Based on *Echinocactus grusonii* var. *horridus* Y. Ito 1981 (*nom. inval.*, Art. 37.1).]
- Echinocactus grusonii** cv. **Weisskopf** Unger, *Grosse Kugelkakt.* Nordamer., 78, 1992. [Based on *E. grusonii* var. *albispinus* Y. Ito 1981 (*nom. inval.*, Art. 37.1).]
- + **Echinocalycium** P. V. Heath, Calyx 1(3): 111, 1992. [= *Echinopsis* + *Gymnocalycium* graft chimaera.]
- + **Echinocalycium japonicum** P. V. Heath, Calyx 1(3): 111, 1992. [= *Echinopsis eyriesii* + *Gymnocalycium mihanovichii* var. *friedrichii* (graft chimaera), based on a report in *Succ. Japon.* 12(71): 3, 1970.]
- × **Echinocereopsis** P. V. Heath, Calyx 1(3): 109, 1992. [= *Echinocereus* × *Echinopsis*.]
- Echinocereus berlandieri** var. **posegerianus** (Linke) Lodé, *Cact. Adventures* No. 16: 17, 1992. Basionym: *Echinocereus posegerianus*. [Simultaneously also (invalidly) published in *Fichier Encycl. Cact.*, ser. 7: no. 590, 1992.]
- × **Echinocoxia** P. V. Heath, Calyx 1(3): 110, 1992. [= *Echinocereus* × *Wilcoxia*.]
- × **Echinoferocactus** P. V. Heath, Calyx 1(3): 109, 1992. [= *Echinocactus* × *Ferocactus*.]
- Echinofossulocactus boedekerianus* fa. *densispinus* P. V. Heath, Calyx 2(3): 86, 1992. *Nom. inval.* (Art. 37.1). [Based on *Echinofossulocactus densispinus* Pechánek 1965 (*nom. inval.*, Art. 9.5).]
- Echinofossulocactus boedekerianus** fa. **ochoterenanus** (Tiegel) P. V. Heath, Calyx 2(3): 86, 1992. Basionym: *Echinofossulocactus ochoterenanus*. [Sphalm. 'ochoterenae'.]
- Echinofossulocactus boedekerianus* fa. *parksonianus* P. V. Heath, Calyx 2(3): 86, 1992. *Nom. inval.* (Art. 37.1). [Based on *Echinofossulocactus parksonianus* Pechánek 1965 (*nom. inval.*, Art. 9.5).]
- Echinofossulocactus boedekerianus* fa. *rosasianus* P. V. Heath, Calyx 2(3): 86, 1992. *Nom. inval.* (Art. 37.1). [Based on *Echinofossulocactus rosasianus* Pechánek 1965 (*nom. inval.*, Art. 9.5).]
- Echinofossulocactus crispatus** fa. **acracanthus** (Stieber) P. V. Heath, Calyx 2(3): 86, 1992. Basionym: *Echinocactus acracanthus*.
- Echinofossulocactus crispatus** fa. **anfractuosus** (Pfeiffer) P. V. Heath, Calyx 2(3): 86, 1992. Basionym: *Echinocactus anfractuosus*.
- Echinofossulocactus crispatus** fa. **arrigens** (A. Dietrich) P. V. Heath, Calyx 2(3): 86, 1992. Basionym: *Echinocactus arrigens*.
- Echinofossulocactus crispatus** fa. **confusus** (Britton & Rose) P. V. Heath, Calyx 2(3): 86, 1992. Basionym: *Echinofossulocactus confusus*.
- Echinofossulocactus crispatus** fa. **dichracanthus** (Pfeiffer) P. V. Heath, Calyx 2(3): 86, 1992. Basionym: *Echinocactus dichracanthus*.
- Echinofossulocactus crispatus** fa. **ensiferus** (Lemaire) P. V. Heath, Calyx 2(3): 86, 1992. Basionym: *Echinocactus ensiferus*.
- Echinofossulocactus crispatus** fa. **flexispinus** (Bravo) P. V. Heath, Calyx 2(3): 86, 1992. Basionym: *Echinofossulocactus flexispinus*.
- Echinofossulocactus crispatus** fa. **grandicornis** (Lemaire) P. V. Heath, Calyx 2(3): 86, 1992. Basionym: *Echinocactus grandicornis*.
- Echinofossulocactus crispatus** fa. **guerraianus** (Backeberg) P. V. Heath, Calyx 2(3): 86, 1992. Basionym: *Echinofossulocactus guerraianus*. [Basionym name and reference incorrect and here corrected and treated as bibliographical error.]
- Echinofossulocactus crispatus** fa. **heteracanthus** (Mühlenpfordt) P. V. Heath, Calyx 2(3): 86, 1992. Basionym: *Echinocactus heteracanthus*.

- Echinofossulocactus crispatus** fa. **kellerianus** (Krainz) P. V. Heath, *Calyx* 2(3): 87, 1992. Basionym: *Echinofossulocactus kellerianus*.
- Echinofossulocactus crispatus** fa. **lamellosus** (A. Dietrich) P. V. Heath, *Calyx* 2(3): 87, 1992. Basionym: *Echinocactus lamellosus*.
- Echinofossulocactus crispatus** fa. **lancifer** (A. Dietrich) P. V. Heath, *Calyx* 2(3): 87, 1992. Basionym: *Echinocactus lancifer*.
- Echinofossulocactus crispatus** fa. **obvallatus** (De Candolle) P. V. Heath, *Calyx* 2(3): 87, 1992. Basionym: *Echinocactus obvallatus*.
- Echinofossulocactus crispatus** fa. **pentacanthus** (Lemaire) P. V. Heath, *Calyx* 2(3): 87, 1992. Basionym: *Echinocactus pentacanthus*.
- Echinofossulocactus crispatus** fa. **tellii** (A. Berger) P. V. Heath, *Calyx* 2(3): 87, 1992. Basionym: *Echinocactus tellii*.
- Echinofossulocactus crispatus** fa. **undulatus** (A. Dietrich) P. V. Heath, *Calyx* 2(3): 87, 1992. Basionym: *Echinocactus undulatus*.
- Echinofossulocactus crispatus** fa. **violaciflorus** (Quehl) P. V. Heath, *Calyx* 2(3): 87, 1992. Basionym: *Echinocactus violaciflorus*.
- Echinofossulocactus multicostatus** fa. **erectocentrus** P. V. Heath, *Calyx* 2(3): 87, 1992. Typus: [icono] Backeberg, *Die Cact.* 5: fig. 2617, 1961. [Based on *Echinofossulocactus erectocentrus* Backeberg 1961 (*nom. inval.*, Art. 95, 37.1).]
- Echinofossulocactus multicostatus** fa. **lloydii** (Britton & Rose) P. V. Heath, *Calyx* 2(3): 87, 1992. Basionym: *Echinofossulocactus lloydii*.
- Echinofossulocactus multicostatus** fa. **zacatecasensis** (Britton & Rose) P. V. Heath, *Calyx* 2(3): 87, 1992. Basionym: *Echinofossulocactus zacatecasensis*.
- Echinofossulocactus spinosus** (Wegener) P. V. Heath, *Calyx* 2(3): 87, 1992. Basionym: *Echinocactus spinosus*.
- Echinofossulocactus spinosus** fa. **albatus** (A. Dietrich) P. V. Heath, *Calyx* 2(3): 87, 1992. Basionym: *Echinocactus albatus*.
- Echinofossulocactus spinosus** fa. **vaupelianus** (Werdermann) P. V. Heath, *Calyx* 2(3): 87, 1992. Basionym: *Echinocactus vaupelianus*.
- Echinofossulocactus sulphureus** fa. **hastatus** (K. Schumann) P. V. Heath, *Calyx* 2(3): 87, 1992. Basionym: *Echinocactus hastatus*.
- × **Echinotocactus** P. V. Heath, *Calyx* 1(3): 112, 1992. [= *Echinopsis* × *Notocactus*.]
- × **Echinopalxochia** P. V. Heath, *Calyx* 1(3): 112, 1992. [= *Echinopsis* × *Nopalxochia*.]
- × **Espocana** P. V. Heath, *Calyx* 1(3): 117, 1992. [= *Espostoa* × *Matucana*.]
- × **Eversonara** P. V. Heath, *Calyx* 1(3): 120, 1992. [= *Heliocereus* × *Nopalxochia* × *Pfeiffera*.]
- × **Feastara** P. V. Heath, *Calyx* 1(2): 38, 1992. [= *Epiphyllum* × *Heliocereus* × *Nopalxochia*.]
- Ferocactus** sect. **Glaucescenti** Unger, Grosse Kugelkakt. Nordamer., 89, 1992. *Nom. inval.* (Art. 36.1). [Intended type: *Ferocactus glaucescens* (De Candolle) Britton & Rose. Based on *F. glaucescens* Group Taylor 1983.]
- Ferocactus** sect. **Pottsia** Unger, Grosse Kugelkakt. Nordamer., 88, 1992. *Nom. inval.* (Art. 36.1). [Intended type: *Ferocactus pottsii* (Salm-Dyck) Backeberg. Given as 'comb. nov. et stat. nov.' for *F. pottsii* Group Taylor 1983.]
- Ferocactus** subgen. **Bisnaga** (Orcutt) Unger, Grosse Kugelkakt. Nordamer., 88, 1992. Basionym: *Bisnaga*.
- Ferocactus acanthodes** var. **johnstonianus** (Britton & Rose) Unger, Grosse Kugelkakt. Nordamer., 132, 1992. Basionym: *Ferocactus johnstonianus*.
- Ferocactus chrysacanthus** fa. **rubrispinus** (Ford ex Orcutt) Unger, Grosse Kugelkakt. Nordamer., 210, 1992. Basionym: *Echinocactus rubrispinus*.
- Ferocactus** × **grandiflorus** (G. E. Lindsay) Unger, Grosse Kugelkakt. Nordamer., 242, 1992. Basionym: *Ferocactus fordii* var. *grandiflorus*.
- Ferocactus peninsulae** var. **coloratus** (H. E. Gates) Unger, Grosse Kugelkakt. Nordamer., 202, 1992. Basionym: *Ferocactus coloratus*.
- Ferocactus peninsulae** var. **gracilis** (H. E. Gates) Unger, Grosse Kugelkakt. Nordamer., 193, 1992. Basionym: *Ferocactus gracilis*.
- Ferocactus recurvus** fa. **flavispinus** (Haage ex Förster) Unger, Grosse Kugelkakt. Nordamer., 316, 1992. Basionym: *Echinocactus cornigerus* var. *flavispinus*.
- Ferocactus recurvus** subvar. **greenwoodii** (Glass) Unger, Grosse Kugelkakt. Nordamer., 299, 1992. Basionym: *Ferocactus recurvus* var. *greenwoodii*.
- Ferocactus recurvus** var. **latispinus** (Haworth) Unger, Grosse Kugelkakt. Nordamer., 302, 1992. Basionym: *Cactus latispinus*.
- Ferocactus viridescens** var. **orcuttii** (Engelmann ex Orcutt) Unger, Grosse Kugelkakt. Nordamer., 105, 1992. Basionym: *Echinocactus orcuttii*.
- × **Fricara** P. V. Heath, *Calyx* 1(3): 103, 1992. [= *Chamaecereus* × *Echinocereus* × *Trichocereus*.]
- Geohintonia** Glass & Fitz Maurice, *Cact. Suc. Mex.* 37(1): 16-17, 1992. Typus: *Geohintonia mexicana* Glass & Fitz Maurice.
- Geohintonia mexicana** Glass & Fitz Maurice, *Cact. Suc. Mex.* 37(1): 17-19, ills. (pp. 1, 14-15, 17), 1992. Typus: *Hinton* s.n. (herb. Can Te AC No. 01).
- × **Guillauminara** P. V. Heath, *Calyx* 1(3): 111, 1992. [= *Echinopsis* × *Harrisia* × *Trichocereus*.]
- × **Gymnobotia** P. V. Heath, *Calyx* 1(3): 118, 1992. [= *Gymnocalycium* × *Rebutia*.]
- Gymnocalycium** subgen. **Macrosemineum** Fric ex Metzger, *Gymnos* 9(17): 4, 1992. Typus: *Gymnocalycium denudatum* (Link & Otto) Pfeiffer ex Mittler. Based on *Gymnocalycium* subgen. *Gymnocalycium* Schütz 1969 (*nom. inval.*, Art. 22.3) and on 'subgroup *Macrosemineum*' Fric 1935.
- Gymnocalycium andreae** fa. **svecianum** Pazout ex Till, *AG Gymnocalycium* 5(2): 65-66, fig., 1992. Typus: *Rausch* 108 (WU). [First used as *G. andreae* var. *svecianum* Pazout 1960

