

A provisional checklist of the continental African Orchidaceae. 3. Orchidoideae. 2. Diseae-Huttonaeae

TOMASZ S. OLSZEWSKI & DARIUSZ L. SZLACHETKO

Abstract: A checklist of continental African Diseae and Huttonaeae is provided. 185 species in 7 genera are listed. Six new combinations in *Amphigena* Rolfe in Dyer, *Herschelianthe* Rauschert and *Monadenia* Lindl. are proposed.

Key words: Magnoliophyta, Orchidaceae, Orchidoideae, Diseae, Huttonaeae, checklist, continental Africa

Tomasz S. Olszewski, Dariusz L. Szlachetko, Department of Plant Taxonomy and Nature Conservation, Gdańsk University, Al. Legionów 9, PL-80-441 Gdańsk, Poland, e-mail: tso@univ.gda.pl, biodarek@univ.gda.pl

The orchids of Diseae and Huttonaeae tribes in continental Africa comprise 7 genera and 185 species. The genera listed in alphabetical order are: *Amphigena* Rolfe in Dyer, *Brownleea* Harv. ex Lindl., *Disa* Bergius, *Herschelianthe* Rauschert, *Huttonaea* Harv., *Monadenia* Lindl. and *Schizodium* Lindl. Six new combinations in *Amphigena* Rolfe in Dyer, *Herschelianthe* Rauschert and *Monadenia* Lindl. are proposed.

LIST OF GENERA AND SPECIES

Tribe *DISEAE* Dressler

Selbyana **5**(2): 204. 1979.

A monotypic tribe including five, exclusively African, genera (Szlachetko 1995).

Subtribe *DISINAE* Benth.

J. Linn. Soc., Bot. **18**: 288. 1881.

Amphigena Rolfe in Dyer

Fl. Cap. **5**(3): 197. 1913.

Disa Bergius sect. *Amphigena* Bolus, Trans. S. African Phil. Soc. **5**: 139. 1888.

A small genus with 4 species endemic to South

Africa. Linder (1981c) includes this genus to *Disa* Bergius as a section.

1. *Amphigena cochlearis* (S. D. Johnson & Liltved) Szlach., comb. nov.

Basionym: *Disa cochlearis* S. D. Johnson & Liltved, S. African J. Bot. **63**(5): 291. 1997.

DISTRIBUTION. R.S.A. (W Cape) (Johnson & Liltved 1997; Linder 1999b).

2. *Amphigena esterhuyseniae* (Schelpe ex H. P. Linder) Szlach., comb. nov.

Basionym: *Disa esterhuyseniae* Schelpe ex H. P. Linder, Contr. Bolus Herb. **9**: 161. 1981.

DISTRIBUTION. R.S.A. (W Cape) (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

3. *Amphigena salteri* (G. J. Lewis) Szlach., comb. nov.

Basionym: *Disa salteri* G. J. Lewis, J. S. African Bot. **7**: 78. 1941.

DISTRIBUTION. R.S.A. (W Cape) (Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982).

4. *Amphigena tenuis* (Lindl.) Rolfe

Fl. Cap. **5**(3): 197. 1913.

Disa tenuis Lindl., Gen. Sp. Orchid. Pl.: 354. 1838.

Disa leptostachys Sond., Linnaea **19**: 89. 1847.

Monadenia tenuis (Lindl.) Kraenzl., Orchid. Gen. Sp. **1**: 819. 1900.

Amphigena leptostachys (Sond.) Rolfe, Fl. Cap. **5**(3): 198. 1913.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1913; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982).

***Brownleea* Harv. ex Lindl.**

London J. Bot. **1**: 16. 1842.

A genus of 7 species widely distributed in South and tropical Africa and Madagascar (Linder 1999c).

1. *Brownleea coerulea* Harv. ex Lindl.

London J. Bot. **1**: 16. 1842.

Disa coerulea (Harv. ex Lindl.) Rchb. f., Otia Bot. Hamburg. **2**: 119. 1881.

Brownleea madagascarica Ridl., J. Linn. Soc., Bot. **22**: 126. 1885.

Brownleea nelsonii Rolfe, Fl. Cap. **5**(3): 262. 1913.

Brownleea woodii Rolfe, Fl. Cap. **5**(3): 262. 1913.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal, Mpumalanga, Northern Province), Swaziland and Madagascar (Bolus 1893; Durand & Schinz 1895; Perrier de la Bathie 1939; Compton 1976; Linder 1981a, 1999c; Stewart *et al.* 1982; Kemp 1983; Reid 1993; Du Puy *et al.* 1999).

2. *Brownleea galpinii* Bolus

Icon. Orchid. Austro-Afr. **1**: t. 42. 1893.

Bonatea flavescentia Schltr., Ann. Transvaal Mus. **10**: 249. 1924.

DISTRIBUTION. Zimbabwe, R.S.A. (KwaZulu-Natal, Mpumalanga, Northern Province) and Lesotho (Bolus 1893; Linder 1981a, 1999c; Stewart *et al.* 1982; Reid 1993; la Croix & Cribb 1995).

– subsp. *galpinii*

DISTRIBUTION. Zimbabwe and R.S.A. (Kwa-

Zulu-Natal, Mpumalanga) (Linder 1981a, 1999c; Stewart *et al.* 1982; Reid 1993).

– subsp. *major* (Bolus) H. P. Linder

J. S. African Bot. **47**(1): 41. 1981.

Brownleea galpinii Bolus var. *major* Bolus, Icon. Orchid. Austro-Afr. **1**: t. 42. 1893.

Brownleea fanniniae Rolfe, Bull. Misc. Inform. Kew **1920**: 131. 1920.

Bonatea leucantha Schltr., Ann. Transvaal Mus. **10**: 249. 1924.

DISTRIBUTION. R.S.A. (Natal Drakensberg) and Lesotho (Bolus 1893; Linder 1981a, 1999c; Stewart *et al.* 1982; Reid 1993).

3. *Brownleea macroceras* Sond.

Linnaea **19**: 106. 1847.

Disa macroceras (Sond.) Rchb. f., Otia Bot. Hamburg. **2**: 119. 1881.

Brownleea coerulea sensu Bolus, J. Linn. Soc., Bot. **25**: 204. 1889.

Brownleea monophylla Schltr., Bot. Jahrb. Syst. **31**: 307. 1901.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal, Free State) and Lesotho (Linder 1981a, 1999c; Stewart *et al.* 1982; Reid 1993).

4. *Brownleea maculata* P. J. Cribb

Kew Bull. **32**(1): 147. 1977.

DISTRIBUTION. Mozambique, Malawi and Zimbabwe (Cribb 1977; Linder 1981a; la Croix *et al.* 1991; la Croix & Cribb 1995).

5. *Brownleea mulanjensis* H. P. Linder

Kew Bull. **40**(1): 125, fig. 1. 1985.

DISTRIBUTION. Malawi (Linder 1985; la Croix *et al.* 1991; la Croix & Cribb 1995).

6. *Brownleea parviflora* Lindl.

London J. Bot. **1**: 16. 1842.

Disa preussii Kraenzl., Bot. Jahrb. Syst. **17**: 64. 1863.

Disa alpina Hook. f., J. Linn. Soc., Bot. **7**: 220. 1864.

Disa parviflora (Harv. ex Lindl.) Rchb. f., Otia Bot. Hamburg. **2**: 119. 1881.

- Disa apetala* Kraenzl., Bot. Jahrb. Syst. **22**: 21. 1896.
Brownleea alpina (Hook. f.) N. E. Br., F.T.A. **7**: 287. 1897.
Brownleea apetala (Kraenzl.) N. E. Br., F.T.A. **7**: 287. 1897.
Brownleea gracilis Schltr., Bot. Jahrb. Syst. **53**: 545. 1915.
Brownleea perrieri Schltr., Feddes Repert. Beih. **33**: 102. 1924.
Brownleea transvaalensis Schltr., Ann. Transvaal Mus. **10**: 250. 1924.

DISTRIBUTION. Cameroun, D.R.C. (Haut-Katanga), Kenya, Tanzania, Zambia, Malawi, Mozambique, Zimbabwe, R.S.A. (E Cape, KwaZulu-Natal, Mpumalanga, Gauteng, Northern Province), Swaziland, Lesotho and Madagascar (Bolus 1893; Durand & Schinz 1895; Rolfe 1897; Summerhayes 1966, 1968a, b; Jacot Guillarmod 1971; Schelpe 1976b; Williamson 1977; Linder 1981a, 1999c; Stewart *et al.* 1982; Kemp 1983; Geerinck 1984; la Croix *et al.* 1991; Reid 1993; la Croix & Cribb 1995; Szlachetko & Olszewski 1998; Du Puy *et al.* 1999).

7. *Brownleea recurvata* Sond.

Linnaea **19**: 107. 1847.

Disa recurvata (Sond.) Rchb. f., Otia Bot. Hamburg. **2**: 119. 1881.

Brownleea natalensis Rolfe, Fl. Cap. **5**(3): 262. 1913.

DISTRIBUTION. R.S.A. (W and E Cape, KwaZulu-Natal, Mpumalanga) and Lesotho (Bolus 1893; Durand & Schinz 1895; Jacot Guillarmod 1971; Linder 1981a, 1999c; Stewart *et al.* 1982; Reid 1993).

Disa Bergius

Fl. Cap.: 348. 1767.

A genus of ca. 125 species, widespread mostly in tropical Africa and Madagascar, with few representatives in Yemen and Réunion Island (Linder 1981d). Linder (1999b) includes here also 3 other genera – *Amphigena* Rolfe, *Herschelianthe* Rauschert and *Monadenia* Lindl. – as sections.

1. *Disa aconitoides* Sond.

Linnaea **19**: 91. 1847.

DISTRIBUTION. Ethiopia, D.R.C. (Haut-Katanga, Lac Albert, Lacs Edouard et Kivu), Burundi, Rwanda, Uganda, Kenya, Tanzania, Zambia, Malawi, Mozambique, Zimbabwe and R.S.A. (W and E Cape, KwaZulu-Natal, Mpumalanga, Gauteng, Northern Province) (Durand & Schinz 1895; Bolus 1896; Rolfe 1897; Summerhayes 1968a; Cufodontis 1972; Schelpe 1976b; Williamson 1977; Linder 1981c, 1999b; Stewart *et al.* 1982; Geerinck 1984, 1988; la Croix *et al.* 1991; Reid 1993; la Croix & Cribb 1995; Delepierre & Lebel 2001).

– subsp. *aconitoides*

DISTRIBUTION. D.R.C. (Haut-Katanga, Lac Albert, Lacs Edouard et Kivu), Burundi, Rwanda and R.S.A. (W and E Cape, KwaZulu-Natal, Mpumalanga, Gauteng, Northern Province) (Bolus 1896; Linder 1981c, 1999b; Geerinck 1984; Delepierre & Lebel 2001).

– subsp. *concinna* (N. E. Br.) H. P. Linder

Contr. Bolus Herb. **9**: 91. 1981.

Disa concinna N. E. Br., F.T.A. **7**: 284. 1897.

Disa equestris Rchb. f. var. *concinna* (N. E. Br.) Kraenzl., Orchid. Gen. Sp. **1**: 949. 1901, excl. syn. *D. aperta* and *D. goetzeana*.

Disa bisetosa Kraenzl., Bot. Jahrb. Syst. **51**: 379. 1914.

DISTRIBUTION. Uganda, Kenya, Tanzania, Zambia, Malawi, Mozambique and Zimbabwe (Rolfe 1897; Summerhayes 1968a; Schelpe 1976b; Williamson 1977; Linder 1981c; la Croix & Cribb 1995).

– subsp. *gotzeana* (Kraenzl.) H. P. Linder

Contr. Bolus Herb. **9**: 92. 1981.

Disa goetzeana Kraenzl., Bot. Jahrb. Syst. **28**: 178. 1900.

Disa vaginata Chiov., Ann. Bot. (Rome) **9**: 138. 1911, non Lindl. 1842.

Disa chiovendaei Schltr., Feddes Repert. **16**: 1920.

DISTRIBUTION. Ethiopia, Uganda, Kenya and

Tanzania (Cufodontis 1972; Linder 1981c; Cribb & Thomas 1997; Cribb *et al.* 2002).

NOTE. Geerinck (1984) does not distinguish subsp. *concinna* and includes here *D. dichroa* so distribution in central Africa needs verification.

2. *Disa aequiloba* Summerh.

Bull. Misc. Inform. Kew **1927**(10): 419. 1927.

DISTRIBUTION. D.R.C. (Haut-Katanga), Tanzania, Angola and Zambia (Summerhayes 1927, 1968a; Geerinck 1974, 1984; Williamson 1977; Linder 1981d; la Croix & Cribb 1995).

3. *Disa alinae* Szlach.

Fragm. Florist. Geobot. **39**(2): 543, fig. 1. 1994.

DISTRIBUTION. D.R.C. (Haut-Shaba) (Szlachetko 1994).

4. *Disa alticola* H. P. Linder

Contr. Bolus Herb. **9**: 252, fig. 77: 1–5. 1981.

DISTRIBUTION. R.S.A. (Mpumalanga) (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

5. *Disa amoena* H. P. Linder

Contr. Bolus Herb. **9**: 236, fig. 71: 1–4. 1981.

DISTRIBUTION. R.S.A. (Mpumalanga) (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

6. *Disa aperta* N. E. Br.

F.T.A. **7**: 286. 1897.

Disa equestris Rehb. f. var. *concinna* (N. E. Br.) Kraenzl., Bot. Jahrb. Syst. **31**: 25. 1901, *pro parte*, excl. *D. concinna* N. E. Br. and *D. goetzeana* Kraenzl.

DISTRIBUTION. Tanzania, Zambia and Malawi (Rolfe 1897; Summerhayes 1968a; Williamson 1977; la Croix *et al.* 1991; la Croix & Cribb 1995).

7. *Disa arida* Vlok

S. African J. Bot. **51**(5): 335. 1985.

DISTRIBUTION. R.S.A. (W Cape) (Vlok 1985; Reid 1993; Linder 1999b).

8. *Disa aristata* H. P. Linder

Contr. Bolus Herb. **9**: 237. 1981.

DISTRIBUTION. R.S.A. (Northern Province) (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

9. *Disa atricapilla* (Harv. ex Lindl.) Bolus

J. Linn. Soc., Bot. **19**: 344. 1882.

Penthea atricapilla Harv. ex Lindl., London J. Bot. **1**: 17. 1842.

Disa bivalvata (L. f.) T. Durand & Schinz var. *atricapilla* (Lindl.) Schltr., Bot. Jahrb. Syst. **31**: 280. 1901.

