MARCHANTIOPHYTA

NEW LIVERWORT DISTRIBUTION RECORDS IN SOUTH AFRICA

New provincial records of thallose liverworts, identified since the publication of the latest checklist of South African liverworts (Perold 2006) are reported here. The new records are based on specimens in the bryophyte collection of the National Herbarium, Pretoria (PRE). Taxonomy and nomenclature follow Perold (2006). The thallose liverworts of southern Africa were revised by Perold (1999).

1. Asterella wilmsii *(Steph.) S.W.Arnell*

FREE STATE.—2828 (Bethlehem): Fouriesburg, Meiringspoort Nature Park, (–CA), 28°36'19"S, 28°13'46"E, 1 381 m, on soil at edge of pool, 15 July 2001, *M. Koekemoer 2057* (PRE). 2829 (Harrismith): Oliviershoek, Blydschap Farm, stream bank, on rock, (–CA), 17 July 1999, *H.M. Anderson 1424* (PRE).

2. Dumortiera hirsuta *(Sw.) Nees*

FREE STATE.—2828 (Bethlehem): Fouriesburg, Meiringspoort Nature Park, 28°36'19"S, 28°13'46"E, 1 381 m, on soil under rock overhang in moist bog, (–CA), 15 July 2001, *M. Koekemoer 2061* (PRE).

3. Exormotheca pustulosa *Mitt*.

KWAZULU-NATAL.—2929 (Underberg): about 4 km down Sani Pass, 2 956 m, on vertical soil bank at roadside, (–CB), 5 Jan. 2000, *S.M. Perold & M. Koekemoer 4341* (PRE).

NORTHERN CAPE.—2822 (Glen Lyon): ± 51 km N of Griekwastad, Rudisheim Farm, on soil, (–DD), June 1999, *P.M. Burgoyne CH13732* (PRE).

WESTERN CAPE.—3320 (Montagu): just outside Montagu at the arched rock, above outspan, 33°48'32"S, 20°05'55"E, 223 m, on soil,

(–CC), 10 Sept. 2002, *M. Koekemoer 2391*(PRE). 3321 (Ladismith): Vleirivier, Manie se Kloof, Gamkaberg Reserve, dry river bed, small area sheltered and shaded by rocks and plants, flat on ground, grey-green, (–DB), 13 Mar. 2003, *Y. van Wijk 2963* (PRE). 3322 (Oudtshoorn): Wilderness, Kleinplaats-Vanrooyenskraal, Bergplaas State Forest, 300 m, steep N-facing rocky cliff, on soil in cracks and under overhangs, (–DC), 20 Apr. 2003, *Y. van Wijk 2972B, 2973A, 2974* (all PRE).

EASTERN CAPE.—3027 (Lady Grey): Barkley East Dist., road to Rhodes from Barkley Pass, 30°52'22"S, 27°47'11"E, 1 590 m, steep SE-facing slope in grassland, green liverwort on moist soil, (–DD), 19 Mar. 1996, *J.E. Victor 1750B* (PRE).

4. Lunularia cruciata *(L.) Dumort. ex Lindb.*

FREE STATE.—2627 (Potchefstroom): Dist. Sasolburg, 'Elysium', Plot 12, Wonderfontein Road, 26°46'52"S, 27°46'18"E, 1 440 m, cultivated garden, abundant and a menace in shade house on soil of pot plants and on floor of cement bricks, green thallose liverwort, (–DD), 12 May 2001, *N.V. Kroon 16480* (PRE).

5. Marchantia pappeana *Lehm. subsp*. pappeana

WESTERN CAPE.—3318 (Cape Town): Claremont, Kirstenbosch Botanical Gardens, 150 m, edge of pond, (–CD), 17 Mar. 1995, *T. Arts RSA03/31* (PRE); stream near guest house, 12 Mar. 1994, *M. Koekemoer 1050* (PRE); on earth bank at edge of streamlet, 12 Jan. 1987, *S.M. Perold 1220* (PRE); on sandstone, at water's edge of small stream, 1 Sept. 1993, *S.M. Perold 2926* (PRE); on earth walls of water furrows, 12 Oct. 1995, *S.M. Perold 3323* (PRE); at edge of streamlet, 5 Jan. 1998, *S.M. Perold 3954* (PRE).

6. Plagiochasma appendiculatum *Lehm. & Lindenb.*

LIMPOPO.—2427 (Thabazimbi): 26 km E of Thabazimbi on road to Alma, in gulley about halfway up Bakker's Pass, at base of large rocks, (–BC), 6 Mar. 1985, *S.M. Perold 854* (PRE); about 4 km E of Rooiberg to Hoopdal, and Thabazimbi to Alma crossroads, in Bakker's Pass, in gulley near road at large *Ficus* tree and boulders, 16 Dec. 1993, *S.M. Perold & M. Koekemoer 3135* (PRE).

MPUMALANGA.—2430 (Pilgrim's Rest): Blydepoort, along stream to Tufa Waterfall, on rock, (–DB), 27 May 2001, *S.M. Perold & M. Koekemoer 4715* (PRE).