- (*nom. inval.*, Art. 37.1.)
Gymnocalycium neuhuberi H. & W. Till, AG Gymnocalycium (Austria) 5(1): 59-60, ills., 1992. Typus: *Neuhuber* 88-77/179 (WU).
Gymnocalycium ochoteranae var. **herbsthoferianum** H. Till & Neuhuber, AG Gymnocalycium 5(4): 75-76, ills., 1992. Typus: *Neuhuber* 88-100/250 (WU). [Sphalm. 'ochoteranae'.]
Gymnocalycium ochoteranae var. **scoparium** H. Till & Neuhuber, AG Gymnocalycium 5(4): 74-75, ills., 1992. Typus: *Neuhuber* 88-98/242 (WU). [Sphalm. 'ochoteranae'.]
 × **Gymnochinopsis** P. V. Heath, Calyx 1(3): 111, 1992. [= *Gymnocalycium* × *Echinopsis*.]
 × **Gymnophora** P. V. Heath, Calyx 1(3): 118, 1992. [= *Gymnocalycium* × *Lophophora*.]
 × **Harrisinopsis jusbertii** (K. Schumann) P. V. Heath, Calyx 1(3): 111, 1992. Basionym: *Cereus jusbertii*.
Hattoria × **graeseri** Barthlott ex D. R. Hunt, Bradleya 10: 25, 1992. Typus: [icono] Kakteenkunde 1939: 10. [Name first used by Barthlott in l.c. 5: 100, 1987, based on *Rhipsalis* × *graeseri* Werdermann (*nom. inval.*, Art. 36). = *Hattoria gaertneri* × *H. rosea*.]
 × **Heliocereopsis** P. V. Heath, Calyx 1(3): 111, 1992. [= *Heliocereus* × *Echinopsis*.]
 × **Heliocchia jenkinsonii** (McIntosh) P. V. Heath, Calyx 1(3): 120, 1992. Basionym: *Cactus jenkinsonii*.
 × **Hypophyllum** P. V. Heath, Calyx 1(3): 116, 1992. [Reported to have been published l.c. 1(1): 36, 1992, but not found at the reference given.] [= *Hylocereus* × *Epiphyllum*.]
 × **Innesara** P. V. Heath, Calyx 1(2): 60, 1992. [= *Echinopsis* × *Epiphyllum* × *Heliocereus* × *Nopalxochia* × *Selenicereus*.]
 × **Joyceara** P. V. Heath, Calyx 1(2): 84, 1992. [= *Aporocactus* × *Epiphyllum* × *Heliocereus* × *Nopalxochia*.]
 × **Kleinerara** P. V. Heath, Calyx 1(2): 86, 1992. [= *Aporocactus* × *Cryptocereus* × *Epiphyllum* × *Heliocereus* × *Selenicereus*.]
 × **Knebelara** P. V. Heath, Calyx 1(2): 52, 1992. [= *Echinopsis* × *Epiphyllum* × *Selenicereus*.]
Leptocereus santamarinae Areces Mallea, Brittonia 44: 45-49, 1992. Typus: *Areces Mallea* 5341 (HAC, HAJB, MNHN).
Lobivia subgen. **Cinnabarinea** (Fric ex F. Ritter) Ullmann, Kaktusy 28(1): 7, 1992. Basionym: *Cinnabarinea*.
Lobivia subgen. **Hymenorebutia** (Fric ex Buining) Ullmann, Kaktusy 28(1): 5, 1992. Basionym: *Hymenorebutia*.
Lobivia subgen. **Neolobivia** (Y. Ito) Ullmann, Kaktusy 28(1): 9, 1992. Basionym: *Neolobivia*.
Lobivia acanthoplegma fa. **neocinnabarina** (Backeberg) Ullmann, Kaktusy 28(1): 9, 1992. *Nom. inval.*, based on *Lobivia neocinnabarina*, *nom. inval.* (Art. 9.5).
Lobivia acanthoplegma fa. **patula** (Rausch) Ullmann, Kaktusy 28(1): 8, 1992. *Nom. inval.*, based on *Lobivia acanthoplegma* var. *patula*, *nom. inval.* (Art. 43.1).
Lobivia acanthoplegma fa. **pseudocinnabarina** (Backeberg) Ullmann, Kaktusy 28(1): 9, 1992. *Nom. inval.*, based on *Lobivia pseudocinnabarina*, *nom. inval.* (Art. 9.5).
Lobivia acanthoplegma fa. **taratensis** (Cárdenas) Ullmann, Kaktusy 28(1): 8, 1992. *Nom. inval.* (Art. 43.1), based on *Lobivia taratensis*.
Lobivia chrysochete var. **hystrix** (F. Ritter) Ullmann, Kaktusy 28(2): 34, 1992. Basionym: *Lobivia hystrix*.
Lobivia cinnabarina fa. **charcasina** (Cárdenas) Ullmann, Kaktusy 28(1): 8, 1992. Basionym: *Lobivia charcasina*.
Lobivia ferox fa. **aureoilacina** (Cárdenas) Ullmann, Kaktusy 28(2): 35, 1992. Basionym: *Lobivia aureoilacina*.
Lobivia ferox fa. **camargensis** (F. Ritter) Ullmann, Kaktusy 28(2): 34, 1992. Basionym: *Lobivia ferox* var. *camargensis*.
Lobivia ferox fa. **cerdana** (Cárdenas) Ullmann, Kaktusy 28(3): 58, 1992. Basionym: *Echinopsis cerdana*.
Lobivia ferox fa. **claeysiana** (Backeberg) Ullmann, Kaktusy 28(3): 58, 1992. Basionym: *Lobivia claeysiana*.
Lobivia ferox fa. **hastifera** (Werdermann) Ullmann, Kaktusy 28(3): 58, 1992. Basionym: *Lobivia hastifera*.
Lobivia ferox fa. **lecoriensis** (Cárdenas) Ullmann, Kaktusy 28(2): 35, 1992. Basionym: *Echinopsis lecoriensis*. [By a printer's error, the specific epithet is omitted in the original publication.]
Lobivia ferox fa. **pictiflora** (F. Ritter) Ullmann, Kaktusy 28(3): 58, 1992. Basionym: *Lobivia pictiflora*. [Sphalm. 'pictiflora'.]
Lobivia ferox fa. **varispina** (F. Ritter) Ullmann, Kaktusy 28(3): 58, 1992. Basionym: *Lobivia varispina*. [Sphalm. 'varispina'.]
Lobivia ferox fa. **wilkeae** (Backeberg) Ullmann, Kaktusy 28(3): 58, 1992. *Nom. inval.*, based on *Pseudolobivia wilkeae*, *nom. inval.* (Art. 37.1).
Lobivia haematantha fa. **chlorogona** (Wessner) Ullmann, Kaktusy 28(1): 7, 1992. Basionym: *Lobivia chlorogona*.
Lobivia haematantha fa. **pectinifera** (Wessner) Ullmann, Kaktusy 28(1): 7, 1992. Basionym: *Lobivia pectinifera*.
Lobivia haematantha fa. **scoparia** (Werdermann) Ullmann, Kaktusy 28(1): 7, 1992. Basionym: *Lobivia scoparia*.
Lobivia haematantha fa. **wessneriana** (Fritzen) Ullmann, Kaktusy 28(1): 7, 1992. Basionym: *Lobivia wessneriana*.
Lobivia haematantha var. **cachensis** (Spegazzini) Ullmann, Kaktusy 28(1): 6, 1992. Basionym: *Echinopsis cachensis*.
Lobivia hertrichiana fa. **allegraiana** (Backeberg) Ullmann, Kaktusy 28(1): 9, 1992. Basionym: *Lobivia allegraiana*.
Lobivia hertrichiana fa. **divaricata** (F. Ritter) Ullmann, Kaktusy 28(1): 9, 1992. Basionym: *Neolobivia divaricata*.