Orthopenthea atricapilla (Lindl.) Rolfe, Fl. Cap. **5**(3): 181. 1913.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1913; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

10. *Disa aurata* (Bolus) L. T. Parker & Koop.

Biochem. Syst. & Ecol. **21**: 807. 1993.

Disa tripetaloides (L. f.) N. E. Br. var. *aurata* Bolus, Icon. Orchid. Austro-Afr. **1**: t. 30. 1893.

Disa tripetaloides (L. f.) N. E. Br. subsp. *aurata* (Bolus) H. P. Linder, Contr. Bolus Herb. **9**: 290. 1981.

DISTRIBUTION. R.S.A. (W Cape) (Bolus 1893; Linder 1981d, 1999b; Stewart *et al.* 1982; Reid 1993).

11. *Disa basutorum* Schltr.

Bot. Jahrb. Syst. **20**, Beibl. 50: 17. 1895.

Monadenia basutorum (Schltr.) Rolfe, Fl. Cap. **5**(3): 196. 1913.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal) and Lesotho (Bolus 1913; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

12. *Disa begleyi* L. Bolus

Ann. Bolus Herb. **1**: 195. 1915.

DISTRIBUTION. R.S.A. (W Cape) (Linder 1981c, 1999; Stewart *et al.* 1982; Reid 1993).

13. *Disa bivalvata* (L. f.) T. Durand & Schinz

Consp. Fl. Afr. **5**: 100. 1895.

Ophrys bivalvata L. f., Suppl. Pl.: 403. 1781.

Serapias melaleuca Thunb., Prodr. Pl. Cap.: 3. 1794.

Disa melaleuca (Thunb.) Sw., Kongl. Vetensk. Acad. Nya Handl. **21**: 213. 1800.

Penthea melaleuca (Thunb.) Lindl., Gen. Sp. Orchid. Pl.: 361. 1838.

Orthopenthea bivalvata (L. f.) Rolfe, Fl. Cap. **5**(3): 180. 1913.

DISTRIBUTION. R.S.A. (W and E Cape) (Durand & Schinz 1895; Bolus 1911; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

14. *Disa bodkinii* Bolus

J. Linn. Soc., Bot. **22**: 74. 1885.

Orthopenthea bodkinii (Bolus) Rolfe, Fl. Cap. **5**(3): 182. 1913.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1913; Lewis 1950; Linder 1981c, 1999b; Reid 1993).

15. *Disa brachyceras* Lindl.

Gen. Sp. Orchid. Pl.: 355. 1838.

Disa tenella (L. f.) Sw. var. *brachyceras* (Lindl.) Schltr., Bot. Jahrb. Syst. **31**: 345. 1901.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1913; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

16. *Disa brevipetala* H. P. Linder

Contr. Bolus Herb. **9**: 42, fig. 4. 1981.

DISTRIBUTION. R.S.A. (W Cape, KwaZulu-Natal) and Lesotho (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

17. *Disa caffra* Bolus

J. Linn. Soc., Bot. **25**: 171, fig. 9. 1889.

Disa perrieri Schltr., Feddes Repert. Beih. **33**: 100. 1925.

Disa compta Summerh., Kew Bull. **17**(3): 545. 1964.

DISTRIBUTION. D.R.C. (Haut-Katanga), Tanzania, Angola, Zambia, Malawi, R.S.A. (E Cape, KwaZulu-Natal) and Madagascar (Durand &

Schinz 1895; Perrier de la Bathie 1939; Summerhayes 1964; Williamson 1977; Linder 1981c, 1999b; Stewart *et al.* 1982; Geerinck 1984; la Croix *et al.* 1991; Reid 1993; la Croix & Cribb 1995; Du Puy *et al.* 1999).

18. *Disa cardinalis* H. P. Linder

J. S. African Bot. **46**(2): 213, fig. 1. 1980.

DISTRIBUTION. R.S.A. (W Cape) (Linder 1980, 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

19. *Disa caulescens* Lindl.

Gen. Sp. Orchid. Pl.: 351. 1838.

DISTRIBUTION. R.S.A. (W Cape) (Bolus 1893; Durand & Schinz 1895; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

20. *Disa cedarbergensis* H. P. Linder

S. African. J. Bot. **54**(4): 497. 1988.

DISTRIBUTION. R.S.A. (W Cape) (Linder 1988, 1999b; Reid 1993).

21. *Disa celata* Summerh.

Kew Bull. **17**(3): 535. 1964.

DISTRIBUTION. Tanzania, Angola, Zambia and Malawi (Summerhayes 1964; Schelpe 1976a; Williamson 1977; Linder 1981d; la Croix *et al.* 1991; la Croix & Cribb 1995).

22. *Disa cephalotes* Rchb. f.

Ota Bot. Hamburg. **2**: 106. 1881.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal, Free State) and Lesotho (Durand & Schinz 1895; Bolus 1896; Jacot Guillarmod 1971; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

– subsp. *cephalotes*

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal, Free State) and Lesotho (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

– subsp. *frigida* (Schltr.) H. P. Linder

Contr. Bolus Herb. **9**: 218. 1981.

Disa frigida Schltr., Bot. Jahrb. Syst. **20**, Beibl. 50: 18. 1895.

DISTRIBUTION. R.S.A. (KwaZulu-Natal) and Lesotho (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

23. *Disa chrysostachya* Sw.

Kongl. Vetensk. Acad. Nya Handl. **21**: 211. 1800.

Disa gracilis Lindl., Gen. Sp. Orchid. Pl.: 348. 1838.

DISTRIBUTION. R.S.A. (W and E Cape, KwaZulu-Natal, Free State, Mpumalanga, Northern Province), Lesotho and Swaziland (Durand & Schinz 1895; Bolus 1913; Jacot Guillarmod 1971; Linder 1981d, 1999b; Stewart *et al.* 1982; Kemp 1983; Reid 1993).

24. *Disa clavicornis* H. P. Linder

J. S. African Bot. **50**(2): 261, fig. 1. 1984.

DISTRIBUTION. R.S.A. (Mpumalanga) (Linder 1984, 1999b; Reid 1993).

25. *Disa cooperi* Rchb. f.

Flora **64**: 328. 1881.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal, Mpumalanga) and Lesotho (Durand & Schinz 1895; Bolus 1911; Jacot Guillarmod 1971; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

26. *Disa cornuta* (L.) Sw.

Kongl. Vetensk. Acad. Nya Handl. **21**: 210. 1800.

Orchis cornuta L., Pl. Rar. Afr.: 109. 1763.

Satyrium cornutum (L.) Thunb., Prodri. Pl. Cap.: 5. 1794.

Disa aemula Bolus, J. Linn. Soc., Bot. **22**: 59. 1885.

Disa macrantha Sw., Kongl. Vetensk. Acad. Nya Handl. **21**: 210. 1899.

Disa cornuta (L.) Sw. var. *aemula* (Bolus) Kraenzl., Orchid. Gen. Sp. **1**: 768. 1900.

DISTRIBUTION. Zimbabwe, R.S.A. (W and E Cape, KwaZulu-Natal, Mpumalanga) and Lesotho (Durand & Schinz 1895; Bolus 1911; Lewis 1950;

Jacot Guillarmod 1971; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993; la Croix & Cribb 1995).

27. *Disa crassicornis* Lindl.

Gen. Sp. Orchid. Pl.: 348. 1838.

Disa macrantha sensu Weale, J. Linn. Soc., Bot. **13**: 45. 1870.

Disa megaceras Hook. f., Bot. Mag.: t. 6529. 1880.

Disa jacottetiae Kraenzl., Vierteljahrsschr. Naturf. Ges. Zürich **40**: 391. 1915.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal) and Lesotho (Durand & Schinz 1895; Bolus 1913; Jacot Guillarmod 1971; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

28. *Disa cryptantha* Summerh.

Kew Bull. **17**(3): 537. 1964.

Disa miniata auct. non Summerh.: Geerinck, Bull. Soc. Roy. Bot. Belgique **107**(1): 66, fig. 10. 1974.

DISTRIBUTION. Ethiopia, D.R.C. (Haut-Katanga), Burundi, Tanzania and Zambia (Summerhayes 1964, 1968a; Geerinck 1974, 1984, 1992; Williamson 1977; Linder 1981d; la Croix & Cribb 1995; Geerinck & Arbonnier 1996; Cribb *et al.* 2002).

29. *Disa danielae* Geerinck

Bull. Jard. Bot. Belg. **52**(1–2): 142, fig. 1. 1982.

DISTRIBUTION. D.R.C. (Haut-Katanga) and Angola (Geerinck 1982a, 1984; la Croix & Cribb 1995).

30. *Disa dichroa* Summerh.

Kew Bull. **17**(3): 549. 1964.

Disa concinna N. E. Br. var. *dichroa* (Summerh.) Geerinck, Bull. Soc. Roy. Bot. Belgique **107**(1): 64, fig. 3. 1974.

Disa aconitoides Sond. var. *dichroa* (Summerh.) Geerinck, Bull. Jard. Bot. Belg. **52**(1–2): 142. 1982.

DISTRIBUTION. D.R.C. (Haut-Katanga) and Zambia (Summerhayes 1964; Geerinck 1974, 1982a, 1984; la Croix & Cribb 1995).

31. *Disa dracomontana* Schelpe ex H. P. Linder
Contr. Bolus Herb. **9**: 226, fig. 69: 1–6. 1981.

DISTRIBUTION. R.S.A. (KwaZulu-Natal, Free State) (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

32. *Disa draconis* (L. f.) Sw.

Kongl. Vetensk. Acad. Nya Handl. **21**: 210. 1800.
Orchis draconis L. f., Suppl. Pl.: 400. 1781.
Satyrium draconis (L. f.) Thunb., Prodr. Pl. Cap.: 5. 1794.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

33. *Disa elegans* Sond. ex Rchb. f.

Flora **48**: 182. 1865.

Penthea elegans Sond., Linnaea **20**: 220. 1847, *nom. nud.*

Orthopenthea elegans (Rchb. f.) Rolfe, Fl. Cap. **5**(3): 182. 1913.

DISTRIBUTION. R.S.A. (W Cape) (Bolus 1893; Durand & Schinz 1895; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

34. *Disa eminii* Kraenzl.

Bot. Jahrb. Syst. **19**: 248. 1894.

Disa stolonifera Rendle, J. Linn. Soc., Bot. **37**: 222. 1905.

Disa stairsii auct non Kraenzl.: Geerinck, Bull. Soc. Roy. Bot. Belgique **107**(1): 89. 1974, *pro parte, quoad Deuse 1373.*

DISTRIBUTION. Burundi, Rwanda, Tanzania, Uganda and Zambia (Durand & Schinz 1895; Rolfe 1897; Summerhayes 1968a; Geerinck 1974, 1984, 1988; Williamson 1977; la Croix & Cribb 1995; Delepierre & Lebel 2001).

35. *Disa engleriana* Kraenzl.

Bot. Jahrb. Syst. **33**: 58. 1902.

Disa subscutellifera Kraenzl., Bot. Jahrb. Syst. **48**: 389. 1912.

Disa leopoldi Kraenzl., Bull. Soc. Roy. Bot. Belgique

38: 218. 1900, *nom. confusum, pro parte, quoad Briart 47.*

Disa verdickii auct non. De Wild.: Geerinck, Bull. Soc. Roy. Bot. Belgique **107**(1): 69. 1974, *pro parte, quoad Schmitz 3713, non Hirschberg 175.*

Disa erubescens auct. non Rendle

DISTRIBUTION. D.R.C. (Haut-Katanga), Tanzania, Zambia and Malawi (Summerhayes 1968a; Geerinck 1974, 1984; Williamson 1977; Linder 1981d; la Croix *et al.* 1991; la Croix & Cribb 1995).

36. *Disa equestris* Rchb. f.

Flora **48**: 181. 1865.

Disa huillensis Fritsch, Bull. Herb. Boissier **1**: 116. 1901.

DISTRIBUTION. Nigeria, Cameroun, C.A.R., D.R.C. (Kasai, Bas-Katanga, Haut-Katanga, Lacs Edouard et Kivu), Burundi, Tanzania, Angola, Zambia, Malawi, Mozambique and Zimbabwe (Durand & Schinz 1895; Rolfe 1897; Summerhayes 1937, 1968a, b; Geerinck 1974, 1984, 1992; Schelpe 1976a, b; Tang & Cribb 1983; Cribb & Fay 1987; la Croix *et al.* 1991; Arbonnier & Geerinck 1993; la Croix & Cribb 1995; Szlachetko & Olszewski 1998).

37. *Disa erubescens* Rendle

J. Linn. Soc., Bot. **33**: 297. 1895.

DISTRIBUTION. Sudan, Nigeria, Cameroun, D.R.C. (Haut-Katanga, Lac Albert, Lacs Edouard et Kivu), Burundi, Rwanda, Uganda, Kenya, Tanzania, Angola, Zambia, Malawi, Mozambique and Zimbabwe (Rolfe 1897; Robyns & Tournay 1955; Andrews 1956; Piers 1968; Summerhayes 1968a, b; Geerinck 1974, 1982a, 1984, 1988; Schelpe 1976a; Williamson 1977; Linder 1981d; Tang & Cribb 1983; la Croix *et al.* 1991; Szlachetko & Olszewski 1998; Delepierre & Lebel 2001).

– subsp. *erubescens*

Disa erubescens var. *leucantha* Schltr., Bot. Jahrb. Syst. **53**: 537. 1915.

DISTRIBUTION. Sudan, Nigeria, Cameroun, D.R.C. (Lac Albert, Lacs Edouard et Kivu), Bu-

rundi, Rwanda, Uganda, Kenya, Tanzania, Zambia, Malawi, Mozambique and Zimbabwe (Geerinck 1974, 1984; Linder 1981d; la Croix & Cribb 1995; Delepierre & Lebel 2001).

– subsp. *carsonii* (N. E. Br.) H. P. Linder

Bull. Jard. Bot. Belg. **51**(3–4): 340. 1981.

Disa carsonii N. E. Br., F.T.A. **7**: 277. 1897.

Disa stolzii Schltr., Bot. Jahrb. Syst. **53**: 537. 1915.

Disa erubescens Rendle var. *carsonii* (N.E.Br.) Geerinck, Bull. Jard. Bot. Nat. Belg. **52**(1–2): 144. 1982.

DISTRIBUTION. D.R.C. (Haut-Katanga), Burundi, Tanzania, Zambia, Malawi and Mozambique (Rolfe 1897; Summerhayes 1968a; Williamson 1977; Linder 1981d; Geerinck 1982a, 1984; la Croix *et al.* 1991; la Croix & Cribb 1995).