7. Plagiochasma rupestre *(J.R.Forst. & G.Forst.) Steph.* var. volkii *Bischl*.

MPUMALANGA.—2529 (Witbank): Mapoch's Grounds ± 8 km NE from Roossenekal, 25°10'32"S, 29°57'14"E, 1 410 m, in grassland on soil, thallus greyish green with black edges, (–BB), 19 Jan. 2005, *S.P. Bester 5505* (PRE).

FREE STATE.—2728 (Frankfort): Warden, just N of turn-off to town, at rocks near roadside (N3), with *Exormotheca pustulosa* Mitt., (–DD), 13 Jan. 1992, *S.M. Perold 2799* (PRE).

8. Riccia albovestita *O.H.Volk*

NORTHERN CAPE.—3025 (Colesberg): 10 km S of Colesberg on N9, between Noupoort and Colesberg, 30°49'09"S, 25°04'33"E, 1 453 m, plant growing flat on ground, thalli greyish green, mixed with fragments of *Riccia runssorensis* Steph., (–CC), 24 Apr. 2006, *J.J. Meyer 4785* (PRE).

9. Riccia argenteolimbata *O.H.Volk & Perold*

EASTERN CAPE.—3225 (Somerset East): Mountain Zebra National Park, 32°14'14"S, 25°27'49"E, 1 245 m, on sandy soil of mountain slope, South-eastern Mountain Grassland, thallus dry and whitish, (–AB), 12 Dec. 2005, *S.P. Bester 6297* (PRE).

10. Riccia crinita *Taylor*

MPUMALANGA.—2529 (Witbank): Mapoch's Grounds ± 8 km NE from Roossenekal, drainage line immediately N of camping site at Mapoch's Caves, 25°10'21"S, 29°57'29"E, 1 519 m, on thin soil layer over rock sheets on edge of river line, North-eastern Mountain Grassland, thallus green with 'hairy' edges, (–BB), 17 Jan. 2005, *S.P. Bester 5439* (PRE).

11. Riccia curtisii *(James ex Austin) Austin*

EASTERN CAPE.—3324 (Steytlerville): Baviaanskloof, second river crossing after Kudu Kaia, Ysrivier Farm, 33°39'52"S, 24°32'11"E, 190 m, on soil in partial shade, (–DA), 8 Sept. 2002, *M. Koekemoer 2355* (PRE).

12. Riccia lanceolata *Steph*.

GAUTENG.—2529 (Witbank): 20 km N of Witbank railway station on dirt road to Zaaihoek, turn-off to Kwartspruit Farm and ± 5 km along rough track to Olifants River, on soil between grass in vlei, (–CA), 20 Feb. 1994, *S.M. Perold, 3189, 3194* (both PRE).

13. Riccia nigrella *DC*.

LIMPOPO.—2430 (Pilgrim's Rest): southern portion of Leolo (Lulu) Mountains, Tama Kgoshi Peak, Soupiana Farm, 24°43'29"S, 30°02'58"E, 1 912 m, on humus-rich soil in North-eastern Mountain Grassland, thallus blue-green, (–CA), 2 Dec. 2004, *S.P. Bester 5316* (PRE).

14. Riccia purpurascens *Lehm*.

EASTERN CAPE.—3324 (Steytlerville): Baviaanskloof, along banks of Witrivier, (–DA), 9 May 2000, *J. Perold 106* (PRE).

15. Riccia runssorensis *Steph*.

KWAZULU-NATAL.—2830 (Dundee): Dannhauser, ± 5 km from Bismarck, farm of David Watson, 28°00'35"S, 30°00'11"E, 1 274 m, common on black turf soil in North-eastern Mountain Grassland, thallus blackish green, submerged in standing water, (–AA), 11 Feb. 2006, *S.P. Bester 6565* (PRE).

NORTHERN CAPE.—3123 (Victoria West): Central Karoo, Rietpoort Farm, 34 km N of Victoria West, on main road, good rains after drought, flat top of koppie in damp area between bossies, (–AA), 14 Mar. 1988, *L. Smook 6962* (PRE).

EASTERN CAPE.—3225 (Somerset East): Mountain Zebra National Park, 32°14'14"S, 25°27'49"E, 1 245 m, at foot of mountain, on soil at base of boulders, South-eastern Mountain Grassland, thallus bluish, with *Riccia crinita* Taylor, (–AB), 12 Dec. 2005, *S.P. Bester 6300* (PRE).

16. Riccia volkii *S.W. Arnell*

EASTERN CAPE.—3027 (Lady Grey): Rhodes, gravel road/jeep track between Naudesnek and Ben Macdhui, Marsfield Farm, 30°39'23"S, 27°59'01"E, on soil among grass tufts, (–DB), 11 Dec. 1999, *M. Koekemoer 1615* (PRE).

17. Symphyogyna brasiliensis *Nees & Mont*.

NORTHWEST.—2527 (Rustenburg): Rustenburg Nature Reserve, stream bank at bridge, on soil, (–CA), 18 Feb. 1997, *S.M. Perold 3666* (PRE).

NORTHERN CAPE.—2822 (Glen Lyon): Griekwastad Dist., Rudesheim Farm, SW of town, 1 279 m, Kalahari thornveld invaded by karoo, (–DD), 19 June 1999, *J.J. Meyer 2007* (PRE).

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