- Lobivia hertrichiana** fa. **echinata** (Rausch) Ullmann, Kaktusy 28(1): 9, 1992. Basionym: *Lobivia echinata*.
- Lobivia hertrichiana** fa. **huilcanota** (Rauh & Backeberg) Ullmann, Kaktusy 28(1): 9, 1992. Basionym: *Lobivia huilcanota*.
- Lobivia hertrichiana** fa. **planiceps** (Backeberg) Ullmann, Kaktusy 28(1): 9, 1992. Basionym: *Lobivia planiceps*.
- Lobivia hertrichiana** fa. **prolifera** (F. Ritter) Ullmann, Kaktusy 28(1): 9, 1992. Basionym: *Neolobivia prolifera*.
- Lobivia hertrichiana* fa. **wegneriana** (Grunert & Klügling) Ullmann, Kaktusy 28(1): 10, 1992. *Nom. inval.*, based on *Lobivia wegneriana*, *nom. inval.* (Art. 34.1, 37.1).
- Lobivia jajoiana** fa. **buiningiana** (F. Ritter) Ullmann, Kaktusy 28(1): 10, 1992. Basionym: *Lobivia buiningiana*.
- Lobivia jajoiana** fa. **miniatinigra** (F. Ritter) Ullmann, Kaktusy 28(1): 10, 1992. Basionym: *Lobivia miniatinigra*.
- Lobivia jajoiana** var. **glauca** (Rausch) Ullmann, Kaktusy 28(1): 10, 1992. Basionym: *Lobivia glauca*.
- Lobivia lateritia** var. **camataquiensis** (Cárdenas) Ullmann, Kaktusy 28(3): 58, 1992. Basionym: *Lobivia camataquiensis*. [Sphalm. 'camataquiensis'.]
- Lobivia marsoneri** var. **haageana** (Backeberg) Ullmann, Kaktusy 28(1): 11, 1992. Basionym: *Lobivia haageana*.
- Lobivia marsoneri* var. **muhriae** (Backeberg) Ullmann, Kaktusy 28(1): 11, 1992. *Nom. inval.*, based on *Lobivia muhriae*, *nom. inval.* (Art. 9.5).
- Lobivia marsoneri** var. **rubescens** (Backeberg) Ullmann, Kaktusy 28(1): 11, 1992. Basionym: *Lobivia rubescens*.
- Lobivia marsoneri** var. **uitewaaliana** (Buining) Ullmann, Kaktusy 28(1): 11, 1992. Basionym: *Lobivia uitewaaliana*. [Sphalm. 'uitewaaleana'.]
- Lobivia maximiliana** fa. **cariquinensis** (Cárdenas) Ullmann, Kaktusy 28(2): 33, 1992. Basionym: *Lobivia cariquinensis*.
- Lobivia maximiliana** fa. **pseudocariquinensis** (Cárdenas) Ullmann, Kaktusy 28(2): 33, 1992. Basionym: *Lobivia pseudocariquinensis*.
- Lobivia maximiliana** var. **lauramarca** (Rauh & Backeberg) Ullmann, Kaktusy 28(2): 33, 1992. Basionym: *Lobivia lauramarca*.
- Lobivia pentlandii** fa. **aculeata** (Buining) Ullmann, Kaktusy 28(2): 32, 1992. Basionym: *Lobivia aculeata*.
- Lobivia pentlandii** fa. **argentea** (Backeberg) Ullmann, Kaktusy 28(2): 32, 1992. Basionym: *Lobivia argentea*.
- Lobivia pentlandii* fa. **aurantiaca** (Backeberg) Ullmann, Kaktusy 28(2): 32, 1992. *Nom. inval.*, based on *Lobivia aurantiaca*, *nom. inval.* (Art. 36.1, 37.1).
- Lobivia pentlandii** fa. **boliviensis** (Britton & Rose) Ullmann, Kaktusy 28(2): 32, 1992. Basionym: *Lobivia boliviensis*.
- Lobivia pentlandii** fa. **carminantha** (Backeberg) Ullmann, Kaktusy 28(2): 32, 1992. Basionym: *Lobivia carminantha*.
- Lobivia pentlandii** fa. **hardeniana** (Bödeker) Ullmann, Kaktusy 28(2): 32, 1992. Basionym: *Lobivia hardeniana*.
- Lobivia pentlandii** fa. **higginsiana** (Backeberg) Ullmann, Kaktusy 28(2): 32, 1992. Basionym: *Lobivia higginsiana*.
- Lobivia pentlandii* fa. **johnsoniana** (Backeberg) Ullmann, Kaktusy 28(2): 32, 1992. *Nom. inval.*, based on *Lobivia johnsoniana*, *nom. inval.* (Art. 9.5, 37.1).
- Lobivia pentlandii** fa. **leucorhodon** (Backeberg) Ullmann, Kaktusy 28(2): 32, 1992. Basionym: *Lobivia leucorhodon*.
- Lobivia pentlandii** fa. **leucoviolaacea** (Backeberg) Ullmann, Kaktusy 28(2): 32, 1992. Basionym: *Lobivia leucoviolaacea*.
- Lobivia pentlandii** fa. **omasuyana** (Cárdenas) Ullmann, Kaktusy 28(2): 32, 1992. Basionym: *Lobivia omasuyana*.
- Lobivia pentlandii** fa. **raphidacantha** (Backeberg) Ullmann, Kaktusy 28(2): 32, 1992. Basionym: *Lobivia raphidacantha*.
- Lobivia pentlandii** fa. **titicacensis** (Cárdenas) Ullmann, Kaktusy 28(2): 32, 1992. Basionym: *Lobivia titicacensis*.
- Lobivia pentlandii** fa. **varians** (Backeberg) Ullmann, Kaktusy 28(2): 33, 1992. Basionym: *Lobivia varians*.
- Lobivia pentlandii** fa. **wegheiana** (Backeberg) Ullmann, Kaktusy 28(2): 33, 1992. Basionym: *Lobivia wegheiana*. [Sphalm. 'wegheana'.]
- Lobivia pugionacantha** var. **adpressispina** (F. Ritter) Ullmann, Kaktusy 28(3): 59, 1992. Basionym: *Lobivia adpressispina*.
- Lobivia pugionacantha** var. **boedekeriana** (Harden) Ullmann, Kaktusy 28(3): 59, 1992. Basionym: *Lobivia boedekeriana*.
- Lobivia pugionacantha** var. **campicola** (F. Ritter) Ullmann, Kaktusy 28(3): 59, 1992. Basionym: *Lobivia campicola*.
- Lobivia pugionacantha** var. **stollenwerkiana** (Bödeker) Ullmann, Kaktusy 28(3): 59, 1992. Basionym: *Lobivia stollenwerkiana*.
- Lobivia saltensis** fa. **emmae** (Backeberg) Ullmann, Kaktusy 28(1): 7, 1992. Basionym: *Lobivia emmae*.
- Lobivia sanguiniflora** var. **polycephala** (Backeberg) Ullmann, Kaktusy 28(2): 34, 1992. Basionym: *Lobivia polycephala*.
- Lobivia scheeri** (Salm-Dyck) Rausch, Kakt. and. Sukk. 43(9): 198, 1992. Basionym: *Echinopsis scheeri*.
- Lobivia scheeri** var. **borealis** (Rausch) Rausch, Kakt. and. Sukk. 43(9): 201, 1992. Basionym: *Lobivia pampana* var. *borealis*. [Sphalm. 'boralis'.]
- Lobivia tiegeliana** fa. **dimorphipetala** (F. Ritter) Ullmann, Kaktusy 28(1): 7, 1992. Basionym: *Hymenorebutia tiegeliana* var. *dimorphipetala*. [Sphalm. 'dimorphipetala'.]
- Lobivia tiegeliana** fa. **distefanoana** (Cullmann) Ullmann, Kaktusy 28(1): 7, 1992. Basionym:

- Lobivia tiegeliana* var. *distefanoana*. [Sphalm. 'distefanoiana']
- × **Lutterlohara** P. V. Heath, *Calyx* 1(3): 111, 1992. [= *Echinopsis* × *Heliocereus* × *Nopalxochia*.]
- × **Macdougallara** P. V. Heath, *Calyx* 1(2): 43, 1992. [= *Disocactus* × *Heliocereus* × *Heliocereus*.]
- Mammillaria albicans** fa. *dolorensis* J. Lüthy, *Mitteilungsbl. AfM* 16(5): 184, ills. (pp. 184, 188, 190), 1992. Typus: Lüthy s.n. (ZSS).
- Mammillaria albicans** fa. *fraileana* (Britton & Rose) J. Lüthy, *Mitteilungsbl. AfM* 16(5): 187, 1992. Basionym: *Neomammillaria fraileana*.
- Mammillaria albidula** Backeberg *ex* Reppenhagen, *Gattung Mammillaria* 2: 504-505, ill., 1992. Typus: *Reppenhagen* 1913 (KL) [Type erroneously given as neotype as the author was unaware of his validation of this earlier name.]. [First published invalidly (Art. 9.5, 37.1) by Backeberg, *Die Cact.* 5: 3429-3430, 1961, and erroneously included as valid in RPS 12.]
- Mammillaria barbata** var. *garessii* (Cowper) Lodé, *Cact. Aventures* No. 16: 17, 1992. Basionym: *Mammillaria garessii*. [Simultaneously also (invalidly) published in *Fichier Encycl. Cact.*, ser. 8: no. 698, 1992.]
- Mammillaria barbata** var. *morricallii* (Cowper) Lodé, *Cact. Aventures* No. 16: 17, 1992. Basionym: *Mammillaria morricallii*. [Simultaneously also (invalidly) published in *Fichier Encycl. Cact.*, ser. 9: no. 819, 1992.]
- Mammillaria barbata** var. *santaclarensis* (Cowper) Lodé, *Cact. Aventures* No. 16: 17, 1992. Basionym: *Mammillaria santaclarensis*. [Simultaneously also (invalidly) published in *Fichier Encycl. Cact.*, ser. 8: no. 699, 1992.]
- Mammillaria centraliplumosa** var. *gracilis* Reppenhagen, *Gattung Mammillaria* 2: 428-429, ill., 1992. Typus: *Reppenhagen* 1803 (KL).
- Mammillaria chiapensis** Reppenhagen, *Gattung Mammillaria* 2: 543-544, ill., 1992. Typus: *Reppenhagen* 960 (KL).
- Mammillaria columbiana** var. *albescens* Haage & Backeberg *ex* Reppenhagen, *Gattung Mammillaria* 2: 538, ill., 1992. Typus: *Reppenhagen* 2228 (KL). [First invalidly (Art. 37.1) published in Backeberg, *Die Cact.* 6: 3887, 1962 and erroneously included as valid in RPS 12 (and again in RPS 13). First mentioned in l. c. 5: 3390, 1961; and invalidly republished in *Kakt.-Lex*, 233, 1966 (cf. RPS 17).]
- Mammillaria haageana** var. *collina* (J. A. Purpus) Linzen & al., *Mitteilungsbl. AfM* 15(6): 234, 1992. Basionym: *Mammillaria collina*. [Dated 1991, published Jan. 1992.]
- Mammillaria sanchez-mejoradae** R. González G., *Cact. Suc. Mex.* 37(3): 55-59, 76, ills., 1992. Typus: *González G.* 4300 (MEXU, K [not received by early 1993]). [The epithet is given as 'sanchezmejoradae' in some of the captions of the illustrations.]
- Mammillaria scrippsiana** var. *pseudoscrippsiana* (Backeberg) E. Kuhn *ex* Reppenhagen, *Gattung Mammillaria* 2: 688, ill., 1992. Basionym: *Mammillaria pseudoscrippsiana*. [Combination first invalidly (Art. 33.2) published by E. Kuhn, *Inform.-brief ZAG Mammillarien* 6(4): 44, 1980, and again mentioned as nude name by Reppenhagen, *Gattung Mammillaria* 1987, 24.]
- Mammillaria swinglei** var. *diabloa* P. C. Fischer, *Cact. Succ. J. (US)* 64(5): 245-246, ills., 1992. Typus: *Fischer* 4848 (ARIZ).
- Matucana myriacantha* fa. *roseoalba* (hort.) Lodé, *Cact. Aventures* No. 16: 17, 1992. *Nom. inval.*, based on *Matucana roseoalba*, *nom. inval.* (Art. 29.1).
- × **Maturoya** P. V. Heath, *Calyx* 1(3): 123, 1992. [= *Matucana* × *Oroya*.]
- × **Medellocereus** P. V. Heath, *Calyx* 1(3): 120, 1992. [= *Mediocactus* × *Heliocereus*.]
- × **Micropilocereus** P. V. Heath, *Calyx* 1(3): 123, 1992. [= *Micranthocereus* × *Pseudopilocereus*.]
- × **Mottramara** P. V. Heath, *Calyx* 1(3): 103, 1992. [= *Chamaecereus* × *Echinopsis* × *Lobivia* × *Trichocereus*.]
- Myrtillocactus** sect. *Escontria* (Rose) P. V. Heath, *Calyx* 2(3): 105, 1992. Basionym: *Escontria*.
- Myrtillocactus** sect. *Polaskia* (Backeberg) P. V. Heath, *Calyx* 2(3): 105, 1992. Basionym: *Polaskia*.
- Myrtillocactus chende** (Gosselin) P. V. Heath, *Calyx* 2(3): 105, 1992. Basionym: *Cereus chende*.
- Myrtillocactus chende** fa. *cristatus* P. V. Heath, *Calyx* 2(3): 105, 1992. Typus: [icono] Y. Ito, *The Cact.*, 636: fig. 136-(1), 1981. [Based on *Heliabravo chende* fa. *cristata* Y. Ito 1981 (*nom. inval.*).]
- Myrtillocactus chichipe** (Gosselin) P. V. Heath, *Calyx* 2(3): 105, 1992. Basionym: *Cereus chichipe*.
- Myrtillocactus chiotilla** (F. A. C. Weber) P. V. Heath, *Calyx* 2(3): 105, 1992. Basionym: *Cereus chiotilla*. [Basionym authority incorrectly given as 'Schumann'.]
- Myrtillocactus chiotilla** fa. *spiralis* P. V. Heath, *Calyx* 2(3): 105, 1992. Typus: [icono] *Cact. Suc. Mex.* 16: 59, fig. 31, 1971. [Based on *Escontria chiotilla* fa. *monstruosa* Evanich (*nom. nud.*).]
- Myrtillocactus geometrizans** fa. *cristatus* P. V. Heath, *Calyx* 2(3): 105, 1992. Typus: [icono] Rauh, *Kakt. Standorten*, t. 28: links oben, 1979. [Name first used (as nude name) by Y. Ito 1981.]
- Myrtillocactus schenkii** fa. *cristatus* P. V. Heath, *Calyx* 2(3): 105, 1992. Typus: [icono] Y. Ito, *The Cact.* 636, fig. 122-(1), 1981. [Name first used (as nude name) by Y. Ito 1981.]
- Neoporteria floccosa** (F. Ritter) Lodé, *Cact.*