38. *Disa extinctoria* Rchb. f.

Flora **64**: 328. 1881.

DISTRIBUTION. R.S.A. (Mpumalanga, Northern Province) and Swaziland (Durand & Schinz 1895; Linder 1981c, 1999b; Stewart *et al.* 1982; Kemp 1983; Reid 1993).

39. *Disa facula* P. J. Cribb, C. Herrm. & Sebsebe

Lindleyana **17**(4): 180, fig. 1. 2002.

DISTRIBUTION. Ethiopia (Cribb *et al.* 2002).

40. *Disa fasciata* Lindl.

Gen. Sp. Orchid. Pl.: 350. 1838.

Orthopenthea fasciata (Lindl.) Rolfe, Fl. Cap. **5**(3): 185. 1913.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1913; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

41. *Disa ferruginea* (Thunb.) Sw.

Kongl. Vetensk. Acad. Nya Handl. **21**: 210. 1800.

Satyrium ferrugineum Thunb., Prodr. Pl. Cap.: 5. 1794.

DISTRIBUTION. R.S.A. (W Cape) (Bolus 1893; Durand & Schinz 1895; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

42. *Disa filicornis* (L. f.) Thunb.

Fl. Cap. **5**(3): 17. 1823.

Orchis filicornis L. f., Suppl. Pl.: 400. 1781.

Disa patens Sw., Kongl. Vetensk. Acad. Nya Handl. **21**: 214. 1800, non L. f.

Penthea filicornis (L. f.) Lindl., Gen. Sp. Orchid. Pl.: 361. 1838.

Penthea reflexa Lindl., Gen. Sp. Orchid. Pl.: 361. 1838.

Disa reflexa (Lindl.) Rchb. f., Flora **48**: 182. 1865.

Disa filicornis (L. f.) Thunb. var. *latipetala* Bolus, Icon. Orchid. Austro-Afr. **3**: t. 45a. 1913.

DISTRIBUTION. R.S.A. (W and E Cape) (Durand & Schinz 1895; Bolus 1911, 1913; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

43. *Disa fragrans* Schltr.

Bot. Jahrb. Syst. **20**, Beibl. 50: 40. 1895.

DISTRIBUTION. Sudan, Ethiopia, D.R.C. (Lacs Edouard et Kivu), Rwanda, Uganda, Kenya, Tanzania, Malawi, Mozambique, Zimbabwe, R.S.A. (E Cape, KwaZulu-Natal, Mpumalanga, Northern Province) and Lesotho (Durand & Schinz 1895; Rolfe 1897; Andrews 1956; Piers 1968; Summerhayes 1968a; Jacot Guillarmod 1971; Cufodontis 1972; Geerinck 1974, 1984, 1988; Linder 1981d, 1999b; Stewart *et al.* 1982; la Croix *et al.* 1991; Reid 1993; la Croix & Cribb 1995; Cribb & Thomas 1997).

– subsp. *fragrans*

Disa leucostachys Kraenzl., Bot. Jahrb. Syst. **30**: 285. 1901.

Monadenia junodiana Kraenzl., Vierteljahrssch. Naturf. Ges. Zürich **74**: 108. 1929.

DISTRIBUTION. Tanzania, Malawi, Mozambique, Zimbabwe, R.S.A. (E Cape, KwaZulu-Natal, Mpumalanga, Northern Province) and Lesotho (Summerhayes 1968a; Linder 1981d, 1999b; la Croix *et al.* 1991; la Croix & Cribb 1995).

– subsp. *deckenii* (Rchb. f.) Linder

Bull. Jard. Bot. Belg. **51**(3–4): 290. 1981.

Disa deckenii Rchb. f., Otia Bot. Hamburg. **2**: 105. 1881.

Disa kilimanjarica Rendl., J. Linn. Soc., Bot. **30**: 399. 1895.

Disa polygonoides sensu Kraenzl., Pflanzw. Ost-Afr., C: 153. 1895, non Lindl.

DISTRIBUTION. Sudan, Ethiopia, D.R.C. (Lacs Edouard et Kivu), Rwanda, Uganda, Kenya and Tanzania (Durand & Schinz 1895; Rolfe 1897; Andrews 1956; Piers 1968; Summerhayes 1968a; Cufodontis 1972; Geerinck 1974, 1984, 1992; Linder 1981d; Cribb & Thomas 1997; Delepierre & Lebel 2001).

NOTE. Geerinck (1984) and Cribb & Thomas (1997) treat *D. fragrans* subsp. *deckenii* as a distinct species.

44. *Disa galpinii* Rolfe

Fl. Cap. **5**(3): 230. 1913.

Disa minax Kraenzl., Vierteljahrssch. Naturf. Ges. Zürich **40**: 392. 1915.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal) (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

45. *Disa gladioliflora* Burch. ex Lindl.

Gen. Sp. Orchid. Pl.: 352. 1838.

DISTRIBUTION. R.S.A. (W and E Cape) (Bolus 1911; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

– subsp. *gladioliflora*

DISTRIBUTION. R.S.A. (W and E Cape) (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

– subsp. *capricornis* (Rchb. f.) H. P. Linder

Contr. Bolus Herb. **9**: 208. 1981.

Disa capricornis Rchb. f., Linnaea **20**: 692. 1847.

DISTRIBUTION. R.S.A. (W Cape) (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

46. *Disa glandulosa* Burch. ex Lindl.

Gen. Sp. Orchid. Pl.: 351. 1838.

DISTRIBUTION. R.S.A. (W and E Cape) (Durand & Schinz 1895; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

47. *Disa hallackii* Rolfe

Fl. Cap. **5**(3): 227. 1913.

Disa stokoei L.Bolus, Ann. Bolus Herb. **4**: 141. 1928.

DISTRIBUTION. R.S.A. (W and E Cape) (Linder 1981c, 1999; Stewart *et al.* 1982; Reid 1993).

48. *Disa harveiana* Lindl.

London J. Bot. **1**: 15. 1842.

Disa draconis (L. f.) Sw. var. *harveiana* (Lindl.) Schltr., Bot. Jahrb. Syst. **31**: 231. 1901.

DISTRIBUTION. R.S.A. (N and W Cape) (Durand & Schinz 1895; Linder 1981c, 1999b; Stewart *et al.* 1982; Johnson & Linder 1995).

– subsp. *harveiana*

DISTRIBUTION. R.S.A. (N and W Cape) (Johnson & Linder 1995; Linder 1999b).

– subsp. *longicalcarata* S. D. Johnson & H. P. Linder

Bot. J. Linn. Soc. **118**(4): 305, fig. 1d. 1995.

DISTRIBUTION. R.S.A. (W Cape) (Johnson & Linder 1995).

49. *Disa hircicornis* Rchb. f.

Otia Bot. Hamburg. **2**: 105. 1881.

Disa laeta Rchb. f., Otia Bot. Hamburg. **2**: 106. 1881.

Disa culveri Schltr., Bot. Jahrb. Syst. **20**, Beibl. 50: 17. 1895.

Disa amblyopetala Schltr., Bot. Jahrb. Syst. **53**: 542. 1915.

DISTRIBUTION. Sudan, Ethiopia, Nigeria, Cameroun, D.R.C. (Bas-Congo, Haut-Katanga, Lac Albert, Lacs Edouard et Kivu), Burundi, Rwanda, Uganda, Kenya, Tanzania, Angola, Zambia, Malawi, Mozambique, Zimbabwe and R.S.A. (Kwa-Zulu-Natal, Mpumalanga, Northern Province) (Durand & Schinz 1895; Rolfe 1897; Andrews 1956; Piers 1968; Summerhayes 1968a, b; Geerinck 1974, 1984, 1988, 1992; Schelpe 1976a;

Williamson 1977; Linder 1981c, 1999b; Stewart *et al.* 1982; Tang & Cribb 1983; la Croix *et al.* 1991; Reid 1993; la Croix & Cribb 1995; Szlachetko & Olszewski 1998; Delepierre & Lebel 2001; Cribb *et al.* 2002).

50. *Disa intermedia* H. P. Linder

Contr. Bolus Herb. **9**: 259, fig. 81: 1–5. 1981.

Disa patula Sond. *sensu* Compton, J. S. African Bot., Suppl. **11**: 157. 1976.

DISTRIBUTION. Swaziland (Compton 1976; Linder 1981c, 1999b; Stewart *et al.* 1982; Kemp 1983; Reid 1993).

51. *Disa introrsa* Kurzweil, Liltved & H. P. Linder
Nordic J. Bot. **17**(4): 353. 1997.

DISTRIBUTION. R.S.A. (W Cape) (Kurzweil *et al.* 1997; Linder 1999b).

52. *Disa karoica* S. D. Johnson & H. P. Linder
Bot. J. Linn. Soc. **118**(4): 304, fig. 1b. 1995.

DISTRIBUTION. R.S.A. (W and N Cape) (Johnson & Linder 1995; Linder 1999b).

53. *Disa katangensis* De Wild.

Ann. Mus. Congo Belge, Bot. **1**: 25. 1902.

Disa stolzii Schltr., Bot. Jahrb. Syst. **53**: 537. 1915.

Disa erubescens Rendle var. *katangensis* (De Wild.) Geerinck, Bull. Soc. Roy. Bot. Belg. **107**(1): 66. 1974.

DISTRIBUTION. D.R.C. (Haut-Katanga), Burundi, Angola and Zambia (Géerinck 1974, 1984; Williamson 1977; Linder 1981d; la Croix & Cribb 1995).

54. *Disa lineata* Bolus

J. Linn. Soc., Bot. **22**: 74. 1885.

Disa neglecta *sensu* Schltr., Bot. Jahrb. Syst. **31**: 249. 1901, *pro parte*, excl. *D. neglecta* Sond. and Rolfe, Fl. Cap. **5**(3): 216. 1913, *pro parte*, excl. *D. neglecta* Sond.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1913; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

55. *Disa lisowskii* Szlach.

Fragm. Florist. Geobot. **39**(2): 546, fig. 3. 1994.

DISTRIBUTION. D.R.C. (Haut-Katanga) (Szlachetko 1994).

56. *Disa longicornu* L. f.

Suppl. Pl.: 406. 1781.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1913; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

57. *Disa longifolia* Lindl.

Gen. Sp. Orchid. Pl.: 349. 1838.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1896; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

58. *Disa maculata* L. f.

Suppl. Pl.: 407. 1781.

Schizodium maculatum (L. f.) Lindl., Gen. Sp. Orchid. Pl.: 360. 1838.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1913; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

59. *Disa maculomarronina* McMurtry

S. African Orchid J. **15**: 91. 1984.

Disa versicolor x *hircicornis* H. P. Linder, Contr. Bolus Herb. **9**: 146. 1981.

DISTRIBUTION. R.S.A. (KwaZulu-Natal, Mpumalanga) (Linder 1981c, 1999b; Reid 1993).

60. *Disa marlothii* Bolus

Trans. S. African Phil. Soc. **16**: 148. 1905.

DISTRIBUTION. R.S.A. (W and E Cape) (Bolus 1911; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

61. *Disa micropetala* Schltr.

Bot. Jahrb. Syst. **20**, Beibl. 50: 7. 1895.

DISTRIBUTION. R.S.A. (W and E Cape) (Bolus

1913; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

62. *Disa miniata* Summerh.

Kew Bull. **17**(3): 539. 1964.

DISTRIBUTION. D.R.C. (Kasai), Tanzania, Zambia, Malawi, Mozambique and Zimbabwe (Summerhayes 1964, 1968a; Geerinck 1974, 1984; Williamson 1977; Linder 1981d; la Croix *et al.* 1991; la Croix & Cribb 1995).

63. *Disa minor* (Sond.) Rchb. f.

Flora **48**: 182. 1865.

Penthea minor Sond., Linnaea **19**: 104. 1847.

Orthopenthea minor (Sond.) Rolfe, Fl. Cap. **5**(3): 183. 1913.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

64. *Disa montana* Sond.

Linnaea **19**: 90. 1847.

Disa pulchra Sond. var. *montana* (Sond.) Schltr., Bot. Jahrb. Syst. **31**: 259. 1901.

Disa poikilantha Kraenzl., Vierteljahrssch. Naturf. Ges. Zürich **40**: 393. 1915.

DISTRIBUTION. R.S.A. (E Cape) (Durand & Schinz 1895; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

65. *Disa neglecta* Sond.

Linnaea **19**: 100. 1847.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

66. *Disa nervosa* Lindl.

Gen. Sp. Orchid. Pl.: 352. 1838.

Disa fanniniae Rolfe, Fl. Cap. **5**(3): 246. 1913.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal, Mpumalanga), ?Lesotho and Swaziland (Durand & Schinz 1895; Jacot Guillarmod 1971;

Compton 1976; Linder 1981c, 1999b; Stewart *et al.* 1982; Kemp 1983; Reid 1993).

NOTE. Linder (1999b) did not confirm citation from Lesotho.

67. *Disa nigerica* Rolfe

Bull. Misc. Inform. Kew **1914**: 214. 1914.

DISTRIBUTION. Nigeria, Cameroun and D.R.C. (Ubangi-Uele) (Summerhayes 1968b; Tang & Cribb 1983; Geerinck 1984; Szlachetko & Olzewski 1998).

68. *Disa nivea* H. P. Linder

Contr. Bolus Herb. **9**: 223, fig. 67: 1–6. 1981.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal) and Lesotho (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

69. *Disa nyikensis* H. P. Linder

Contr. Bolus Herb. **9**: 96. 1981.

DISTRIBUTION. Malawi and Zambia (Linder 1981d; la Croix *et al.* 1991; la Croix & Cribb 1995).

70. *Disa obtusa* Lindl.

Gen. Sp. Orchid. Pl.: 355. 1838.

DISTRIBUTION. R.S.A. (W and E Cape) (Durand & Schinz 1895; Bolus 1913; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

– subsp. *obtusa*

Disa tabularis Sond., Linnaea **19**: 99. 1847.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

– subsp. *hottentotica* H. P. Linder

Contr. Bolus Herb. **9**: 40. 1981.

DISTRIBUTION. R.S.A. (W Cape) (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

– subsp. *picta* (Sond.) H. P. Linder

Contr. Bolus Herb. **9**: 41. 1981.

Disa picta Sond., Linnaea **19**: 99. 1847.

Disa pappei Rolfe, Fl. Cap. **5**(3): 216. 1913.

DISTRIBUTION. R.S.A. (W and E Cape) (Durand & Schinz 1895; Bolus 1911; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

71. *Disa ocellata* Bolus

J. Linn. Soc., Bot. **20**: 477. 1884.

Disa maculata Harv. ex Lindl., London J. Bot. **1**: 15. 1842, non L. f.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1913; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

72. *Disa ochrostachya* Rchb. f.

Flora **48**: 181. 1865.

Disa aurantiaca Rchb. f., Flora **50**: 98. 1867.

Disa adolphi-friderici Kraenzl., Bot. Jahrb. Syst. **43**: 331. 1901.

Disa ochrostachya Rchb. f. var. *major* Rendle, J. Linn. Soc., Bot. **37**: 222. 1905.

DISTRIBUTION. Cameroun, D.R.C. (Haut-Katanga, Lacs Albert, Lacs Edouard et Kivu), Burundi, Rwanda, Uganda, Kenya, Tanzania, Angola, Zambia, Malawi and Zimbabwe (Durand & Schinz 1895; Rolfe 1897; Summerhayes 1964, 1968a, b; Piers 1968; Geerinck 1974, 1984, 1988; Schelpe 1976a; Williamson 1977; Linder 1981d; la Croix *et al.* 1991; la Croix & Cribb 1995; Szlachetko & Olszewski 1998; Delepierre & Lebel 2001).

73. *Disa oligantha* Rchb. f.

Flora **48**: 182. 1865.

Penthea triloba Sond., Linnaea **19**: 104. 1847.

Disa parvilabris Bolus, J. Linn. Soc., Bot. **19**: 344. 1882.

Orthopenthea triloba (Sond.) Rolfe, Fl. Cap. **5**(3): 183. 1913.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1911; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

74. *Disa oreophila* Bolus

J. Linn. Soc., Bot. **25**: 170, fig. 8. 1889.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal, Free State, Mpumalanga) and Lesotho (Durand & Schinz 1895; Bolus 1911; Jacot Guillarmod 1971; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

– subsp. *oreophila*

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal, Free State, Mpumalanga) (Reid 1993; Linder 1999b).

– subsp. *erecta* H. P. Linder

Contr. Bolus Herb. **9**: 223, fig. 67: 7. 1981.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal) and Lesotho (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

75. *Disa ornithantha* Schltr.

Bot. Jahrb. Syst. **53**: 538. 1915.

Disa erubescens auct. non Rendle: Geerinck, Bull. Soc. Roy. Bot. Belgique **107**(1): 65. 1974, *pro parte quoad Becquet 7*.

Disa verdickii auct. non De Willd.: Geerinck, Bull. Soc. Roy. Bot. Belgique **107**(1): 69. 1974, *pro parte quoad photo 3*.

DISTRIBUTION. D.R.C. (Bas-Katanga, Haut-Katanga), Tanzania, Angola, Zambia, Malawi, Mozambique and Zimbabwe (Summerhayes 1937, 1968a; Geerinck 1974, 1984; Williamson 1977; Linder 1981d; la Croix *et al.* 1991; la Croix & Cribb 1995).

76. *Disa ovalifolia* Sond.

Linnaea **19**: 93. 1847.

DISTRIBUTION. R.S.A. (W Cape) (Bolus 1893; Durand & Schinz 1895; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

77. *Disa patula* Sond.

Linnaea **19**: 94. 1847.

DISTRIBUTION. Zimbabwe, R.S.A. (E Cape,

KwaZulu-Natal, Mpumalanga, Northern Province) and Swaziland (Durand & Schinz 1895; Bolus 1896; Summerhayes 1938; Linder 1981c, 1999b; Stewart *et al.* 1982; Kemp 1983; Reid 1993; la Croix & Cribb 1995).

– var. *patula*

Disa stenoglossa Bolus, J. Linn. Soc., Bot. **25**: 173. 1889.

Disa nervosa sensu Bolus, Icon. Orchid. Austro-Afr. **1**: t. 84. 1896.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal, Mpumalanga) (Bolus 1896; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

– var. *transvaalensis* Summerh.

Bull. Misc. Inform. Kew **1938**(4): 148. 1938.

Disa nervosa sensu Bolus, Icon. Orchid. Austro-Afr. **1**: t. 84. 1896.

Disa gerrardii Rolfe, Fl. Cap. **5**(3): 243. 1913.

DISTRIBUTION. Zimbabwe, R.S.A. (E Cape, KwaZulu-Natal, Mpumalanga, Northern Province) and Swaziland (Summerhayes 1938; Linder 1981c, 1999b; Stewart *et al.* 1982; Kemp 1983; Reid 1993; la Croix & Cribb 1995).

78. *Disa perplexa* H. P. Linder

Contr. Bolus Herb. **9**: 128. 1981.

DISTRIBUTION. Nigeria, ?Cameroun, Kenya, Tanzania, Malawi, Zambia and Zimbabwe (Linder 1981c; la Croix *et al.* 1991; la Croix & Cribb 1995).

79. *Disa pillansii* L. Bolus

Ann. Bolus Herb. **2**: 32. 1916.

DISTRIBUTION. R.S.A. (W Cape) (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

80. *Disa polygonoides* Lindl.

Gen. Sp. Orchid. Pl.: 349. 1838.

Disa natalensis Lindl., London J. Bot. **1**: 16. 1842.

Disa chrysostachya auct. non Sw.

DISTRIBUTION. Mozambique, R.S.A. (E Cape,

KwaZulu-Natal, Gauteng, Northern Province, North-West), Lesotho and ?Swaziland (Durand & Schinz 1895; Bolus 1911; Jacot Guillarmod 1971; Compton 1976; Linder 1981d, 1999b; Stewart *et al.* 1982; Kemp 1983; Reid 1993; la Croix & Cribb 1995).

NOTE. Linder (1999b) did not confirm citation from Swaziland.

81. *Disa porrecta* Sw.

Kongl. Vetensk. Acad. Nya Handl. **21**: 211. 1800.

Disa zeyheri Sond., Linnaea **19**: 95. 1847.

DISTRIBUTION. R.S.A. (E Cape, Free State) and Lesotho (Bolus 1893; Durand & Schinz 1895; Jacot Guillarmod 1971; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

82. *Disa pulchella* Hochst. ex A. Rich.

Tent. Fl. Abyss. **2**: 301. 1847.

DISTRIBUTION. Ethiopia and Yemen (Durand & Schinz 1895; Rolfe 1897; Cufodontis 1972; Cribb & Thomas 1997).

83. *Disa pulchra* Sond.

Linnaea **19**: 94. 1847.

Disa kraussii Rolfe, Fl. Cap. **5**(3): 246. 1913.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal, Free State) (Durand & Schinz 1895; Bolus 1913; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

84. *Disa racemosa* L. f.

Suppl. Pl.: 406. 1781.

Satyrium secundatum Thunb., Prodr. Pl. Cap.: 4. 1794.

Disa secunda (Thunb.) Sw., Kongl. Vetensk. Acad. Nya Handl. **21**: 213. 1800.

Disa racemosa L. f. var. *isopetala* Bolus, Trans. S. African Phil. Soc. **5**: 156. 1888.

DISTRIBUTION. R.S.A. (W and E Cape) (Durand & Schinz 1895; Bolus 1911; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993)

85. *Disa renziana* Szlach.

Fragm. Florist. Geobot. **39**(2): 545, fig. 2. 1994.

DISTRIBUTION. D.R.C. (Haut-Katanga) (Szla-chetko 1994).

86. *Disa rhodantha* Schltr.

Bot. Jahrb. Syst. **20**, Beibl. 50: 40. 1895.

DISTRIBUTION. Zimbabwe and R.S.A. (E Cape, KwaZulu-Natal, Mpumalanga, Northern Province) (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993; la Croix & Cribb 1995).

87. *Disa richardiana* F. Lehm. ex Bolus

J. Linn. Soc., Bot. **20**: 480. 1884.

Penthea obtusa Lindl., Gen. Sp. Orchid. Pl.: 361. 1838.
Orthopenthea richardiana (F. Lehm ex Bolus) Rolfe, Fl. Cap. **5**(3): 183. 1913.

Orthopenthea obtusa (Lindl.) Schelpe, Orchid Rev. **74**: 394. 1966.

DISTRIBUTION. R.S.A. (W Cape) (Bolus 1893; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

88. *Disa robusta* N. E. Br.

F.T.A. **7**: 282. 1897.

Disa coccinea Kraenzl., Bot. Jahrb. Syst. **33**: 59. 1902.
Disa praestans Kraenzl., Bot. Jahrb. Syst. **33**: 59. 1902.

DISTRIBUTION. D.R.C. (Lacs Edouard et Kivu), Burundi, Rwanda, Tanzania, Zambia and Malawi (Durand & Schinz 1895; Rolfe 1897; Summerha-yes 1964, 1968a; Piers 1968; Geerinck 1974, 1984, 1988, 1992; Williamson 1977; la Croix & Cribb 1995; Delepierre & Lebel 2001).

89. *Disa roeperocharoides* Kraenzl.

Bot. Jahrb. Syst. **51**: 379. 1914.

Disa welwitschii auct. non Rchb. f.

DISTRIBUTION. D.R.C. (Shaba Prov.) and Zam-bia (Williamson 1977; Linder 1981d; Geerinck 1984; la Croix & Cribb 1995).

90. *Disa rosea* Lindl.

Gen. Sp. Orchid. Pl.: 350. 1838.

Orthopenthea rosea (Lindl.) Rolfe, Fl. Cap. **5**(3): 184. 1913.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1911; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

91. *Disa rungweensis* Schltr.

Bot. Jahrb. Syst. **53**: 543. 1915.

DISTRIBUTION. Tanzania and Malawi (Sum-merhayes 1968a; Williamson 1977; la Croix *et al.* 1991; la Croix & Cribb 1995).

92. *Disa sagittalis* (L. f.) Sw.

Kongl. Vetensk. Acad. Nya Handl. **21**: 212. 1800.

Orchis sagittalis L. f., Suppl. Pl.: 399. 1781.

Satyrium sagittale (L. f.) Thunb., Prodr. Pl. Cap.: 5. 1794.

Disa attenuata Lindl., Gen. Sp. Orchid. Pl.: 351. 1838.

DISTRIBUTION. R.S.A. (W and E Cape) (Bolus 1893; Durand & Schinz 1895; Bolus 1911; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

93. *Disa sanguinea* Sond.

Linnaea **19**: 97. 1847.

Disa huttonii Rchb. f., Otia Bot. Hamburg. **2**: 105. 1881.

DISTRIBUTION. R.S.A. (E Cape) (Durand & Schinz 1895; Bolus 1896; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

94. *Disa sankeyi* Rolfe

Fl. Cap. **5**(3): 225. 1913.

Disa basutorum Kraenzl., Virerteljahr. Natur. Ges. Zü-rich **60**: 391. 1915, *non* Schltr.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal), Lesotho and Swaziland (Linder 1981d, 1999b; Stewart *et al.* 1982; Reid 1993).

95. *Disa satyriopsis* Kraenzl.

Bot. Jahrb. Syst. **28**: 177. 1901.

Disa ochrostachya Kraenzl. var. *latipetala* G. Will., Pl. Syst. Evol. **134**: 60, fig. 5A-D. 1980.

DISTRIBUTION. Burundi, Tanzania, Zambia and Malawi (Williamson 1980; Linder 1981d; la

Croix *et al.* 1991; la Croix & Cribb 1995; Geerinck & Arbonier 1996).

96. *Disa saxicola* Schltr.

Bot. Jahrb. Syst. **20**, Beibl. 50: 41. 1895.

Disa uliginosa Kraenzl., Bot. Jahrb. Syst. **30**: 285. 1901

DISTRIBUTION. Tanzania, Zambia, Malawi, Mozambique, Zimbabwe, R.S.A. (Mpumalanga, Northern Province) and Swaziland (Durand & Schinz 1895; Rolfe 1897; Summerhayes 1964, 1968a; Compton 1976; Williamson 1977; Linder 1981c, 1999b; Stewart *et al.* 1982; Kemp 1983; Reid 1993; la Croix & Cribb 1995).

97. *Disa schizodiooides* Sond.

Linnaea **19**: 92. 1847.

Orthopenthea schizodiooides (Sond.) Rolfe, Fl. Cap. **5(3)**: 184. 1913.

DISTRIBUTION. R.S.A. (W Cape) (Bolus 1896; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

98. *Disa scullyi* Bolus

J. Linn. Soc., Bot. **22**: 70. 1885.

Disa cooperi Rchb. f. var. *scullyi* (Bolus) Schltr., Bot. Jahrb. Syst. **31**: 236. 1901. excl. syn. *D. thodei* Kraenzl.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal) (Durand & Schinz 1895; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

99. *Disa scutellifera* A. Rich.

Ann. Sc. Nat., ser. 2, **14**: 272. 1840.

Disa schimperi N. E. Br., F.T.A. **7**: 279. 1897.

DISTRIBUTION. Ethiopia, Sudan, Uganda and Kenya (Durand & Schinz 1895; Rolfe 1897; Andrews 1956; Summerhayes 1964, 1968a; Piers 1968; Cufodontis 1972; Linder 1981d; Cribb & Thomas 1997).

100. *Disa similis* Summerh.

Kew Bull. **17(3)**: 552. 1964.

DISTRIBUTION. Angola, Zambia and R.S.A (E Cape, KwaZulu-Natal) (Summerhayes 1964;

Schelpe 1976a; Williamson 1977; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993; la Croix & Cribb 1995).

101. *Disa stachyoides* Rchb. f.

Flora **64**: 328. 1881.

Monadenia leydenburgensis Kraenzl., Orchid. Gen. Sp. **1**: 811. 1900.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal, Free State, Mpumalanga, Northern Province), Lesotho and Swaziland (Durand & Schinz 1895; Bolus 1913; Jacot Guillarmod 1971; Compton 1976; Linder 1981c, 1999b; Stewart *et al.* 1982; Kemp 1983; Reid 1993).

102. *Disa stairsii* Kraenzl.

Gard. Chron. ser. 3, **12**: 728. 1892.

Disa gregorana Rendle, J. Linn. Soc., Bot. **30**: 398. 1895.

Disa wissmannii Kraenzl., Bot. Jahrb. Syst. **22**: 21. 1895.

Disa luxurians Kraenzl., Bot. Jahrb. Syst. **29**: 369. 1900.

Disa bakeri Rolfe, Bull. Misc. Inform. Kew **1907**: 132: 1907.

DISTRIBUTION. D.R.C. (Forestier Central, Lacs Edouard et Kivu), Burundi, Rwanda, Uganda, Kenya and Tanzania (Durand & Schinz 1895; Rolfe 1897; Robyns & Tournay 1955; Summerhayes 1964, 1968a; Piers 1968; Geerinck 1974, 1984, 1988; Arbonnier & Geerinck 1993; Delepierre & Lebel 2001).