- Aventures No. 16: 17, 1992. Basionym: *Pyrhocactus floccosus*.
- Notocactus uebelmannianus* fa. *flaviflorus* Gerloff & Königs, Internoto 13(4): 104-112, ills., SEM-ills., 1992. Based on Gerloff 52b. *Nom. illeg.* (Art. 64.4). [*Non Notocactus uebelmannianus* fa. *flaviflorus* Buining 1968 (republished as fa. *gilviflorus* in 1993).]
- Notocactus uebelmannianus* var. *nilsonii* Königs, Internoto 13(2): 56, 1992. Typus: *Stockinger* 137 (KOELN). [First invalidly (Art. 37.1) published in l.c. 11(4): 119-124, ills., 1990 (cf. RPS 41).]
- Notocactus uebelmannianus* var. *pleiocephalus* Gerloff & Königs, Internoto 13(4): 103-112, ills., SEM-ills., 1992. Typus: *Gerloff* 52a (STU).
- × *Notolobivia* P. V. Heath, Calyx 1(3): 122, 1992. [= *Notocactus* × *Lobivia*.]
- Opuntia densispina* Ralston & Hilsenbeck, Madroño 39(4): 281-284, 1992. Typus: *Ralston* 200 (SRSC, ASC, TEX).
- Opuntia dillenii* var. *tehuantepecana* Bravo ex Arias Montes & al., Cact. Suc. Mex. 37(3): 74, 1992. Typus: [icono] l.c. 9: 57, fig. 39. [First invalidly (Art. 37.1) published in l.c. 9: 55-56, ills., 1964, and erroneously included as valid in RPS 15.]
- Opuntia wernerii* Eggl, Bradleya 10: 90-94, ills., 1992. Typus: *Taylor, Zappi et Eggl* 1555 (CEPEC, HRCB, K, ZSS).
- Opuntia wolfei* (L. Benson) M. A. Baker, Madroño 39(2): 108, 1992. Basionym: *Opuntia echinocarpa* var. *wolfei*.
- × *Oreocana* P. V. Heath, Calyx 1(3): 123, 1992. [= *Oreocereus* × *Matucana*.]
- × *Oreotrichocereus* P. V. Heath, Calyx 1(3): 125, 1992. [= *Oreocereus* × *Trichocereus*.]
- Pachycereus* sect. *Anisocereus* (Backeberg) P. V. Heath, Calyx 2(3): 108, 1992. Basionym: *Anisocereus*.
- Pachycereus* sect. *Backebergia* (Bravo) P. V. Heath, Calyx 2(3): 108, 1992. Basionym: *Backebergia*.
- Pachycereus* sect. *Lemaireocereus* (Britton & Rose) P. V. Heath, Calyx 2(3): 106, 1992. Basionym: *Lemaireocereus*.
- Pachycereus* sect. *Lophocereus* (A. Berger) P. V. Heath, Calyx 2(3): 106, 1992. Basionym: *Cereus* subgen. *Lophocereus*.
- Pachycereus* sect. *Marshallocereus* (Backeberg) P. V. Heath, Calyx 2(3): 106, 1992. Basionym: *Marshallocereus*.
- Pachycereus aragonii* (F. A. C. Weber) P. V. Heath, Calyx 2(3): 106, 1992. Basionym: *Cereus aragonii*.
- Pachycereus aragonii* var. *palmatum* (F. A. C. Weber) P. V. Heath, Calyx 2(3): 106, 1992. Basionym: *Cereus aragonii* var. *palmatum*.
- Pachycereus foetidus* (Miranda & MacDougall) P. V. Heath, Calyx 2(3): 108, 1992. Basionym: *Pterocereus foetidus*.
- Pachycereus hollianus* fa. *cristatus* P. V. Heath, Calyx 2(3): 106, 1992. Typus: [icono] Cact. Succ. J. (US) 10: 12, fig. 4, 1938. [Based on *Lemaireocereus hollianus* fa. *cristatus* Evanich (*nom. nud.*).]
- Pachycereus marginatus* fa. *gibbosus* (Purpus) P. V. Heath, Calyx 2(3): 106, 1992. Basionym: *Cereus marginatus* fa. *gibbosus*.
- Pachycereus marginatus* var. *gemmatus* (Pfeiffer) P. V. Heath, Calyx 2(3): 106, 1992. Basionym: *Cereus gemmatus*.
- Pachycereus marginatus* var. *oaxacensis* P. V. Heath, Calyx 2(3): 107, 1992. Typus: [icono] Backeberg, Die Cact. 6: fig. 3503, 1962. [Based on *Marginatocereus marginatus* var. *oaxacensis* Backeberg 1962 (*nom. inval.*, Art. 9.5).]
- Pachycereus pecten-aboriginum* ssp. *tehuantepecanus* (MacDougall & Bravo) P. V. Heath, Calyx 2(3): 107, 1992. Basionym: *Pachycereus tehuantepecanus*.
- Pachycereus pringlei* fa. *calvus* (J. M. Coulter) P. V. Heath, Calyx 2(3): 107, 1992. Basionym: *Cereus calvus*.
- Pachycereus pringlei* fa. *constrictus* P. V. Heath, Calyx 2(3): 107, 1992. Typus: [icono] Cact. Suc. Mex. 8: 84, fig. 54, 1963. [Sphalm. 'pringlei'. Based on *Pachycereus pringlei monstrosus* (spiral) Evanich (*nom. nud.* & *inval.*).]
- Pachycereus pringlei* fa. *cristatus* P. V. Heath, Calyx 2(3): 107, 1992. Typus: [icono] Cact. Succ. J. (US) 34: 173, fig. 113, 1962. [Based on *Pachycereus pringlei* fa. *cristatus* Y. Ito 1981 (*nom. inval.*).]
- Pachycereus pringlei* fa. *gibbosus* P. V. Heath, Calyx 2(3): 107, 1992. Typus: [icono] Cact. Suc. Mex. 7: 19, fig. 12, 1962.
- Pachycereus schottii* fa. *mieckleyanus* (Weingart) P. V. Heath, Calyx 2(3): 107, 1992. Basionym: *Cereus mieckleyanus*.
- Pachycereus schottii* fa. *monstruosus* (H. E. Gates) P. V. Heath, Calyx 2(3): 107, 1992. Basionym: *Lophocereus schottii* fa. *monstruosus*.
- Pachycereus schottii* fa. *sargentianus* (Orcutt) P. V. Heath, Calyx 2(3): 107, 1992. Basionym: *Cereus sargentianus*.
- Pachycereus schottii* fa. *spiralis* (Carter) P. V. Heath, Calyx 2(3): 107, 1992. Basionym: *Lophocereus schottii* fa. *spiralis*.
- Pachycereus schottii* fa. *tenuis* (G. E. Lindsay) P. V. Heath, Calyx 2(3): 107, 1992. Basionym: *Lophocereus schottii* var. *tenuis*.
- Pachycereus schottii* var. *australis* (K. Brandegee) P. V. Heath, Calyx 2(3): 107, 1992. Basionym: *Cereus schottii* var. *australis*.
- Pachycereus weberi* var. *gigas* (Backeberg) P. V. Heath, Calyx 2(3): 107, 1992. Basionym: *Pachycereus grandis* var. *gigas*.
- × *Pachyhylocereae* P. V. Heath, Calyx 2(3): 111, 1992. *Nom. inval.* (Art. 4.3). Based on × *Cephalocereus* Rowley. [Published as 'nothotribe'.]
- × *Pachynyctocereinae* P. V. Heath, Calyx 2(3): 111, 1992. *Nom. inval.* (Art. 4.3). Based on × *Cephalocereus* Rowley. [Published as 'nothosubtribe'.]