103. *Disa stricta* Sond.

Linnaea **19**: 91. 1847.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal) and Lesotho (Durand & Schinz 1895; Bolus 1896; Jacot Guillarmod 1971; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

104. *Disa subtenuicornis* H. P. Linder

Contr. Bolus Herb. **9**: 53, fig. 7: 4–8. 1981.

DISTRIBUTION. R.S.A. (W Cape) (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

105. *Disa telipogonis* Rchb. f.

Linnaea **20**: 689. 1847.

Orthopenthea telipogonis (Rchb. f.) Rolfe, Fl. Cap. 5(3): 185. 1913.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1911; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

106. *Disa tenella* Lindl.

Kongl. Vetensk. Acad. Nya Handl. 21: 212. 1800.

Orchis tenella L. f., Suppl. Pl.: 400. 1781.

Satyrium tenellum (L. f.) Thunb., Prodr. Pl. Cap.: 5. 1794.

DISTRIBUTION. R.S.A. (W Cape) (Bolus 1911; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

– subsp. *tenella*

Orchis tenuifolia Burm. f., Prodr. Fl. Cap.: 30. 1768.

DISTRIBUTION. R.S.A. (W Cape) (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

– subsp. *pusilla* H. P. Linder

Contr. Bolus Herb. 9: 197, fig. 57: 4. 1981.

DISTRIBUTION. R.S.A. (W Cape) (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

107. *Disa tenuicornis* Bolus

J. Linn. Soc., Bot. 22: 68. 1885.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

108. *Disa tenuifolia* Sw.

Kongl. Vetensk. Acad. Nya Handl. 21: 214. 1800.

Ophrys patens L. f., Suppl. Pl.: 404. 1781.

Serapias patens (L. f.) Thunb., Prodr. Pl. Cap.: 3. 1794.

Disa patens (L. f.) Thunb., Fl. Cap.: 16. 1823, *non* Sw.

Penthe patens (L. f.) Lindl., Gen. Sp. Orchid. Pl.: 362. 1838.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1911; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

109. *Disa thodei* Schltr. ex Kraenzl.

Orchid. Gen. Sp. 1: 796. 1900.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal, Mpumalanga) and Lesotho (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

110. *Disa triloba* Lindl.

Gen. Sp. Orchid. Pl.: 351. 1838.

Disa sagittalis (L. f.) Sw. var. *triloba* (Lindl.) Schltr., Bot. Jahrb. Syst. 31: 232. 1901.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

111. *Disa tripetaloides* (L. f.) N. E. Br.

Gard. Chron. 1889(1): 360. 1889.

Orchis tripetaloides L. f., Suppl. Pl.: 398. 1781.

Satyrium excelsum Thunb., Prodr. Pl. Cap.: 5. 1794.

Disa excelsa (Thunb.) Sw., Kongl. Vetensk. Acad. Nya Handl. 21: 213. 1800, *nom. superfl.*

Disa venosa Lindl., Gen. Sp. Orchid. Pl.: 351. 1838, *nom. superfl., non* Sw.

Disa falcata Schltr., Verh. Bot. Ver. Brand. 35: 46. 1893.

DISTRIBUTION. R.S.A. (W and E Cape, Kwa-Zulu-Natal) (Bolus 1893; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

112. *Disa tysonii* Bolus

J. Linn. Soc., Bot. 25: 172, fig. 10. 1889.

DISTRIBUTION. R.S.A. (W and E Cape) and Lesotho (Durand & Schinz 1895; Bolus 1911; Jacot Guillarmod 1971; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

113. *Disa ukingensis* Schltr.

Bot. Jahrb. Syst. 53: 539. 1915.

Disa engleriana auct. *non* Kraenzl.: G.Will., Orchid. S. Centr. Afr.: pl. 53. 1977.

DISTRIBUTION. Tanzania, Zambia and Malawi (Williamson 1977; Cribb 1979; la Croix *et al.* 1991; la Croix & Cribb 1995).

114. *Disa uncinata* Bolus

J. Linn. Soc., Bot. 20: 478. 1884.

DISTRIBUTION. R.S.A. (W and E Cape) (Du-

rand & Schinz 1895; Bolus 1896; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

115. *Disa uniflora* Bergius

Descr. Pl. Cap.: 348. 1767.

Disa grandiflora L. f., Suppl. Pl.: 406. 1781.

Satyrium grandiflora (L. f.) Thunb., Prodr. Pl. Cap.: 4. 1794.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1911; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

116. *Disa vaginata* Harv. ex Lindl.

Gen. Sp. Orchid. Pl.: 351. 1838.

Disa modesta Rchb. f., Linnaea **20**: 690. 1847.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1911; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

117. *Disa vasselloitii* Bolus ex Schltr.

Bot. Jahrb. Syst. **31**: 273. 1901.

DISTRIBUTION. R.S.A. (W and E Cape) (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

118. *Disa venosa* Sw.

Kongl. Vetensk. Acad. Nya Handl. **21**: 213. 1800.

Disa racemosa L. f. var. *venosa* (Sw.) Schltr., Bot. Jahrb. Syst. **31**: 227. 1901.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1911; Lewis 1950; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

119. *Disa verdickii* De Wild.

Ann. Mus. Congo Belge, Bot. **1**: 26. 1902.

Disa ornithanta auct. non Schltr.: Geerinck, Bull. Soc. Roy. Bot. Belg. **107**(1): 68. 1974, *pro parte, quoad de Witte 4800*.

DISTRIBUTION. D.R.C. (Kasai, Haut-Katanga), Angola and Zambia (Geerinck 1974, 1984; Williamson 1977; Linder 1981d; la Croix & Cribb 1995).

120. *Disa versicolor* Rchb. f.

Flora **48**: 181. 1865.

Disa hemisphaerophora Rchb. f., Otia Bot. Hamburg. **2**: 106. 1881.

Disa macowanii Rchb. f., Otia Bot. Hamburg. **2**: 106. 1881.

DISTRIBUTION. Angola, Mozambique, Zimbabwe, R.S.A. (E Cape, KwaZulu-Natal, Free State, Mpumalanga, Gauteng, Northern Province), Swaziland and Lesotho (Durand & Schinz 1895; Rolfe 1897; Jacot Guillarmod 1971; Compton 1976; Schelpe 1976a, b; Linder 1981c, 1999b; Stewart *et al.* 1982; Kemp 1983; Reid 1993; la Croix & Cribb 1995).

121. *Disa virginalis* H. P. Linder

Novon **8**(4): 405. 1998.

DISTRIBUTION. R.S.A. (W Cape) (Linder *et al.* 1998; Linder 1999b).

122. *Disa walleri* Rchb. f.

Otia. Bot. Hamburg. **2**: 105. 1881.

Disa zombaensis Rendl., Trans. Linn. Soc. London, Bot., ser. 2, **4**: 47. 1894.

Disa leopoldii Kraenzl., Bull. Soc. Roy. Bot. Belgique **38**: 218. 1899.

Disa princeae Kraenzl., Bot. Jahrb. Syst. **28**: 370. 1900.

DISTRIBUTION. D.R.C. (Haut-Katanga), Burundi, Rwanda, Tanzania, Zambia, Malawi and Zimbabwe (Durand & Schinz 1895; Rolfe 1897; Summerhayes 1968a; Geerinck 1974, 1984, 1992; Williamson 1977; Linder 1981c; la Croix *et al.* 1991; la Croix & Cribb 1995).

123. *Disa welwitschii* Rchb. f.

Flora **48**: 181. 1865.

DISTRIBUTION. Guinea, Sierra Leone, Ivory Coast, Nigeria, Cameroun, Gabon, D.R.C. (Bas-Congo, Kasai, Ubangi-Uele, Forestier Central, Haut-Katanga, Lacs Edouard et Kivu), Burundi, Uganda, Kenya, Tanzania, Angola, Zambia, Malawi, Mozambique, Zimbabwe, R.S.A. (Northern Province) and Swaziland (Durand & Schinz 1895; Rolfe 1897; Summerhayes 1936, 1964, 1968a, b;

Jaeger *et al.* 1968; Piers 1968; Geerinck 1974, 1982b, 1984; Cribb & Perez-Vera 1975; Perez-Vera 1976; Schelpe 1976a, b; Williamson 1977; Adam 1982; Stewart *et al.* 1982; Tang & Cribb 1983; Cribb & Fay 1987; la Croix & Cribb 1995; Reid 1993; Linder 1999b; Szlachetko & Olszewski 1998; Szlachetko, in press).

– subsp. *welwitschii*

Disa welwitschii Rchb. f. var. *buchneri* Schltr., Bot. Jahrb. Syst. **31**: 219. 1901.

Disa calophylla Kraenzl., Bot. Jahrb. Syst. **33**: 58. 1901.

Disa ignea Kraenzl., Bot. Jahrb. Syst. **33**: 57. 1902.

Disa hyacinthina Kraenzl., Bot. Jahrb. Syst. **48**: 390. 1912.

Disa breyeri Schltr., Ann. Transvaal Mus. **10**: 247. 1924.

DISTRIBUTION. Cameroun, Gabon, D.R.C. (Bas-Congo, Kasai, Forestier Central, Haut-Katanga), Burundi, Tanzania, Angola, Zambia, Malawi, Mozambique, Zimbabwe, R.S.A. (Northern Province) and Swaziland (Linder 1981d, 1999b; Geerinck 1984; la Croix & Cribb 1995; Szlachetko & Olszewski 1998; Szlachetko, in press).

– subsp. *occultans* (Schltr.) H. P. Linder

Bull. Jard. Bot. Nat. Belg. **51**(3–4): 306. 1981.

Disa occultans Schltr., Notizbl. Königl. Bot. Gart. Berlin **8**: 225. 1922.

Disa subaequalis Summerh., Bull. Misc. Inform. Kew **1936**(3): 221. 1936.

Disa tanganyikensis Summerh., Kew Bull. **17**(3): 541. 1964.

Disa welwitschii Rchb. f. var. *occultans* (Schltr.) Geerinck, Bull. Jard. Bot. Belg. **52**(3–4): 342. 1982.

DISTRIBUTION. Guinea, Liberia, Ivory Coast, Nigeria, Cameroun, C.A.R., Gabon, D.R.C. (Bas-Congo, Kasai, Ubangi-Uele, Bas-Katanga, Haut-Katanga, Lacs Edouard et Kivu), Uganda, Kenya, Tanzania, Zambia and Malawi (Summerhayes 1936, 1964; Linder 1981d; Geerinck 1982b, 1984; Cribb & Fay 1987; Szlachetko & Olszewski 1998; Szlachetko, in press).

124. *Disa woodii* Schltr.

Ann. Transvaal Mus. **10**: 247. 1924.

DISTRIBUTION. Mozambique, Zimbabwe, R.S.A.

(E Cape, KwaZulu-Natal, Mpumalanga, Gauteng, Northern Province) and Swaziland (Linder 1981d, 1999b; Stewart *et al.* 1982; Kemp 1983; Reid 1993; la Croix & Cribb 1995).

125. *Disa zimbabweensis* H. P. Linder

Contr. Bolus Herb. **9**: 267, fig. 83: 4. 1981.

Disa rungweensis Schltr. var. *rhodesiaca* Summerh., Bot. Not. **1937**: 188. 1937.

Disa rungweensis Schltr. subsp. *rhodesiaca* (Summerh.) Summerh., Kew Bull. **17**(3): 551. 1964.

DISTRIBUTION. Mozambique, Zimbabwe and R.S.A. (Mpumalanga) (Summerhayes 1964; Schelpe 1976b; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993; la Croix & Cribb 1995).

126. *Disa zombica* N. E. Br.

F.T.A. **7**: 278. 1897.

Disa nyassana Schltr., Jahrb. Syst. Bot. **53**: 538. 1915.

DISTRIBUTION. D.R.C. (Haut-Katanga), Burundi, Tanzania, Zambia, Malawi, Mozambique and Zimbabwe (Durand & Schinz 1895; Rolfe 1897; Summerhayes 1949, 1968a; Geerinck 1974, 1984, 1992; Schelpe 1976b; Williamson 1977; Linder 1981d; la Croix *et al.* 1991; la Croix & Cribb 1995).

127. *Disa zuluensis* Rolfe

Fl. Cap. **5**(3): 233. 1913.

DISTRIBUTION. R.S.A. (KwaZulu-Natal, Mpumalanga) (Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

***Herschelianthe* Rauschert**

Feddes Repert. **94**(7–8): 434. 1983.

Herschelia Lindl., Gen. Sp. Orchid. Pl.: 362. 1838, non Bowdich 1825, *nom. illegit.*

Disa Bergius sect. *Trichochila* Lindl., Gen. Sp. Orchid. Pl.: 353. 1838.

Forficaria Lindl., Gen. Sp. Orchid. Pl.: 362. 1838.

Disa Bergius sect. *Herschelia* (Lindl.) Bolus, Trans. S. African Phil. Soc. **5**: 168. 1888.

Disa Bergius sect. *Spathulatae* Kaenzl., Orchid. Gen. Sp. **1**: 793. 1900.

Disa Bergius sect. *Forficaria* (Lindl.) Schltr., Bot. Jahrb. Syst. **31**: 297. 1901.

Disa Bergius sect. *Microperistera* Bolus, Trans. S. African Phil. Soc. **16**: 149. 1907.

Disa Bergius sect. *Herschelianthe* (Rauschert) H. P. Linder in H. P. Linder & Kurzweil, Orchid. Southern Afr.: 255. 1999.

A genus of 18 species, predominantly South African but one species extending into Tanzania. Linder (1999b) includes this genus to *Disa Bergius* as a section.

1. *Herschelianthe barbata* (L. f.) N. C. Anthony

Bothalia **15**(3–4): 554. 1985.

Orchis barbata L. f., Suppl. Pl.: 399. 1781.

Satyrium barbatum (L. f.) Thunb., Prodr.: 5. 1794.

Disa barbata (L. f.) Sw., Kongl. Vetensk. Acad. Nya Handl. **21**: 212. 1800.

Herschelia barbata (L. f.) Bolus, J. Linn. Soc., Bot. **19**: 236. 1882.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1913; Lewis 1950; Linder 1981f, 1999b; Stewart *et al.* 1982; Reid 1993).

2. *Herschelianthe baurii* (Bolus) Rauschert

Feddes Repert. **94**(7–8): 434. 1983.

Disa baurii Bolus, J. Linn. Soc., Bot. **25**: 174, fig. 12. 1889.

Disa hamatopetala Rendle, Trans. Linn. Soc. London, Bot. ser. 2, **4**: 47, t. 7/4-b. 1894.

Herschelia hamatopetala (Rendle) Kraenzl., Orchid. Gen. Sp. **1**: 803. 1900.

Herschelia baurii (Bolus) Kraenzl., Orchid. Gen. Sp. **1**: 804. 1900.

Herschelia bachmanniana Kraenzl., Orchid. Gen. Sp. **1**: 805. 1900.

Disa longilabris Schltr., Bot. Jahrb. Syst. **38**: 150. 1907.

Herschelia longilabris (Schltr.) Rolfe, Orchid Rev. **27**: 9. 1919.

Herschelianthe buchmanniana (Kraenzl.) Rauschert, Feddes Repert. **94**(7–8): 94. 1983.

Herschelianthe hamatopetala (Rendle) Rauschert, Feddes Repert. **94**(7–8): 435. 1983.

DISTRIBUTION. D.R.C. (Lacs Edouard et Kivu), Rwanda, Burundi, Tanzania, Zambia, Malawi, Mozambique, Zimbabwe, R.S.A. (E Cape,

KwaZulu-Natal, Free State, Mpumalanga, Northern Province), Swaziland and Lesotho (Durand & Schinz 1895; Rolfe 1897; Robyns & Tournay 1955; Piers 1968; Summerhayes 1968a; Compton 1976; Schelpe 1976b; Williamson 1977; Linder 1981f, 1999b; Stewart *et al.* 1982; Kemp 1983; Geerinck 1984, 1988; la Croix *et al.* 1991; Reid 1993; la Croix & Cribb 1995; Delepierre & Lebel 2001).

3. *Herschelianthe chimanimaniensis* (H. P. Linder) H. P. Linder

Kew Bull. **40**(1): 129. 1985.

Herschelia chimanimaniensis H. P. Linder, Bothalia **13**(3–4): 384. 1981.

DISTRIBUTION. Mozambique and Zimbabwe (Linder 1981f, 1985; Reid 1993; la Croix & Cribb 1995).

4. *Herschelianthe forcipata* (Schltr.) Rauschert

Feddes Repert. **94**(7–8): 434. 1983.

Disa forcipata Schltr., Bot. Jahrb. Syst. **24**: 428. 1897.

Herschelia forcipata (Schltr.) Kraenzl., Orchid. Gen. Sp. **1**: 807. 1900.

DISTRIBUTION. R.S.A. (Cape Prov.) (Linder 1981f, 1999b; Stewart *et al.* 1982; Reid 1993).

5. *Herschelianthe forficaria* (Bolus) N. C. Anthony

Bothalia **15**(3–4): 554. 1985.

Forficaria graminifolia Lindl., Gen. Sp. Orchid. Pl.: 362. 1838.

Disa forficaria Bolus, Icon. Orchid. Austro-Afr. **1**: t. 87. 1896.

Herschelia forcipata (Bolus) H. P. Linder, Bothalia **13**(3–4): 369. 1981.

DISTRIBUTION. R.S.A. (W Cape) (Bolus 1896; Lewis 1950; Linder 1981f, 1999b; Stewart *et al.* 1982; Reid 1993).

6. *Herschelianthe goetzeana* (Kraenzl.) Rauschert

Feddes Repert. **94**(7–8): 434. 1983.

Herschelia goetzeana Kraenzl., Bot. Jahrb. Syst. **30**: 286. 1901.

Disa goetzeana (Kraenzl.) Schltr., Bot. Jahrb. Syst. **38**: 150. 1906, *in obs., non Kraenzl., nom. illegit.*

Disa walteri Schltr., Bot. Jahrb. Syst. **53**: 544. 1915.

DISTRIBUTION. Tanzania (Summerhayes 1968a; Linder 1981f).

7. *Herschelianthe graminifolia* (Ker Gawl. ex Spreng.) Rauschert

Feddes Repert. **94**(7–8): 434. 1983.

Disa graminifolia Ker Gawl. ex Spreng., Syst. Veg.: 699. 1826.

Herschelia coelestis Lindl., Gen. Sp. Orchid. Pl.: 363. 1838.
Herschelia graminifolia (Spreng.) T.Durand & Schinz, Consp. Fl. Afr. **5**: 111. 1895.

DISTRIBUTION. R.S.A. (W and E Cape) (Bolus 1893; Durand & Schinz 1895; Lewis 1950; Linder 1981f, 1999b; Stewart *et al.* 1982; Reid 1993).

8. *Herschelianthe hians* (L. f.) Rauschert

Feddes Repert. **94**(7–8): 434. 1983.

Satyrium hians L. f., Suppl. Pl.: 401. 1781.

Limodorum hians (L. f.) Thunb., Prodri.: 3. 1793.

Disa lacera Sw., Kongl. Vetensk. Acad. Nya Handl. **21**: 212. 1800.

Disa hians (L. f.) Spreng., Syst. Veg.: 698. 1826.

Eulophia hians (L. f.) Spreng., Syst. Veg.: 720. 1826.

Disa lacera Sw. var. *multifida* N. E. Br., Gard. Chron. **2**: 664. 1888.

Herschelia excelsa sensu Rolfe, Fl. Cap. **5**(3): 200. 1913, *non* (Thunb.) Rolfe

Disa outeriquensis Schltr., Ann. Transvaal Mus. **10**: 246. 1924.

Herschelia lacera (Sw.) Fourc., Trans. Roy. Soc. South Africa **21**: 81. 1932.

Herschelia hians (L. f.) A. V. Hall, Fl. Pl. Africa **42**: t. 1674. 1973.

DISTRIBUTION. R.S.A. (W and E Cape) (Durand & Schinz 1895; Lewis 1950; Linder 1981f, 1999b; Stewart *et al.* 1982; Reid 1993).

9. *Herschelianthe longilabris* (Schltr.) Rauschert

Feddes Repert. **94**(7–8): 435. 1983.

Disa longilabris Schltr., Bot. Jahrb. Syst. **38**: 150. 1906.

Herschelia longilabris (Schltr.) Rolfe, Orchid Rev. **22**: 9. 1919.

Herschelia baurii sensu H. P. Linder, Bothalia **13**(3–4): 383. 1981, *pro parte*.

DISTRIBUTION. Tanzania and Malawi (Summerhayes 1968a; la Croix *et al.* 1991; la Croix & Cribb 1995).

10. *Herschelianthe lugens* (Bolus) Rauschert

Feddes Repert. **94**(7–8): 435. 1983.

Disa lugens Bolus, J. Linn. Soc., Bot. **20**: 482. 1884.

Herschelia lugens (Bolus) Kraenzl., Orchid Gen. Sp. **1**: 806. 1900.

DISTRIBUTION. R.S.A. (W and E Cape) (Durand & Schinz 1895; Bolus 1911; Linder 1981f, 1999b; Stewart *et al.* 1982; Reid 1993).

– var. *lugens*

DISTRIBUTION. R.S.A. (W and E Cape) (Linder 1981f, 1999b; Reid 1993).

– var. *nigrescens* (Linder) N. C. Anthony

Bothalia **15**(3–4): 554. 1985.

Herschelia nigrescens (Lindl.) Rolfe, Fl. Cap. **5**(3): 206. 1913.

DISTRIBUTION. R.S.A. (E Cape) (Linder 1981f, 1999b; Reid 1993).

11. *Herschelianthe multifida* (Lindl.) Rauschert

Feddes Repert. **94**(7–8): 435. 1983.

Disa multifida Lindl., Gen. Sp. Orchid. Pl.: 353. 1838.

Disa macroglottis Sond. ex Drége, Linnaea **20**: 219. 1847, *nom. nud.*

Disa charpentieriana Rchb. f., Linnaea **20**: 668. 1847.

Herschelia charpentieriana (Rchb. f.) Kraenzl., Orchid. Gen. Sp. **1**: 807. 1900.

Herschelia multifida (Lindl.) Rolfe, Fl. Cap. **5**(3): 206. 1913.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1911; Linder 1981f, 1999b; Stewart *et al.* 1982; Reid 1993).

12. *Herschelianthe newdigateae* (L. Bolus) N. C. Anthony

Bothalia **15**(3–4): 554. 1985.

Disa newdigatae L. Bolus, Fl. Pl. South Africa **11**: sub t. 415. 1931.

Herschelia newdigatae H. P. Linder, Bothalia **13**(3–4): 370. 1981.

DISTRIBUTION. R.S.A. (W Cape) (Bolus 1896; Linder 1981f, 1999b; Stewart *et al.* 1982; Reid 1993).

13. *Herschelianthe praecox* (H. P. Linder) H. P. Linder

Kew Bull. **40**(1): 127. 1985.

Herschelia praecox H. P. Linder, Bothalia **13**(3–4): 382. 1981.

DISTRIBUTION. Malawi and Zimbabwe (Linder 1981f; la Croix & Cribb 1995).

14. *Herschelianthe procera* (H. P. Linder in H. P. Linder & Kurzweil) Szlach., comb. nov.

Basionym: *Disa procera* H. P. Linder in H. P. Linder & Kurzweil, Ochid. Southern Afr.: 265. 1999.

Disa excelsa sensu Lindl., Gen. Sp. Orchid. Pl.: 356. 1838, non (Thunb.) Rolfe.

Herschelia excelsa sensu Rolfe, Fl. Cap. **5**(3): 200. 1913.

DISTRIBUTION. R.S.A. (W Cape) (Linder 1999b).

15. *Herschelianthe purpurascens* (Bolus) Rauschert

Feddes Repert. **94**(7–8): 435. 1983.

Disa purpurascens Bolus, J. Linn. Soc., Bot. **20**: 482. 1884.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1896; Lewis 1950; Linder 1981f, 1999b; Stewart *et al.* 1982; Reid 1993).

16. *Herschelianthe schlechteriana* (Bolus) N. C. Anthony

Bothalia **15**(3–4): 554. 1985.

Herschelia purpurascens (Bolus) Kraenzl., Orchid. Gen. Sp. **1**: 803. 1900.

Disa schlechteriana Bolus, Trans. S. African Phil. Soc. **16**: 149. 1905.

Herschelia schlechteriana H. P. Linder, Bothalia **13**(3–4): 371. 1981.

DISTRIBUTION. R.S.A. (W Cape) (Bolus 1911; Linder 1981f, 1999b; Stewart *et al.* 1982; Reid 1993).

17. *Herschelianthe spathulata* (L. f.) Rauschert

Feddes Repert. **94**(7–8): 435. 1983.

Disa spathulata (L. f.) Sw., Kongl. Vetensk. Acad. Nya Handl. **21**: 213. 1800.

Herschelia spathulata (L. f.) Rolfe, Fl. Cap. **5**(3): 205. 1913.

DISTRIBUTION. R.S.A. (N, W and E Cape) (Durand & Schinz 1895; Bolus 1913; Linder 1981f, 1999b; Stewart *et al.* 1982; Reid 1993).

– subsp. *spathulata*

Orchis spathulata L. f., Suppl. Pl.: 398. 1781.

Satyrium spathulatum (L. f.) Thunb., Prodr.: 5. 1794.

Disa propinqua Sond., Linnaea **19**: 95. 1847.

Disa atropurpurea Sond., Linnaea **19**: 96. 1847.

Disa propinqua Sond. var. *trifida* Sond., Linnaea **19**: 96. 1847.

Disa spathulata (L. f.) Sw. var. *atropurpurea* (Sond.) Schltr., Bot. Jahrb. Syst. **31**: 284. 1901.

Herschelia atropurpurea (Sond.) Rolfe, Fl. Cap. **5**(3): 205. 1913.

DISTRIBUTION. R.S.A. (N and E Cape) (Durand & Schinz 1895; Bolus 1913; Linder 1981f, 1999b; Stewart *et al.* 1982; Reid 1993).

– subsp. *tripartita* (Lindl.) N. C. Anthony

Bothalia **15**(3–4): 554. 1985.

Disa tripartita Lindl., Gen. Sp. Orchid. Pl.: 353. 1838.

Disa spathulata sensu Schltr., Bot. Jahrb. Syst. **31**: 284. 1901, pro parte.

Herschelia tripartita (Lindl.) Rolfe, Fl. Cap. **5**(3): 204. 1913.

Herschelia spathulata (L. f.) Rolfe subsp. *tripartita* (Lindl.) H. P. Linder, Bothalia **13**(3–4): 373. 1981.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Linder 1981f, 1999b; Stewart *et al.* 1982; Reid 1993).

18. *Herschelianthe venusta* (Bolus) Rauschert

Feddes Repert. **94**(7–8): 435. 1983.

Disa venusta Bolus, J. Linn. Soc., Bot. **20**: 482. 1884.

Herschelia venusta (Bolus) Kraenzl., Orchid. Gen. Sp. **1**: 805. 1900.

Disa lacera sensu Schltr., Bot. Jahrb. Syst. **31**: 287. 1901, pro parte.

DISTRIBUTION. R.S.A. (W and E Cape) (Durand & Schinz 1895; Bolus 1913; Linder 1981f, 1999b; Stewart *et al.* 1982; Reid 1993).

***Monadenia* Lindl.**

Gen. Sp. Orchid. Pl.: 356. 1838.

Disa Bergius sect. *Monadenia* (Lindl.) Bolus, Trans. S. African Phil. Soc. **5**: 137. 1888.

A genus of 18 species, which are restricted to South Africa, one species extending into Malawi and Madagascar. Linder (1999b) includes this genus to *Disa Bergius* as a section.

1. *Monadenia atrorubens* (Schltr.) Rolfe

Fl. Cap. **5**(3): 196. 1913.

Disa atrorubens Schltr., Bot. Jahrb. Syst. **24**: 427. 1897.

Monadenia ophrydea Lindl. *sensu* Kraenzl., Orchid Gen. Sp. **1**: 817. 1900, *pro parte*.

DISTRIBUTION. R.S.A. (W Cape) (Linder 1981e, 1999b; Stewart *et al.* 1982; Reid 1993).

2. *Monadenia bolusiana* (Schltr.) Rolfe

Fl. Cap. **5**(3): 194. 1913.

Disa bolusiana Schltr., Bot. Jahrb. Syst. **24**: 426. 1897.

DISTRIBUTION. R.S.A. (W Cape) (Bolus 1911; Lewis 1950; Linder 1981e, 1999b; Stewart *et al.* 1982; Reid 1993).

3. *Monadenia bracteata* (Sw.) T. Durand & Schinz

Consp. Fl. Afr. **5**(3): 111. 1895.

Disa bracteata Sw., Kongl. Vetensk. Acad. Nya Handl. **21**: 211. 1800.

Monadenia micrantha Lindl., Gen. Sp. Orchid. Pl.: 357. 1838.

Disa micrantha (Lindl.) Bolus, Trans. S. African Phil. Soc. **5**: 142. 1888.