- × *Pachystenocereinae* P. V. Heath, Calyx 2(3): 110, 1992. *Nom. inval.* (Art. 4.3). Based on × *Myrtgerocactus* Moran. [Published as 'nothosubtribe'.]
- Parodia aureispina* var. *mojotoroensis* Weskamp, Gattung *Parodia* 2: 204-205, fig. 12, 1992. Based on *Rausch* 707. *Nom. inval.* (Art. 36.1). [Published as provisional name.]
- Parodia belenensis*** Weskamp, Gattung *Parodia* 2: 132, 137-138, fig. 3, 1992. Typus: *Lambert* 164 (WU) [Ex cult. W. Weskamp (see l.c., 132, for details on the typification)]. [A re-description for *Parodia fuscato-viridis* Backeberg 1963 (*nom. inval.*).]
- Parodia cachiiana*** Weskamp, Gattung *Parodia* 2: 131, 134-135, 1992. Typus: *Herzog* 104 (WU) [Ex cult. W. Weskamp (see l.c., 132, for details on the typification)]. [A re-description for *Parodia kilianana* Backeberg 1963 (*nom. inval.*).]
- Parodia cebilarensis*** Weskamp, Gattung *Parodia* 2: 131, 136, 1992. Typus: *Herzog* 113 (WU) [Ex cult. W. Weskamp (see l.c., 132, for details on the typification)]. [A re-description for *Parodia rubelliamata* Backeberg 1963 (*nom. inval.*).]
- Parodia grandiflora* Veverka, Kaktusy 28(6): 130-132, ill., SEM-ill., 1992. *Nom. inval.* (Art. 36.1, 9.5). [Published as provisional name. Name probably already in use previously.]
- Parodia guachipasana*** Weskamp, Gattung *Parodia* 2: 151-154, fig. 4, 1992. Typus: *Herzog* 184 (WU) [Ex cult. W. Weskamp].
- Parodia heyeriana*** Weskamp, Gattung *Parodia* 2: 155-161, fig. 9, 1992. Typus: *Herzog* 101 (WU) [Ex cult. W. Weskamp].
- Parodia lembckeii*** Weskamp, Gattung *Parodia* 2: 131, 135, 1992. Typus: *Piltz* 157 (WU) [Ex cult. W. Weskamp (see l.c., 132, for details on the typification)]. [A re-description for *Parodia tafiensis* Backeberg 1963 (*nom. inval.*).]
- Parodia penicillata*** var. *fulviceps* Backeberg ex Weskamp, Gattung *Parodia* 2: 138, 1992. Typus: *Fechser* s.n. (WU) [Ex cult. W. Weskamp.]. [First invalidly published by Backeberg, *Kakt.-Lex.*, 459 (1966), and erroneously included as valid in RPS 17.]
- Parodia tolimbona*** Weskamp, Gattung *Parodia* 2: 131, 133-134, 1992. Typus: *Herzog* 135 (WU) [Ex cult. W. Weskamp (see l.c., 132, for details on the typification)].
- Parodia tumbayana*** Weskamp, Gattung *Parodia* 2: 132, 136-137, 1992. Typus: *Piltz* 171 (WU) [Ex cult. W. Weskamp (see l.c., 132, for details on the typification)]. [A re-description for *Parodia setosa* Backeberg 1963 (*nom. inval.*).]
- Pediocactus nigrispinus*** (Hochstätter) Hochstätter, Succulenta 71(3): 99, 1992. Basionym: *Pediocactus simpsonii* var. *nigrispinus*.
- Pediocactus nigrispinus*** var. *beastonii* Hochstätter, Succulenta 71(3): 102-104, ill., SEM-ills., 1992. Typus: *Hochstätter* 19.1 (HBG).
- Pereskia marcanoi*** Areces, Brittonia 44(4): 423-428, ill., 1992. Typus: *Areces Mallea* 5823 (JBSD, HAC, MNHN, NY).
- × ***Petersenara*** P. V. Heath, Calyx 1(2): 86, 1992. [= *Cryptocereus* × *Heliocereus* × *Nopalxochia*.]
- Pilosocereus rizoioianus*** P. J. Braun & E. Esteves Pereira, Cact. Succ. J. (US) 64(3): 148-155, ill., SEM-ills., 1992. Typus: *Esteves Pereira* 58 (UFG 12.351, B, ZSS).
- Pseudoacanthocereus sicariguensis*** (Croizat & Tamayo) N. P. Taylor, *Bradleya* 10: 30, 1992. Basionym: *Acanthocereus sicariguensis*.
- × ***Pseudocereus*** P. V. Heath, Calyx 1(3): 106, 1992. [= *Pseudopilocereus* × *Coleocephalocereus*.]
- × ***Pseudocladodia*** P. V. Heath, Calyx 1(3): 121, 1992. [= *Pseudomammillaria* × *Leptocladodia*.]
- Rathbunia*** nsect. ***Dumorakia*** P. V. Heath, Calyx 2(3): 105, 1992. Typus: no type needed. = sect. *Horakia* × sect. *Dumortiera*.
- Rathbunia*** nsect. ***Gibsonia*** P. V. Heath, Calyx 2(3): 105, 1992. Typus: = sect. *Gibsonia* (*nom. inval.*) × sect. *Rathbunia*.
- Rathbunia*** sect. ***Dumortiera*** P. V. Heath, Calyx 2(3): 104, 1992. Typus: *Cereus dumortieri* Scheidweiler. Based on *Lemaireocereus* subgen. *Isolatocereus* Backeberg 1938.
- Rathbunia*** sect. ***Eruca*** P. V. Heath, Calyx 2(3): 102, 1992. Typus: *Cereus eruca* K. Brandegee. Based on *Cereus* ser. *Prostrati* K. Schumann 1897.
- Rathbunia*** sect. ***Gibsonia*** P. V. Heath, Calyx 2(3): 103, 1992. Typus: *Cereus queretaroensis* Mathsson. Based on *Cereus* ser. *Chlorotini* K. Schumann 1897.
- Rathbunia*** sect. ***Hertrichia*** P. V. Heath, Calyx 2(3): 103, 1992. Typus: *Cereus beneckei*. *Nom. nov. pro Hertrichocereus* Backeberg 1950.
- Rathbunia*** sect. ***Horakia*** P. V. Heath, Calyx 2(3): 104, 1992. Typus: Based on *Cereus* ser. *Pruinosi* K. Schumann 1897.
- Rathbunia*** sect. ***Stenocladia*** P. V. Heath, Calyx 2(3): 102, 1992. Typus: Based on *Cereus* ser. *Stellati* K. Schumann 1897.
- Rathbunia alamosensis*** fa. ***cristata*** P. V. Heath, Calyx 2(3): 103, 1992. Typus: [icono] Lamb & Lamb, Ill. Ref. Cacti other Succ. 5: 1255, fig. 738, 1978. [Name first used by Lamb & Lamb, l.c. 1978 (*nom. nud.*).]
- Rathbunia alamosensis*** var. ***sonorensis*** (K. Schumann) P. V. Heath, Calyx 2(3): 103, 1992. Basionym: *Cereus sonorensis*.
- Rathbunia beneckei*** (Ehrenberg) P. V. Heath, Calyx 2(3): 103, 1992. Basionym: *Cereus beneckei*.
- Rathbunia beneckei*** fa. ***cristata*** P. V. Heath, Calyx 2(3): 103, 1992. Typus: [icono] Y. Ito, *The Cact.*, 213, fig. 131-(1)-(A), 1981. [Based on *Hertrichocereus beneckei* fa. *cristatus* Y. Ito (*nom. nud.*).]
- Rathbunia chacalapensis*** (Bravo & MacDougall) P. V. Heath, Calyx 2(3): 104, 1992. Basionym:

- Ritterocereus chacalapensis*.
- Rathbunia chrysoarpa** (Sánchez-Mejorada) P. V. Heath, Calyx 2(3): 104, 1992. Basionym: *Stenocereus chrysoarpus*.
- Rathbunia deficiens** (Otto & A. Dietrich) P. V. Heath, Calyx 2(3): 104, 1992. Basionym: *Cereus deficiens*.
- Rathbunia dumortieri** (Scheidweiler) P. V. Heath, Calyx 2(3): 104, 1992. Basionym: *Cereus dumortieri*.
- Rathbunia eichlamii** (Britton & Rose) P. V. Heath, Calyx 2(3): 104, 1992. Basionym: *Lemaireocereus eichlamii*.
- Rathbunia eruca** (K. Brandegee) P. V. Heath, Calyx 2(3): 102, 1992. Basionym: *Cereus eruca*.
- Rathbunia fimbriata** (Lamarck) P. V. Heath, Calyx 2(3): 104, 1992. Basionym: *Cactus fimbriatus*.
- Rathbunia fricii** (Sánchez-Mejorada) P. V. Heath, Calyx 2(3): 103, 1992. Basionym: *Stenocereus fricii*.
- Rathbunia grisea** (Haworth) P. V. Heath, Calyx 2(3): 104, 1992. Basionym: *Cereus griseus*.
- Rathbunia grisea* fa. *cristata* P. V. Heath, Calyx 2(3): 104, 1992. Typus: [icono] Succulenta 58: 19, top fig., 1979. *Nom. inval.* (Art. 9.5). [Based on *Ritterocereus griseus* fa. *cristatus* Evanich (*nom. nud.*).]
- Rathbunia grisea** var. **monstruosa** (De Candolle) P. V. Heath, Calyx 2(3): 104, 1992. Basionym: *Cereus eburneus* var. *monstruosus*.
- Rathbunia gummosa** (Brandegee) P. V. Heath, Calyx 2(3): 102, 1992. Basionym: *Cereus gummosus*.
- Rathbunia gummosa** fa. **cristata** P. V. Heath, Calyx 2(3): 102, 1992. Typus: [icono] Cact. Succ. J. Gr. Brit. 6: 23, fig. 2, 1937. [Based on *Machaerocereus gummosus cristatus* Turner 1937 (*nom. nud.*).]
- Rathbunia gummosa** fa. **tortuosa** P. V. Heath, Calyx 2(3): 102, 1992. Typus: *Foster* 265-331 (POM). [Based on *Machaerocereus gummosus* var. *tortuosus* Evanich (*nom. nud.*).]
- Rathbunia laevigata** (Salm-Dyck) P. V. Heath, Calyx 2(3): 104, 1992. Basionym: *Cereus laevigatus*.
- Rathbunia laevigata** var. **schumannii** (K. Schumann) P. V. Heath, Calyx 2(3): 104, 1992. Basionym: *Cereus schumannii*.
- Rathbunia longispina** (Britton & Rose) P. V. Heath, Calyx 2(3): 104, 1992. Basionym: *Lemaireocereus longispinus*. [Sphalm. 'longispinus'.]
- Rathbunia martinezii** (J. G. Ortega) P. V. Heath, Calyx 2(3): 103, 1992. Basionym: *Lemaireocereus martinezii*.
- Rathbunia montana** (Britton & Rose) P. V. Heath, Calyx 2(3): 104, 1992. Basionym: *Lemaireocereus montanus*.
- Rathbunia pruinosa** (Pfeiffer) P. V. Heath, Calyx 2(3): 104, 1992. Basionym: *Echinocactus pruinosus*.
- Rathbunia queretaroensis** (Mathsson) P. V. Heath, Calyx 2(3): 104, 1992. Basionym: *Cereus queretaroensis*.
- Rathbunia quevedonis** (J. G. Ortega) P. V. Heath, Calyx 2(3): 103, 1992. Basionym: *Lemaireocereus quevedonis*.
- Rathbunia standleyi** (J. G. Ortega) P. V. Heath, Calyx 2(3): 103, 1992. Basionym: *Lemaireocereus standleyi*.
- Rathbunia stellata** (Pfeiffer) P. V. Heath, Calyx 2(3): 102, 1992. Basionym: *Cereus stellatus*.
- Rathbunia thurberi** (Engelmann) P. V. Heath, Calyx 2(3): 103, 1992. Basionym: *Cereus thurberi*.
- Rathbunia thurberi** fa. **cristata** P. V. Heath, Calyx 2(3): 103, 1992. Typus: [icono] Cact. Succ. J. (US) 1: 175, fig. 1, 1930. [Based on *Lemaireocereus thurberi cristatus* West 1930.]
- Rathbunia thurberi** fa. **dichotoma** P. V. Heath, Calyx 2(3): 103, 1992. Typus: [icono] Verbeek Wolthuys, Raadsel onstaan monstr. crist. succ., 47, fig. 11.
- Rathbunia thurberi** var. **littoralis** (K. Brandegee) P. V. Heath, Calyx 2(3): 103, 1992. Basionym: *Cereus thurberi* var. *littoralis*.
- Rathbunia treleasei** (Vaupel) P. V. Heath, Calyx 2(3): 102, 1992. Basionym: *Cereus treleasei*.
- Rathbunia yunckeri** (Standley) P. V. Heath, Calyx 2(3): 104, 1992. Basionym: *Cereus yunckeri*. [Basionym authority erroneously given as 'Yuncker'.]
- × **Rathbunillocactus** sect. **Dumortillocaustus** P. V. Heath, Calyx 2(3): 106, 1992. Typus: no type needed. Published as 'nothosection'; = *Myrtillocactus* sect. *Myrtillocactus* × *Rathbunia* sect. *Dumortieria*.
- × **Rathbunillocactus glassii** P. V. Heath, Calyx 2(3): 106, 1992. Typus: [icono] Cact. Succ. Mex. 9: 37, fig. 26, 1964. [= *Myrtillocactus geometrizzans* × *Rathbunia dumortieri*.]
- Rebutia** cv. **Sunrise** Kimnach & Trager, Cact. Succ. J. (US) 64(2): 84, ill., 1992. [= *Rebutia heliosa* × *R. albiflora*.]
- Rebutia pygmaea** var. **colorea** (F. Ritter) Lodé, Cact. Aventures No. 16: 17, 1992. Basionym: *Rebutia colorea*.
- Rebutia pygmaea** var. **diersiana** (Rausch) Lodé, Cact. Aventures No. 16: 17, 1992. Basionym: *Rebutia diersiana*. [Simultaneously (invalidly) published in Fichier Encycl. Cact., ser. 8: no. 724, 1992.]
- Rebutia pygmaea** var. **iscayachensis** (Rausch) Lodé, Cact. Aventures No. 16: 17, 1992. Basionym: *Rebutia iscayachensis*.
- Rebutia pygmaea** var. **mudanensis** (Rausch) Lodé, Cact. Aventures No. 16: 17, 1992. Basionym: *Rebutia mudanensis*. [Simultaneously (invalidly) published in Fichier Encycl. Cact., ser. 9: no. 837, 1992.]
- Rebutia pygmaea** var. **nazarenoensis** (Rausch) Lodé, Cact. Aventures No. 16: 17, 1992. Basionym: *Digitorebutia nazarenoensis*.
- × **Rettigara** P. V. Heath, Calyx 1(3): 96, 1992. [= *Aporocactus* × *Epiphyllum* × *Helicocereus* × *Selenicereus*.]
- Rhipsalis paradoxa** var. **catenulata** Kimnach, Cact. Succ. J. (US) 64(2): 90-92, ill., 1992.