Disa praetermissa Schltr., Ann. Transvaal Mus. **10**: 146. 1924.

Monadenia australiensis Rupp, Austral. Orchid. Rev. **11**: 70. 1946.

DISTRIBUTION. R.S.A. (W and E Cape) and W Australia (introduced) (Durand & Schinz 1895; Lewis 1950; Linder 1981e, 1999b; Stewart *et al.* 1982; Reid 1993).

4. *Monadenia brevicornis* Lindl.

Gen. Sp. Orchid. Pl.: 357. 1838.

Disa brevicornis (Lindl.) Bolus, J. Linn. Soc., Bot. **25**: 196. 1889.

DISTRIBUTION. Malawi, Zimbabwe, R.S.A. (W and E Cape, KwaZulu-Natal, Free State, Mpumalanga, Northern Province), Lesotho, Swaziland and ?Madagascar (Durand & Schinz 1895; Bolus 1911; Compton 1976; Linder 1981e, 1999b; Stewart *et al.* 1982; Kemp 1983; la Croix *et al.* 1991; Reid 1993; la Croix & Cribb 1995).

NOTE. Du Puy *et al.* (1999) did not confirm citation from Madagascar.

5. *Monadenia cernua* (Thunb.) T. Durand & Schinz

Consp. Fl. Afr. **5**(3): 111. 1895.

Satyrium cernuum Thunb., Prodr. Pl. Cap.: 5. 1794.

Disa cernua (Thunb.) Sw., Kongl. Vetensk. Acad. Nya Handl. **21**: 211. 1800.

Disa prasinata Ker Gawl., Edwards's Bot. Reg.: t. 210. 1817.

Monadenia prasinata (Ker Gawl.) Lindl., Gen. Sp. Orchid. Pl.: 358. 1838.

Monadenia inflata Sond., Linnaea **19**: 102. 1847.

DISTRIBUTION. R.S.A. (W and E Cape) (Durand & Schinz 1895; Bolus 1911; Lewis 1950; Linder 1981e, 1999b; Stewart *et al.* 1982; Reid 1993).

6. *Monadenia comosa* Rchb. f.

Linnaea **20**: 687. 1847.

Disa affinis N. E. Br., Gard. Chron. **24**: 402. 1835.

Monadenia rufescens Lindl., Gen. Sp. Orchid. Pl.: 356. 1838, *non* Thunb.

Disa comosa (Rchb. f.) Schltr., Bot. Jahrb. Syst. **31**: 206. 1901.

DISTRIBUTION. R.S.A. (W and E Cape) (Durand & Schinz 1895; Bolus 1911; Lewis 1950; Linder 1981e, 1999b; Stewart *et al.* 1982; Reid 1993).

7. *Monadenia conferta* (Bolus) Kraenzl.

Orchid. Gen. Sp. **1**: 810. 1900.

Disa conferta Bolus, Icon. Orchid. Austro-Afr. **1**: t. 28. 1893.

DISTRIBUTION. R.S.A. (W Cape) (Bolus 1893; Lewis 1950; Linder 1981e, 1999b; Stewart *et al.* 1982; Reid 1993).

8. *Monadenia cylindrica* (Thunb.) Szlach., comb. nov.

Basionym: *Satyrium cylindricum* Thunb.: Prodr. 5. 1794. *Disa cylindrica* (Thunb.) Sw., Kongl. Vetensk. Acad. Nya Handl. **21**: 213. 1800.

DISTRIBUTION. R.S.A. (W and E Cape). (Durand & Schinz 1895; Bolus 1911; Linder 1981c, 1999b; Stewart *et al.* 1982; Reid 1993).

9. *Monadenia densiflora* Lindl.

Gen. Sp. Orchid. Pl.: 357. 1838.

Monadenia multiflora Sond., Linnaea **19**: 101. 1847. *Disa multiflora* (Sond.) Bolus, Trans. S. African Philos. Soc. **5**: 140. 1888.

Disa densiflora (Lindl.) Bolus, J. Linn. Soc., Bot. **25**: 197. 1889.

Disa auriculata Bolus, Icon. Orchid. Austro-Afr. **1**: t. 77. 1896.

Monadenia auriculata (Bolus) Rolfe, Fl. Cap. **5**(3): 189. 1913.

DISTRIBUTION. R.S.A. (W and E Cape) (Durand & Schinz 1895; Bolus 1896; Lewis 1950; Linder 1981e, 1999b; Stewart *et al.* 1982; Reid 1993).

10. *Monadenia ecalcarata* G. J. Lewis

J. S. African Bot. **14**: 31. 1948.

Disa ecalcarata (G.J.Lewis) H. P. Linder in H. P. Linder & Kurzweil, Orchid. Southern Afr.: 224. 1999.

DISTRIBUTION. R.S.A. (W Cape) (Lewis 1950; Linder 1981e, 1999b; Stewart *et al.* 1982; Reid 1993).

11. *Monadenia macrostachya* Lindl.

Gen. Sp. Orchid. Pl.: 357. 1838.

Disa macrostachya (Lindl.) Bolus, J. Linn. Soc., Bot. **25**: 197. 1889.

DISTRIBUTION. R.S.A. (N Cape) (Durand & Schinz 1895; Linder 1981e, 1999b; Stewart *et al.* 1982; Reid 1993).

12. *Monadenia nubigena* (H. P. Linder) Szlach., comb. nov.

Basionym: *Disa nubigena* H. P. Linder, Fl. Pl. Africa **56**: t. 2148. 1999.

DISTRIBUTION. R.S.A. (W Cape) (Linder 1999b).

13. *Monadenia ophrydea* Lindl.

Gen. Sp. Orchid. Pl.: 358. 1838.

Disa ophrydea (Lindl.) Bolus, Trans. S. African Phil. Soc. **5**: 142. 1888.

Brownleea pantheriana Kraenzl ex Zahlbr., Ann. Nat. Hofmus. Wien **20**: 6. 1905.

DISTRIBUTION. R.S.A. (W and E Cape) (Durand & Schinz 1895; Bolus 1913; Lewis 1950; Linder 1981e, 1999b; Stewart *et al.* 1982; Reid 1993).

14. *Monadenia physodes* (Sw.) Rchb. f.

Flora **66**: 461. 1883.

Disa physodes Sw., Kongl. Vetensk. Acad. Nya Handl. **21**: 211. 1800.

Disa cernua (Thunb.) Sw. *sensu* Schltr., Bot. Jahrb. Syst. **31**: 210. 1901, *pro parte*.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Lewis 1950; Linder 1981e, 1999b; Stewart *et al.* 1982; Reid 1993).

15. *Monadenia pygmaea* (Bolus) T. Durand & Schinz

Consp. Fl. Afr. **5**(3): 111. 1895.

Disa pygmaea Bolus, J. Linn. Soc., Bot. **22**: 72. 1885.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1913; Lewis 1950; Linder 1981e, 1999b; Stewart *et al.* 1982; Reid 1993).

16. *Monadenia reticulata* (Bolus) T. Durand & Schinz

Consp. Fl. Afr. **5**(3): 111. 1895.

Disa reticulata Bolus, J. Linn. Soc., Bot. **22**: 73. 1885.

Disa macrostachya *sensu* Bolus, Icon. Orchid. Austro-Afr. **2**: t. 88. 1911.

DISTRIBUTION. R.S.A. (W and E Cape) (Durand & Schinz 1895; Bolus 1911, 1913; Lewis 1950; Linder 1981e, 1999b; Stewart *et al.* 1982; Reid 1993).

17. *Monadenia rufescens* (Thunb.) Lindl.

Gen. Sp. Orchid. Pl.: 356. 1838.

Satyrium rufescens Thunb., Prodr. Pl. Cap.: 5. 1794.

Disa rufescens (Thunb.) Sw., Kongl. Vetensk. Acad. Nya Handl. **21**: 210. 1800.

Monadenia macrostachya, Lindl., Gen. Sp. Orchid. Pl.: 358. 1830.

Monadenia cancifolia Sond., Linnaea **19**: 100. 1847.

Monadenia leptostachya Sond., Linnaea **19**: 101. 1847.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1911; Lewis 1950; Linder 1981e, 1999b; Stewart *et al.* 1982; Reid 1993).

18. *Monadenia sabulosa* (Bolus) Kraenzl.

Orchid. Gen. Sp. **1**: 814. 1900.

Disa sabulosa Bolus, Icon. Orchid. Austro-Afr. **1**: t. 27. 1893.

DISTRIBUTION. R.S.A. (W Cape) (Bolus 1893; Lewis 1950; Linder 1981e, 1999b; Stewart *et al.* 1982; Reid 1993).

***Schizodium* Lindl.**

Gen. Sp. Orchid. Pl.: 358. 1838.

A small genus with 6 species endemic to South Africa (Linder 1999a).

1. *Schizodium bifidum* (Thunb.) Rchb. f.

Flora **66**: 460. 1883.

Satyrium bifidum Thunb., Prodr. Fl. Cap.: 5. 1794.

Disa bifida (Thunb.) Sw., Kongl. Vetensk. Acad. Nya Handl. **21**: 212. 1800.

Schizodium rigidum Lindl., Gen. Sp. Orchid. Pl.: 360. 1838.

DISTRIBUTION. R.S.A. (W and E Cape) (Durand & Schinz 1895; Bolus 1911; Lewis 1950; Linder 1981b, 1999a; Stewart *et al.* 1982; Reid 1993).

2. *Schizodium cornutum* (L.) Schltr.

Ann. Transvaal Mus. **10**: 248. 1924.

Satyrium cornutum L., Pl. Rar. Afr.: 27. 1760.

Orchis biflora L., Sp. Pl. ed. 3: 1330. 1764.

Satyrium tortum Thunb., Prodr. Pl. Cap.: 5. 1794.

Disa torta (Thunb.) Sw., Kongl. Vetensk. Acad. Nya Handl. **21**: 211. 1800.

Schizodium arcuatum Lindl., Gen. Sp. Orchid. Pl.: 359. 1838.

Schizodium biflorum (L.) T. Durand & Schinz, Consp. Fl. Afr. **5**: 113. 1895.

DISTRIBUTION. R.S.A. (W Cape) (Bolus 1893; Durand & Schinz 1895; Lewis 1950; Linder 1981b, 1999a; Stewart *et al.* 1982; Reid 1993).

3. *Schizodium flexuosum* (L.) Lindl.

Gen. Sp. Orchid. Pl.: 359. 1838.

Orchis flexuosa L., Pl. Rar. Afr.: 26. 1760.

Satyrium flexuosum (L.) Thunb., Prodr. Pl. Cap.: 5. 1794.

Disa flexuosa (L.) Sw., Kongl. Vetensk. Acad. Nya Handl. **21**: 212. 1800.

DISTRIBUTION. R.S.A. (N and W Cape) (Durand & Schinz 1895; Bolus 1911; Lewis 1950; Linder 1981b, 1999a; Stewart *et al.* 1982; Reid 1993).

4. *Schizodium inflexum* Lindl.

Gen. Sp. Orchid. Pl.: 360. 1838.

Disa inflexa Mund. in Lindl., Gen. Sp. Orchid. Pl.: 360. 1838, *nom. nud.*

DISTRIBUTION. R.S.A. (N, W and E Cape) (Durand & Schinz 1895; Bolus 1911; Lewis 1950; Linder 1981b, 1999a; Stewart *et al.* 1982; Reid 1993).

5. *Schizodium longipetalum* Lindl.

Gen. Sp. Orchid. Pl.: 359. 1838.

Disa longipetala (Lindl.) Bolus, J. Linn. Soc. Bot. **25**: 201. 1889.

Schizodium antenniferum Schltr., Bot. Jahrb. Syst. **24**: 426. 1898.

Schizodium bifidum sensu Schltr., pro parte, non Rchb. f.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1896; Linder 1981b, 1999a; Stewart *et al.* 1982; Reid 1993).

6. *Schizodium obliquum* Lindl.

Gen. Sp. Orchid. Pl.: 359. 1838.

Disa obliqua (Lindl.) Bolus, Trans. S. African Phil. Soc. **5**: 162. 1888.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Bolus 1911; Lewis 1950; Linder 1981b, 1999a; Stewart *et al.* 1982; Reid 1993).

– subsp. *obliquum*

DISTRIBUTION. (W Cape) (Linder 1981b, 1999a; Stewart *et al.* 1982; Reid 1993).

– subsp. *clavigerum* (Lindl.) H. P. Linder

J. S. Afr. Bot. **47**(3): 356. 1981.

Schizodium obtusatum Lindl., Gen. Sp. Orchid. Pl.: 359. 1838.

Schizodium clavigerum Lindl., Gen. Sp. Orchid. Pl.: 360. 1838.

Schizodium queinzii Rchb. f., Linnaea **20**: 694. 1847.

Disa clavigera (Lindl.) Bolus, Trans. S. African Phil. Soc. **5**: 163. 1888.

Disa queinzii (Rchb. f.) Bolus, J. Linn. Soc., Bot. **25**: 201. 1889.

Schizodium bifidum (Thunb.) Rchb. f. var. *clavigerum* (Lindl.) Schltr., Bot. Jahrb. Syst. **31**: 303. 1901.

Schizodium modestum L.Bolus, Fl. Pl. Africa **19**: pl. 752. 1939.

DISTRIBUTION. R.S.A. (W Cape) (Durand & Schinz 1895; Lewis 1950; Linder 1981b, 1999a; Stewart *et al.* 1982; Reid 1993).

Tribe *HUTTONAEAE* (Schltr.) Szlach.

Folia Geobot. Phytotax. **26**: 326. 1991.

A monotypic tribe, restricted in distribution to South Africa (Szlachetko 1995).

Subtribe *HUTTONAEINAЕ* Schltr.

Notizbl. Bot. Gart. Berlin-Dahlem **9**: 568. 1926.

Huttonaea Harv.

Thes. Cap. **2**: 1. 1863.

A small genus with 5 species endemic to South Africa (Linder 1999d).

1. *Huttonaea fimbriata* Rchb. f.

Flora **50**: 116. 1867.

Hallackia fimbriata Harv., Thes. Cap. **2**: 2, fig. 102. 1863.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal) (Durand & Schinz 1895; Bolus 1911; Stewart *et al.* 1982; Reid 1993; Linder 1999d).

2. *Huttonaea grandiflora* (Schltr.) Rolfe in Dyer.

Fl. Cap. **5**(3): 114. 1912.

Huttonaea oreophila Schltr. var. *grandiflora* Schltr., Bot. Jahrb. Syst. **24**: 420. 1897.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal, Free State) and Lesotho (Stewart *et al.* 1982; Reid 1993; Linder 1999d).