- Typus: *Fowlie* s.n. (HNT, HEID, US).
- × **Rowleyara** P. V. Heath, *Calyx* 1(2): 36, 1992. [= *Epiphyllum* × *Heliocereus* × *Nopalxochia* × *Selenicereus*.]
 - Schlumbergera microsphaerica** fa. *obtusangula* (K. Schumann) P. V. Heath, *Calyx* 2(2): 64, 1992. Basionym: *Cereus obtusangulus*.
 - Schlumbergera microsphaerica** fa. *parvula* (K. Schumann) P. V. Heath, *Calyx* 2(2): 64, 1992. Basionym: *Cereus parvulus*.
 - × **Schlumbergopsis** P. V. Heath, *Calyx* 1(3): 127, 1992. [= *Schlumbergera* × *Rhipsalidopsis*.]
 - Sclerocactus nyensis** Hochstätter, *Succulenta* 71(6): 253-255, ill., SEM-ills. (p. 262), 1992. Typus: *Hochstätter* 105 (HBG).
 - × **Selenicereus colvillii** (Sweet) P. V. Heath, *Calyx* 1(3): 120, 1992. Basionym: *Cereus colvillii*.
 - × **Sulcocalycium** P. V. Heath, *Calyx* 1(3): 118, 1992. [= *Sulcorebutia* × *Gymnocalycium*.]
 - Tacinga funalis** var. *atropurpurea* (Werdermann) P. J. Braun & E. Esteves Pereira, *Kakt. and. Sukk.* 43(5: centre page pullout 14): [2], 1992. Basionym: *Tacinga atropurpurea*.
 - Thelocactus rinconensis** var. *freudenbergeri* Haas, *Kakt. and. Sukk.* 43(5): 96-98, ill., 1992. Typus: *Freudenberger* s.n. in *Haas* 157 (ZSS).
 - × **Timmermansara** P. V. Heath, *Calyx* 1(3): 104, 1992. [= *Chamaecereus* × *Echinopsis* × *Rebutia*.]
 - × **Tricholobivopsis** P. V. Heath, *Calyx* 1(3): 111, 1992. [= *Trichocereus* × *Lobivia* × *Echinopsis*.]
 - Turbincarpus bonatzii** G. Frank, *Succulenta* 71(6): 279-281, ill., 72(1): 43, SEM-ills., 1992. Typus: *Bonatz* 291 (WU).
 - Turbincarpus rioverdensis** G. Frank, *Succulenta* 71(2): 63-66, ill., SEM-ills., 1992. Typus: *Jauernig* 64 (WU).
 - × **Weinocalycium** P. V. Heath, *Calyx* 1(3): 119, 1992. [= *Weingartia* × *Gymnocalycium*.]
 - × **Worsleyara** P. V. Heath, *Calyx* 1(3): 120, 1992. [= *Heliocereus* × *Nopalxochia* × *Selenicereus*.]

CRASSULACEAE

- Adromischus cristatus** cv. **Indian Clubs** Kimmach & Trager, *Cact. Succ. J. (US)* 64(2): 87, 1992. [Selected from plants of unknown origin cultivated at Huntington BG under HBG 71207.]
- Adromischus subdistichus** Makin ex Bruyns, *South Afr. J. Bot.* 58(1): 50-51, ill., 1992. Typus: *Bruyns* 2887 (BOL).
- × **Aeonichryson** P. V. Heath, *Calyx* 2(2): 59, 1992. [= *Aeonium* × *Aichryson*.]
- × **Aeonichryson aizoides** (Lamarck) P. V. Heath, *Calyx* 2(2): 59, 1992. Basionym: *Sempervivum aizoides*. [Interpreted as *Aichryson tortuosum* × *Aeonium divaricatum* or *Aeonium punctatum*.]
- × **Aeonichryson aizoides** var. **domesticum** (Praeger) P. V. Heath, *Calyx* 2(2): 59, 1992.

- Basionym: *Sempervivum domesticum*.
- Aeonium** cv. **Blushing Beauty** Catlin ex Kimmach & Trager, *Cact. Succ. J. (US)* 64(2): 87, 1992. [= *Aeonium canariense* × *A. arboreum* cv. *Zwartkop*.]
- Aeonium** nsect. **Aeonileuconium** P. V. Heath, *Calyx* 2(2): 57, 1992. Typus: no type needed. = *Aeonium* sect. *Leuconium* × *A. sect. Aeonium*.
- Aeonium** nsect. **Canareonium** P. V. Heath, *Calyx* 2(2): 57, 1992. Typus: no type needed. = *Aeonium* sect. *Canariensia* × *A. sect. Aeonium*.
- Aeonium** nsect. **Hololeuconium** P. V. Heath, *Calyx* 2(2): 58, 1992. Typus: no type needed. = *Aeonium* sect. *Holochrysa* × *A. sect. Leuconium*.
- Aeonium** nsect. **Holonium** P. V. Heath, *Calyx* 2(2): 58, 1992. Typus: no type needed. = *Aeonium* sect. *Holochrysa* × *A. sect. Aeonium*.
- Aeonium** nsect. **Leuconariensia** P. V. Heath, *Calyx* 2(2): 58, 1992. Typus: no type needed. = *Aeonium* sect. *Canariensia* × *A. sect. Leuconium*.
- Aeonium** nsect. **Leucopittonium** P. V. Heath, *Calyx* 2(2): 58, 1992. Typus: no type needed. = *Aeonium* sect. *Pittonium* × *A. sect. Leuconium*.
- Aeonium** nsect. **Pittonariensia** P. V. Heath, *Calyx* 2(2): 58, 1992. Typus: no type needed. = *Aeonium* sect. *Pittonium* × *A. sect. Canariensia*.
- Aeonium** nsubject. **Auoneonium** P. V. Heath, *Calyx* 2(2): 57, 1992. Typus: no type needed. = *Aeonium* subject. *Auonium* × *A. subject. Aeonium*.
- Aeonium** × **anagense** Bramwell & G. D. Rowley ex P. V. Heath, *Calyx* 2(2): 57-58, 1992. Typus: [icono] Burchard, *Kanarenpl.*, t. 43, 1929. [First used invalidly (Art. H10.1, 37.1) (sphalm. 'anagensis') in *Nation. Cact. Succ. J.* 28(1): 5, 1973, for *Aeonium lindleyi* × *A. tabuliforme*, and erroneously included as valid in RPS 24.]
- Aeonium** × **edgari** P. V. Heath, *Calyx* 2(2): 58, 1992. Typus: [icono] *Proc. Roy. Irish Acad.* 38B: t. 12: fig. 16, 1929. [*Nom. nov. pro Aeonium* × *lambii* G. D. Rowley (*nom. inval.*); = *A. palmense* × *A. valverdense*.]
- Aeonium** × **lowei** Bramwell & G. D. Rowley ex P. V. Heath, *Calyx* 2(2): 58-59, 1992. Typus: [icono] *Proc. Roy. Irish Acad.* 38B: t. 10: fig. 10, 1929. [First used invalidly (Art. H10.1, 37.1) in *Nation. Cact. Succ. J.* 28(1): 5, 1973, for *Aeonium glandulosum* × *A. glutinosum* and erroneously included as valid in RPS 24.]
- Aeonium** × **mixtum** P. V. Heath, *Calyx* 2(2): 57, 1992. Typus: [icono]: *Proc. Roy. Irish Acad.* 38B: t. 11: fig. 15, 1929. [= *Aeonium haworthii* × *A. urbicum*.]
- Aeonium pseudurbicum** Bañares, *Anales Jard. Bot. Madrid* 50(2): 175-182, ill., 1992. Typus: *Bañares* s.n. (TFC 34199). [Sphalm. 'pseudourbicum'.]
- Aeonium** × **splendens** Bramwell & G. D. Rowley ex P. V. Heath, *Calyx* 2(2): 58, 1992. Typus:

- [icono] Proc. Roy. Irish Acad. 38B: t. 11: fig. 11, 1929. [First used invalidly (Art. H10.1, 37.1) in Nation. Cact. Succ. J. 28(1): 5, 1973, for *Aeonium ciliatum* × *A. nobile* and erroneously included as valid in RPS 24.]
- Bryophyllum gracilipes** (Baker) Egli, Bradleya 10: 84, ill., 1992. Basionym: *Kitchingia gracilipes*.
- Crassula** cv. **Fallwood** Kimmach & Trager, Cact. Succ. J. (US) 64(2): 88, 1992. [= (*Crassula namaquensis* ssp. *comptonii* × *C. susannae*) × *C. falcata*.]
- Crassula aurusbergensis** G. Williamson, Cact. Succ. J. (US) 64(6): 288-289, ill., 1992. Typus: *Williamson* 4416 (BOL, NBG).
- Crassula goatlhambensis** Hargreaves, Excelsa No. 15: 85, 1992. Typus: *Hargreaves* 4955 (ROML). [First published invalidly (Art. 36.1) in l.c. 14: 71-72, 93, ill., 1990 (dated 1989).]
- Echeveria agavoides** cv. **Ebony** Kimmach & Trager, Cact. Succ. J. (US) 64(2): 88, 1992. [A selection from a collection reportedly from Coahuila, Mexico, grown at Huntington BG under HBG 62638.]
- Echeveria agavoides** cv. **Maria** Kimmach & Trager, Cact. Succ. J. (US) 64(2): 88, 1992. [Selected from crosses of *E. agavoides* with its cultivar 'Prolifera', as grown at Huntington BG under HBG 71216.]
- Echeveria multicolor** C. H. Uhl, Cact. Succ. J. (US) 64(3): 120-124, ill., 1992. Based on *Uhl* 2741. *Nom. illeg.* (Art. 63.1). [A replacement name described on the basis of the wrong assumption that *E. recurvata* Carruthers was invalidly described without type.]
- Echeveria pendulosa** Kimmach & C. H. Uhl, Cact. Succ. J. (US) 64(4): 200-203, ill., 1992. Typus: *Uhl* 2749 (BH, HNT, US).
- Echeveria uhlii** Meyrán, Cact. Succ. Mex. 37(4): 79-82, ill., 1992. Typus: *Otero* 41 (MEXU, ENCB) [Ex cult. Meyrán 4303].
- × **Greenonium extinctum** P. V. Heath, Calyx 2(2): 59, 1992. [Based on *Sempervivum calyciforme* [var.] β *spuriium* Haworth 1821; interpreted as *Aeonium glutinosum* × *Greenovia aurea*.]
- Hylotelephium** × **furusei** H. Ohba, J. Jap. Bot. 66: 67, 1991. Typus: *Furuse* s.n. (TI) [Ex cult.].
- Hylotelephium sieboldii** var. **chinense** H. Ohba, J. Jap. Bot. 67(4): 198-200, ill., 1992. Typus: *Fu et Zhang* 1742 (PE). [= *Hylotelephium sieboldii sensu* Fu, Fl. Reipubl. Pop. Sin. 34(1): 52, 1984.]
- Hylotelephium stepposum** (Borissova) N. N. Tsvelev, Novosti Sist. Vyssh. Rast. 28: 163, 1991. Basionym: *Sedum stepposum*.
- Hylotelephium tangchiense** R. X. Meng, Bull. Bot. Res. North-East. Forest. Inst. 12(3): 243, 1992. Typus: *Zou* 86102 (AU).
- Monanthes** sect. **Monanthoidea** (Battandier) Nyffeler, Bradleya 10: 65, 1992. Basionym: *Sedum* sect. *Monanthoidea*.
- Monanthes** sect. **Sedoidea** Sventenius ex Nyffeler, Bradleya 10: 76, 1992. Typus: *Sedum laxiflorum* De Candolle. Name first published (*nom. inval.*, Art. 37.1) by Sventenius, Addit. Fl. Canar. 1: 15, 1960 (cf. RPS 12).
- Monanthes polyphylla** ssp. **amydros** Nyffeler, Bradleya 10: 73-74, ill., 1992. Typus: *Nyffeler* 152 (Z, ORT, ZSS). [Based on *Monanthes amydros* Sventenius 1960 (*nom. inval.*, Art. 37.1).]
- Mucizonia henriquesii** (A. Caballero) Velayos, Carrasco & Monge, Anales Jard. Bot. Madrid 47(1): 57, 1990. Basionym: *Sedum henriquesii*. [Omitted previously. Despite the fact that the combination appears in bold print, there exists some doubt whether the authors actually accept the new name, which therefore might be invalid.]
- Oreosedum hirsutum** ssp. **baeticum** (Rouy) Velayos, Anales Jard. Bot. Madrid 45(2): 584, 1989. Basionym: *Sedum hirsutum* ssp. *baeticum*. [Omitted previously.]
- Oreosedum pedicellatum** ssp. **lusitanicum** (Mariz) Velayos, Anales Jard. Bot. Madrid 45(2): 584, 1989. Basionym: *Sedum pedicellatum* var. *lusitanicum*. [Omitted previously.]
- Oreosedum villosum** ssp. **aristatum** (Emberger & Maire) Velayos, Anales Jard. Bot. Madrid 45(2): 584, 1989. Basionym: *Sedum villosum* var. *aristatum*. [Omitted previously.]
- Oreosedum villosum** ssp. **glandulosum** (Moris) Velayos, Anales Jard. Bot. Madrid 45(2): 584, 1989. Basionym: *Sedum glandulosum*. [Omitted previously.]
- Oreosedum villosum** ssp. **nevadense** (Cosson) Velayos, Anales Jard. Bot. Madrid 45(2): 584, 1989. Basionym: *Sedum nevadense*. [Omitted previously.]
- Orostachys malacophylla** var. **aggregata** (Makino) H. Ohba, J. Jap. Bot. 67(4): 200, 1992. Basionym: *Cotyledon aggregata*. [Sphalm. 'aggregatus'. First used as nude combination by H. Ohba & Tagawa l.c. 65: 307, 1990.]
- Orostachys malacophylla** var. **iwarenge** (Makino) H. Ohba, J. Jap. Bot. 67(4): 200, 1992. Basionym: *Cotyledon iwarenge*. [First used as nude combination by H. Ohba & Tagawa l.c. 65: 307, 1990.]
- Petrosedum amplexicaule** (De Candolle) Velayos, Anales Jard. Bot. Madrid 45(2): 584, 1989. Basionym: *Sedum amplexicaule*. [Omitted previously.]
- Petrosedum amplexicaule** ssp. **tenuifolium** (Smith) Velayos, Anales Jard. Bot. Madrid 45(2): 584, 1989. Basionym: *Sempervivum tenuifolium*. [Omitted previously.]
- Petrosedum rupestre** ssp. **anopetalum** (De Candolle) Velayos, Anales Jard. Bot. Madrid 45(2): 584, 1989. Basionym: *Sedum anopetalum*. [Omitted previously.]
- Petrosedum rupestre** ssp. **elegans** (Lejeune) Velayos, Anales Jard. Bot. Madrid 45(2): 584, 1989. Basionym: *Sedum elegans*. [Omitted previously.]
- Petrosedum rupestre** ssp. **erectum** ('t Hart) Velayos, Anales Jard. Bot. Madrid 45(2): 584, 1989. Basionym: *Sedum rupestre* ssp.

erectum. [Omitted previously.]

Petrosedum rupestre ssp. **montanum** (Sonneon & Perrier) Velayos, *Anales Jard. Bot. Madrid* 45(2): 585, 1989. Basionym: *Sedum montanum*. [Omitted previously.]

Petrosedum rupestre ssp. **reflexum** (Linné) Velayos, *Anales Jard. Bot. Madrid* 45(2): 585, 1989. Basionym: *Sedum reflexum*. [Omitted previously. Nomenclatural status not assessed.]

Rhodiola rosea ssp. **borealis** (Borissova) A. P. Khokryakov & V. B. Kurajev, *Bot. Zhurn.* 77(3): 80, 1992. Basionym: *Rhodiola borealis*.

Sedum ser. **Atrata** 't Hart, *Bradleya* 10: 83, 1992. Typus: *Sedum atratum* Linné. Replacement name for *Sedum* ser. *Sedella* (Fourreau) 't Hart, *nom. inval.* (Art. 32.1, 64.1).

Sedum dasyphyllum var. **moroderi** (Pau) O. de Bolos & J. Vigo, *Fl. Paisos Catalans* 1: 295, 1984. Basionym: *Sedum moroderi*. [Omitted previously.]

Sedum duckbonglii Y. H. Chung & J. H. Kim, *Korean J. Bot.* 33(1): 6, 1990. [*Nom. nov. pro Sedum rotundifolium* D. B. Lee (*nom. inval.*).]

Sedum ecalcaratum H. J. Wang & P. S. Hsu, *Rheedia* 1(1-2): 46-47, ill., 1991. Typus: *Lu* 17 (Herb. Fuden Univ.).

Sedum farronianum Kit Tan & Metzger, *Willdenowia* 22: 125-128, ill., 1992. Typus: *Metzger* 2005.2 (B, herb. Metzger).

Sedum jiuhuashanense P. S. Hsu & H. J. Wang, *Rheedia* 1(1-2): 46, 1991. Typus: *Wang et Fu* 86112 (Herb. Fuden Univ.).

Sedum laconicum ssp. **pallidum** 't Hart & van Ham, *Israel J. Bot.* 40: 325, 1991. Typus: *van Ham* 51.3 (U, HUU).

Sedum mucizonia ssp. **urceolatum** R. Stephenson, *Cact. Succ. J. (US)* 65(2): 70, 1993. Typus: *Stephenson* 5447 (E 5447). [First invalidly (Art. 37.4) published *l.c.* 64(5): 233-234, ill., 1993.]

Thompsonella colliculosa Moran, *Cact. Succ. J. (US)* 64(1): 41-43, ill., 1992. Typus: *Moran* 10150 (SD 53453, CU, HNT, SD) [Isotypes ex cult.].

Tylecodon bodleyae Van Jaarsveld, *Cact. Succ. J. (US)* 64(2): 57-61, (4): 168 [erratum], ill., map, 1992. Typus: *Lavranos et Bleck* s.n. (NBG). [Originally published as 'boddleyi' (sic !), but amended as the taxon honours Elise Bodley.]

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Villadia aperta Moran & C. H. Uhl, *Cact. Suc. Mex.* 37(2): 31-34, ill., 1992. Typus: *Uhl* 2255 (BH).

CUCURBITACEAE

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Apodanthera hindii C. Jeffrey, *Kew Bull.* 47(3): 519-521, ill., 1992. Typus: *Harley et al.* 26688 (CEPEC, K, SPF).

Apodanthera succulenta C. Jeffrey, *Kew Bull.* 47(3): 521-524, ill., 1992. Typus: *Harley et al.* 18955 (CEPEC, K, NY, SPF, U).

Apodanthera villosa C. Jeffrey, *Kew Bull.* 47(3): 523-526, ill., 1992. Typus: *Harley et al.* 22753 (K).

Momordica littorea Thulin, *Nord. J. Bot.* 11: 425-427, ill., 1991. Typus: *Thulin et al.* 7132 (UPS, E, FT, K, MOG). [Omitted previously.]

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Euphorbia baradilii S. Carter, *Nordic J. Bot.* 12(4): 421, 1992. Typus: *Lavranos et al.* 24603 (K).

Euphorbia barlensis S. Carter, *Nordic J. Bot.* 12(6): 675, 1992. Typus: *Gillett et Watson* 23370 (K, EA, MOG).

Euphorbia dasyacantha S. Carter, *Nordic J. Bot.* 12(4): 419, 1992. Typus: *Lavranos et al.* 24729 (K, EA, MOG). [First used as provisional name by Lodé, *Fichier Encycl. Cact.*, ser. 8: no. 744, 1992.]