3. *Huttonaea oreophila* Schltr.

Bot. Jahrb. Syst. **24**: 420. 1897.

DISTRIBUTION. R.S.A. (E Cape, KwaZulu-Natal) (Stewart *et al.* 1982; Reid 1993; Linder 1999d).

4. *Huttonaea pulchra* Harv.

Thes. Cap. **2**: 1, fig. 101. 1863.

DISTRIBUTION. R.S.A. (from E Cape to Kwa-Zulu-Natal) (Durand & Schinz 1895; Bolus 1913; Stewart *et al.* 1982; Reid 1993; Linder 1999d).

5. *Huttonaea woodii* Schltr.

Bot. Jahrb. Syst. **38**: 144. 1906.

DISTRIBUTION. R.S.A. (KwaZulu-Natal) (Stewart *et al.* 1982; Reid 1993; Linder 1999d).

ACKNOWLEDGEMENTS. The three first parts of *A provisional checklist of the continental African Orchidaceae* (Introduction, Part 1 and Part 2) were financed by the KBN grants 6 P04C 054 16 and 6 P04C 026 13 (State Committee for Scientific Research, Poland). This work was financed by grant BW 11BO-5-0132-0 (University of Gdańsk).

REFERENCES

- ADAM J. G. 1982. Flore descriptive des Monts Nimba (Côte d'Ivoire, Guinée, Libéria). 5. CNRS, Paris.
- ANDREWS F. W. 1956. The flowering plants of the Sudan. **3**. (Compositae-Gramineae). T. Buncle & Co, Arbroath.
- ARBONNIER M. & GEERINCK D. 1993. Contribution à l'étude des Orchidaceae du Burundi (première partie). *Belg. J. Bot.* **126**(2): 253–261.
- BOLUS H. 1893–1896. *Icones Orchidearum Austro-Africanum Extra-Tropicarum*; or, Figures, with descriptions, of Extra-

- Tropical South African Orchids. **1**. William Wesley & Son, London.
- BOLUS H. 1911. Icones Orchidearum Austro-Africanum Extra-Tropicarum; or, Figures, with descriptions, of Extra-Tropical South African Orchids. **2**. William Wesley & Son, London.
- BOLUS H. 1913. Icones Orchidearum Austro-Africanum Extra-Tropicarum; or, Figures, with descriptions, of Extra-Tropical South African Orchids. **3**. William Wesley & Son, London.
- COMPTON R. H. 1976. The flora of Swaziland. *J. S. African Bot., Suppl.* **11**: 1–684.
- CRIBB P. J. 1977. New orchids from South Central Africa. *Kew Bull.* **32**(1): 137–187.
- CRIBB P. J. 1979. New or little-known orchids from East Africa. *Kew Bull.* **34**(2): 321–340.
- CRIBB P. J. & FAY J. M. 1987. Orchids of the Central African Republic – a provisional checklist. *Kew Bull.* **42**(3): 711–737.
- CRIBB P. J., HERRMANN C. & SEBSEBE D. 2002. New records of orchids from Ethiopia. *Lindleyana* **17**(4): 178–188.
- CRIBB P. J. & PEREZ-VERA F. 1975. A contribution to the study of the Orchidaceae of the Côte d'Ivoire. *Adansonia* **15**(2): 199–214.
- CRIBB P. J. & THOMAS S. 1997. Orchidaceae. In: S. EDWARDS, S. DEMISSEW & I. HEDBERG (eds), *Flora of Ethiopia and Eritrea*. **6**: 193–307. The National Herbarium, Biology Department, Science Faculty, Addis Ababa University and the Department of Systematic Botany, Uppsala University, Addis Ababa–Uppsala.
- CUFODONTIS G. 1972. Enumeratio Plantarum Aethiopiae Spermatophyta. **2**. *Bull. Jard. Bot. Belg.* **42**(3, Suppl.): 653–1657.
- DELEPIERRE G. & LEBEL J.-P. 2001. Liste des orchidées du Rwanda. *Taxonomania* **5**: 5–9.
- DU PUY D., BOSSER J., CRIBB P., HERMANS J. & HERMANS C. 1999. The orchids of Madagascar: annotated checklist. Royal Botanic Gardens, Kew.
- DURAND TH. & SCHINZ H. 1895. Conspectus Flora Africana ou énumération des plantes d'Afrique. **5**. Monocotyledoneae et Gymnospermeae. Jardin Botanique de l'État, Brussels.
- GEERINCK D. 1974. Notes taxonomiques sur des Orchidées d'Afrique centrale. II: *Disa* Berg. *Bull. Soc. Roy. Bot. Belgique* **107**(1): 61–71.
- GEERINCK D. 1982a. Notes taxonomiques sur des Orchidées d'Afrique centrale. VIII. *Bull. Jard. Bot. Belg.* **52**(1–2): 141–149.
- GEERINCK D. 1982b. Notes taxonomiques sur des Orchidées d'Afrique centrale. IX. *Bull. Jard. Bot. Belg.* **52**(3–4): 341–347.
- GEERINCK D. 1984. Orchidaceae. **1**. In: P. BAMPS (ed.), *Flore d'Afrique Centrale (Zaire – Rwanda – Burundi)*, pp. 1–296. Jardin Botanique National de Belgique, Meise.
- GEERINCK D. 1988. Orchidaceae. In: G. TROUPIN (ed.), *Flore du Rwanda*. **4**: 505–629. Musée Royal de l'Afrique Centrale, Tervueren.
- GEERINCK D. 1992. Orchidaceae. **2**. In: P. BAMPS (ed.), *Flore d'Afrique Centrale (Zaire – Rwanda – Burundi)*, pp. 297–780. Jardin Botanique National de Belgique, Meise.
- GEERINCK D. & ARBONNIER M. 1996. Contribution à l'étude des Orchidaceae du Burundi (deuxième partie). *Belg. J. Bot.* **129**(1): 66–70.
- JACOT GUILLARMOD A. 1971. Flora of Lesotho (Basutoland). *Fl. Veg. Mundi* **3**: 1–474.
- JAEGER P., HALLÉ N. & ADAM J. G. 1968. Contribution à l'étude des orchidées des Monts Loma (Sierra Leone). *Adansonia* **8**(3): 265–310.
- JOHNSON S. D. & LILTVED W. R. 1997. *Disa cochlearis*, a new species from the Karoo region of South Africa. *S. African J. Bot.* **63**(5): 291–293.
- JOHNSON S. D. & LINDER H. P. 1995. Systematics and evolution of the *Disa draconis* complex (Orchidaceae). *Bot. J. Linn. Soc.* **118**(4): 289–307.
- KEMP E. S. 1983. A flora checklist for Swaziland. The Swaziland National Trust Commission, Lobamba.
- KURZWEIL H., LILTVED W. R. & LINDER H. P. 1997. *Disa introrsa* sp. nov. (Orchidaceae) from the western Cape of South Africa, with notes on the phylogeny of *Disa* sect. *Disella*. *Nordic J. Bot.* **17**(4): 353–360.
- LA CROIX I. & CRIBB P. J. 1995. Orchidaceae. **1**. In: G. V. POPE (ed.), *Flora Zambesiaca*. **11**: 1–320. Flora Zambesiaca Managing Committee, London.
- LA CROIX I. F., LA CROIX E. A. S. & LA CROIX T. M. 1991. Orchids of Malawi. Balkema, Rotterdam.
- LEWIS G. J. 1950. Orchidaceae. In: R. S. ADAMSON & T. M. SALTER (eds), *Flora of the Cape Peninsula*, pp. 265–309. Juta & Co., Ltd., Cape Town–Johannesburg.
- LINDER H. P. 1980. *Disa cardinalis* Linder (Orchidaceae), a new species from the Cape Province. *J. S. African Bot.* **46**(2): 213–215.
- LINDER H. P. 1981a. Taxonomic studies in the Disinae: 1. A revision of the genus *Brownleea* Lindl. *J. S. African Bot.* **47**(1): 13–48.
- LINDER H. P. 1981b. Taxonomic studies in the Disinae: 2. A revision of the genus *Schizodium* Lindl. *J. S. African Bot.* **47**(3): 339–371.
- LINDER H. P. 1981c. Taxonomic studies in the Disinae. III. A revision of *Disa* Berg, excluding sect. *Micranthae* Lindl. *Contr. Bolus Herb.* **9**: 1–370.
- LINDER H. P. 1981d. Taxonomic studies in the Disinae. IV. A

- revision of *Disa* Berg, sect. *Micranthae* Lindl. *Bull. Jard. Bot. Belg.* **51**(3–4): 255–346.
- LINDER H. P. 1981e. Taxonomic studies in the Disinae. V. A revision of the genus *Monadenia*. *Bothalia* **13**(3–4): 339–363.
- LINDER H. P. 1981f. Taxonomic studies in the Disinae. VI. A revision of the genus *Herschelia*. *Bothalia* **13**(3–4): 365–388.
- LINDER H. P. 1984. A new species of *Disa* (Orchidaceae). *J. S. African Bot.* **50**(2): 261–263.
- LINDER H. P. 1985. Notes on the orchids of southern tropical Africa I: *Brownleea* and *Herschelia*. *Kew Bull.* **40**(1): 125–129.
- LINDER H. P. 1988. Taxonomic notes on some orchids from the south-western Cape Province, South Africa. *S. African J. Bot.* **54**(5): 496–500.
- LINDER H. P. 1999a. *Schizodium* Lindl. In: H. P. LINDER & H. KURZWEIL (eds), *Orchids of Southern Africa*, pp. 182–187. Balkema, Rotterdam.
- LINDER H. P. 1999b. *Disa* Berg. In: H. P. LINDER & H. KURZWEIL (eds), *Orchids of Southern Africa*, pp. 187–288. Balkema, Rotterdam.
- LINDER H. P. 1999c. *Brownleea* Harv. ex Lindl. In: H. P. LINDER & H. KURZWEIL (eds), *Orchids of Southern Africa*, pp. 89–294. Balkema, Rotterdam.
- LINDER H. P. 1999d. *Huttonaea* Harv. In: H. P. LINDER & H. KURZWEIL (eds), *Orchids of Southern Africa*, pp. 295–298. Balkema, Rotterdam.
- LINDER H. P., JOHNSON S. D. & LILTVED W. R. 1998. *Disa virginiana* (Diseae: Orchidoideae: Orchidaceae): A new species from Southern Africa. *Novon* **8**(4): 405–407.
- PÉREZ-VERA F. 1976. Notice sur une mise à jour de l'inventaire des espèces et des genres des Orchidées de la Côte-d'Ivoire. *Boissiera* **24b**: 551–557.
- PERRIER DE LA BATHIE H. 1939. Orchidées. 1. In: H. HUMBERT (ed.), *Flore de Madagascar (Plantes vasculaires)*, pp. 1–477. Imprimerie officielle, Tananarive.
- PIERS F. 1968. Orchids of East Africa. J. Cramer, London.
- REID C. 1993. Orchidaceae. In: T. A. ARNOLD & B. C. DE WET (eds), *Plants of Southern Africa: names and distribution*. *Mem. Bot. Surv. S. Africa* **62**: 194–209.
- ROBYNS W. & TOURNAY R. 1955. Flore des Spermatophytes du Parc National Albert. 3. – Monocotylées. Institut des Parcs Nationaux du Congo Belge, Brussels.
- ROLFE R. A. 1897. Orchidaceae. In: W. T. THISELTON-DYER (ed.), *Flora of Tropical Africa*. 7: 1–595. Reeve, London.
- SCHELPE E. A. C. L. E. 1976a. A provisional check-list of the Orchidaceae of Angola. *J. S. African Bot.* **42**(4): 383–388.
- SCHELPE E. A. C. L. E. 1976b. A provisional check-list of the Orchidaceae of Mozambique. *J. S. African Bot.* **42**(4): 389–393.
- STEWART J., LINDER H. P., SCHELPE E. A. & HALL A. V. 1982. Wild orchids of Southern Africa. Macmillan South Africa (Publishers) Ltd, Johannesburg.
- SUMMERHAYES V. S. 1927. African Orchids I. *Bull. Misc. Inform. Kew* **1927**(10): 415–419.
- SUMMERHAYES V. S. 1937. African Orchids IX. *Bull. Misc. Inform. Kew* **1937**(9): 457–476.
- SUMMERHAYES V. S. 1938. African Orchids X. *Bull. Misc. Inform. Kew* **1938**(4): 141–153.
- SUMMERHAYES V. S. 1949. African Orchids XIX. *Kew Bull.* **4**(3): 427–443.
- SUMMERHAYES V. S. 1964. African Orchids XXIX. *Kew Bull.* **17**(3): 511–561.
- SUMMERHAYES V. S. 1966. African Orchids XXX. *Kew Bull.* **20**(2): 165–199.
- SUMMERHAYES V. S. 1968a. Orchidaceae. 1. In: E. MILNE-REDHEAD & R. M. POLHILL (eds), *Flora of Tropical East Africa*, pp. 1–236. Balkema, Rotterdam.
- SUMMERHAYES V. S. 1968b. Orchidaceae. In: J. HUTCHINSON & J. M. DALZIEL (eds), *Flora of West Tropical Africa*. Ed. 2. 3(2): 180–276. Crown Agents, London.
- SZLACHETKO D. L. 1994. *Orchidaceae Lisowskianae*. 3. *Disa* and *Tridactyle*. *Fragm. Flor. Geobot.* **39**(2): 543–548.
- SZLACHETKO D. L. 1995. *Systema Orchidalium. Fragm. Flor. Geobot.*, Suppl. 3: 1–152.
- SZLACHETKO D. L. Orchidaceae. 1. In: P. MORAT (ed), *Flore du Gabon*. Muséum National d'Histoire Naturelle, Paris (in press).
- SZLACHETKO D. L. & OLSZEWSKI T. S. 1998. Orchidaceae. 1. In: B. SATABIE & P. MORAT (eds), *Flore du Cameroun*. **34**(1): 1–320. MINREST, Yaoundé.
- TANG C. Z. & CRIBB P. J. 1983. Check-list of Nigerian orchids. In: L. B. SEGERBÄCK, *Orchids of Nigeria*, pp. 103–109. Balkema, Rotterdam.
- VLOK J. H. J. 1985. A new *Disa* species (Orchidaceae) from the southern Cape. *S. African J. Bot.* **51**(5): 335–338.
- WILLIAMSON G. 1977. The orchids of South Central Africa. J. M. Dent & Sons Ltd., London.
- WILLIAMSON G. 1980. Contribution to the orchid flora of South Central Africa. *Pl. Syst. Evol.* **134**: 53–77.