Euphorbia debilispina Leach, *Excelsa* No. 15: 13-14, ill., 1992. Typus: *Williamson et Drummond* 1995 (SRGH, K, MO, PRE).

Euphorbia dedzana Leach, *Excelsa* No. 15: 20-21, 1992. Typus: *Leach* 14826 (SRGH, K, MO, PRE) [Ex cult. hort. Leach.].

Euphorbia dhofarensis S. Carter, *Nordic J. Bot.* 12(6): 679, 1992. Typus: *Miller* 7245 (K, E).

Euphorbia distinctissima Leach, *Excelsa* No. 15: 11-12, ill., 1992. Typus: *Williamson et Drummond* 1994 (SRGH, BR, K, MO, PRE, UNIN) [Ex cult. hort. Leach.].

Euphorbia eilensis S. Carter, *Nordic J. Bot.* 12(4): 414, 1992. Typus: *Lavranos et al.* 24928 (K, MOG).

Euphorbia erigavensis S. Carter, *Nordic J. Bot.* 12(4): 409, 1992. Typus: *Bally* 11202 (K).

Euphorbia galgalana S. Carter, *Nordic J. Bot.* 12(4): 407, 1992. Typus: *Lavranos et al.* 24765 (K, EA, MO, MOG).

Euphorbia geldorensis S. Carter, *Nordic J. Bot.* 12(4): 405, 1992. Typus: *Bally et Melville* 15942 (K, EA, FT).

Euphorbia gottlebei Rauh, *Cact. Succ. J. (US)* 64(1): 14-22, ill., 1992. Typus: *Rauh* 72185 (HEID).

Euphorbia hofstaetteri Rauh, *Cact. Succ. J. (US)* 64(3): 112-115, ill., 1992. Typus: *Hofstätter* s.n. in *BG Heidelberg* 73040 (HEID).

Euphorbia holmesiae Lavranos, *Cact. Succ. J. (US)* 64(4): 195-196, ill., 1992. Typus:

- Lavranos et al.* 24578 (K, EA, MO, MOG). [Sphalm. 'holmsiae'. Reprinted in Euphorbiaceae Study Group Bull. 1992(3): 40-47, ills.]
- Euphorbia imparispina** S. Carter, Nordic J. Bot. 12(4): 413, 1992. Typus: *Carter* 924 (K, EA, FT, MOG).
- Euphorbia inundaticola** Leach, Excelsa No. 15: 18-19, ills., 1992. Typus: *Williamson* 1046 (SRGH, K, MO, NBG, PRE, SRGH, UNIN) [Ex cult. Leach sub *Leach* 14145].
- Euphorbia johannis** S. Carter, Nordic J. Bot. 12(4): 420, 1992. Typus: *Lavranos et al.* 23345 (K).
- Euphorbia leontopoda** S. Carter, Nordic J. Bot. 12(4): 403, 1992. Typus: *Bally* 7162 (K).
- Euphorbia luapulana** Leach, Excelsa No. 15: 16-18, ills., 1992. Typus: *Williamson* 1147 (SRGH, K, MO, NBG, NSW, PRE, UNIN) [Ex cult. Leach sub *Leach* 14147].
- Euphorbia margaretae** S. Carter, Nordic J. Bot. 12(4): 407, 1992. Typus: *Carter* 925 (K).
- Euphorbia myrloclada** S. Carter, Nordic J. Bot. 12(4): 409, 1992. Typus: *Carter* 909 (K, EA, MOG).
- Euphorbia neobosseri** Rauh, Cact. Succ. J. (US) 64(5): 264, 1992. [Sphalm. 'neo-bosseri' (cf. Art. 73.9, Ex. 13). *Nom. nov. pro Euphorbia milii* var. *bosseri* Rauh 1970 (non *E. bosseri* Léandri 1965). Reprinted in Euphorbia Study Group Bull. 6(1): 34-42, 1993.]
- Euphorbia pachyclada** S. Carter, Nordic J. Bot. 12(6): 677, 1992. Typus: *Lavranos et al.* 24719 (K, EA).
- Euphorbia papilionum** S. Carter, Nordic J. Bot. 12(6): 677, 1992. Typus: *Thulin et Watson* 6098 (K, UPS).
- Euphorbia perarmata** S. Carter, Nordic J. Bot. 12(4): 414, 1992. Typus: *Lavranos et al.* 24568 (K, EA, MO, MOG).
- Euphorbia perplexa** Leach, Excelsa No. 15: 16, 1992. Typus: *Richards* 18176 (K, BR, PRE, SRGH) [Isotypes ex cult. Leach sub *Leach* 14779].
- Euphorbia perplexa** var. *kasamana* Leach, Excelsa No. 15: 16, 1992. Typus: *Williamson* s.n. in *Leach* 14761 (SRGH, BR, K, LISC, MO, NBG, NSW, PRE, UNIN).
- Euphorbia phillipsioides** S. Carter, Nordic J. Bot. 12(4): 413, 1992. Typus: *Hemming* 2283 (K, EA).
- Euphorbia ponderosa** S. Carter, Nordic J. Bot. 12(4): 416, 1992. Typus: *Gillett* 22937 (K, EA, MOG).
- Euphorbia prona** S. Carter, Nordic J. Bot. 12(4): 420, 1992. Typus: *Lavranos et al.* 24730 (K, MOG).
- Euphorbia rubromarginata** Newton, Cact. Succ. J. (US) 64(4): 167-168, ills., 1992. Typus: *Powys* 547 (K, EA). [Reprinted in Euphorbiaceae Study Group Bull. 1992(3): 12-18, ills.]
- Euphorbia sakarahaensis** Rauh, Cact. Succ. J. (US) 64(5): 265-266, ills., 1992. Typus: *Hofstätter* s.n. (HEID) [Ex cult. BG Heidelberg 72 317.]. [Reprinted in Euphorbia Study Group Bull. 6(1): 34-40, 1993.]
- Euphorbia scatorhiza** S. Carter, Nordic J. Bot. 12(6): 684, 1992. Typus: *Lavranos et al.* 23417 (K).
- Euphorbia setispina** S. Carter, Nordic J. Bot. 12(4): 411, 1992. Typus: *Lavranos et al.* 24742 (K).
- Euphorbia speciosa** Leach, Excelsa No. 15: 19-20, ills., 1992. Typus: *Williamson et Drummond* 2000 (SRGH, BR, K, MO, PRE) [Ex cult. Leach sub *Leach* 14851].
- Euphorbia tholicola** Leach, Excelsa No. 15: 21-22, 1992. Typus: *Leach et Royle* 14828 (SRGH, K, MO, PRE).
- Euphorbia umbonata** S. Carter, Nordic J. Bot. 12(4): 418, 1992. Typus: *Bally et Melville* 15663 (K, EA, FT, MOG).

FOUQUIERIACEAE

- Fouquieria splendens** fa. *albiflora* Lodé, Cact. Aventures No. 16: 17, 1992. Typus: *Lodé* 91066 (Centr. Prop. Esp. Menac. ARIDES) [Type permanently conserved ?]. [First published invalidly (Art. 9.5, cf. RPS 42) in l.c. 11: 6-7, 1991, and repeated in Fichier Encycl. Cact. ser. 7: no. 654, 1992 (*nom. inval.* Art. 36.1, 37.1).]

GERANIACEAE

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- Pelargonium nephrophyllum** Marais, South Afr. J. Bot. 58(4): 220-223, ills., SEM-ills., 1992. Typus: *Snijman* 593 (STE, BOL, K, MO, NBG, PRE).

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PASSIFLORACEAE

- Adenia pulchra** M. G. Gilbert & de Wilde, Nordic J. Bot. 11: 77-80, ills., 1992. Typus: *Gilbert et Jones* 76 (K, ETH).

PORTULACACEAE

- Anacampseros** sect. *Avonia* (E. Meyer ex Fenzl) Gerbaulet, Bot. Jahrb. Syst. 113(4): 543, 1992. Basionym: *Anacampseros* subgen. *Avonia*.
- Anacampseros** subgen. *Tuberosa* (von Poellnitz) Gerbaulet, Bot. Jahrb. Syst. 113(4): 550, 1992. Basionym: *Anacampseros* sect. *Tuberosa*.
- Anacampseros filamentosa** ssp. *tomentosa* (A.

- Berger) Gerbaulet, Bot. Jahrb. Syst. 113(4): 540, 1992. Basionym: *Anacampseros tomentosa*.
- Anacampseros lanceolata** ssp. **nebrownii** (von Poellnitz) Gerbaulet, Bot. Jahrb. Syst. 113(4): 541, 1992. Basionym: *Anacampseros nebrownii*.
- Anacampseros papyracea** ssp. **namaensis** Gerbaulet, Bot. Jahrb. Syst. 113(4): 547, 1992. Typus: *Gerbaulet et al.* 22838 (HBG).
- Anacampseros recurvata** ssp. **buderiana** (von Poellnitz) Gerbaulet, Bot. Jahrb. Syst. 113(4): 548, 1992. Basionym: *Anacampseros buderiana*.
- Anacampseros recurvata** ssp. **minuta** Gerbaulet, Bot. Jahrb. Syst. 113(4): 548-549, 1992. Typus: *Gerbaulet et Struck* 24533 (HBG).
- Anacampseros subnuda** ssp. **lubbersii** (Bleck) Gerbaulet, Bot. Jahrb. Syst. 113(4): 543, 1992. Basionym: *Anacampseros lubbersii*.
- Claytonia virginica** var. **hammondiae** (Kalmbacher) Doyle et al., *Bartonia* 57: 39, 1992. Basionym: *Claytonia virginica* fa. *hammondiae*.
- Montia biapiculata** Lourteig, Rev. Acad. Colomb. Ci. 8(68): 47-48, ill. (p. 44), 1991. Typus: *Cleef* 1022 (P, COL, U).
- Portulaca decorticans** M. G. Gilbert, Kew Bull. 47(4): 693-697, ill., map, 1992. Typus: *Newbould* 3528 (K, EA).
- Portulaca insignis** Steyermark, Ann. Missouri Bot. Gard. 75(3): 1058, fig. 1 (p. 1059), 1988. Typus: *Morillo et Carnevali* 8260 (VEN). [Omitted previously.]
- Portulaca pygmaea** Steyermark, Ann. Missouri Bot. Gard. 75(3): 1058-1061, fig. 2, 1988. Typus: *Bassett Maguire et al.* 36188 (NY). [Omitted previously.]
- Portulaca umbraticola** ssp. **coronata** (Small) J. F. Matthews & D. W. Ketrón, *Castanea* 56(4): 304, 1991. Basionym: *Portulaca coronata*.
- Portulaca umbraticola** ssp. **lanceolata** (Engelmann) J. F. Matthews & D. W. Ketrón, *Castanea* 56(4): 305, 1991. [Based on *Portulaca lanceolata* Engelmann *non* Haworth; validity remains TO BE CHECKED.]
- Xenia** Gerbaulet, Bot. Jahrb. Syst. 113(4): 552, 1992. Typus: *Anacampseros vulcanensis* Añón.
- Xenia vulcanensis** (Añón) Gerbaulet, Bot. Jahrb. Syst. 113(4): 552, 1992. Basionym: *Anacampseros vulcanensis*.

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