

BRYOPHYTA

NEW AND INTERESTING RECORDS OF MOSSES IN THE FLORA OF SOUTHERN AFRICA AREA: I. SPHAGNACEAE—GRIMMIACEAE

Since the publication of the first fascicle of the moss *Flora of southern Africa* (Magill 1981), several new and interesting records have been identified from geographical regions referred to in the fascicle. Most of the new records are a result of recent collecting by the authors and other staff members of the National Botanical Institute. However, large parts of the flora area remain under-collected, especially the arid and semi-arid central and northern regions.

New and interesting records are listed in the same taxonomic order as in the first fascicle of the moss flora. The quarter-degree grid reference (Edwards & Leistner 1971), name of the collector and collector's number or PRE-Cryptogamic Herbarium number are given for each voucher specimen. All specimens cited are in PRE unless otherwise indicated. New taxa, new records and name changes for southern African mosses are reported in the *List of species of southern African plants* (1985) and updates to the list in *Bothalia* (Van Rooy 1985, 1986, 1988, 1989).

SPHAGNACEAE

Sphagnum

truncatum Hornsch. (Magill 1981:29)

Northern Transvaal (2230 CC: *Bosman PRE-CH 1365*, 2329 CD: *Codd & Dyer PRE-CH 12235*), eastern Transvaal (2430 DB: *Van der Schijff*, 2530 BB: *Sim 8014*, 8580), Zululand (2831 DC: *Sim 9671*; *Venter 2478*) and the eastern Cape (3227 CB: *Sim 7166*).

capense Hornsch. (Magill 1981:31)

Northern Transvaal (2329 AA: *Leeman PRE-CH 3649*).

ANDREAEACEAE

Andreaea

subulata Harv. ex Hook. (Magill 1981:33)

Previously known only from Table Mountain, the species has recently been identified from other localities in the south-western Cape (3319 CA: *Esterhuysen 21806*, 22270, 3319 CB: *Esterhuysen 20031*).

rupestris Hedw. (Magill 1981:35)

Transkei (3128 BC: *Van Rooy 2277*) and southern Cape (3324 DB: *Esterhuysen 28046*).

FISSIDENTACEAE

Fissidens

usambaricus Broth. (Magill 1981: 43)

Transkei (3129 CB: *Van Rooy 1928*).

bryoides Hedw. (Magill 1981: 46)

Recently collected in the Transkei (3129 BA: *Van Rooy 1826*, 3228 BD: *Van Rooy 2064*) and the southern Cape (3323 DD: *Wagener PRE-CH 13328*).

hoeegii P. Vårde (Magill 1981:47)

Northern Transvaal (2329 DD: *Brenan M3226*) and the central Cape (3224 BC: *MacLea sub Rehm 588*).

rufescens Hornsch. (Magill 1981:47)

Southern Transvaal (2628 CB: *Perold 252*) and the eastern Cape (3027 CA: *Van Rooy 2615*, 2618, 2630, 3027 CC: *Van Rooy 2665*, 2668, 2677).

simii Schelpe (Magill 1981:50)

Now also known from the Orange Free State (3026 BD: *Van Rooy 2591*).

curvatus Hornsch. (Magill 1981:51)

Transkei (3128 DC: *Van Rooy 2158*, 3228 AB: *Van Rooy 2031*).

aciphyllus Dix. (Magill 1981: 53)

Zululand (2832 CC: *Van Rooy 180*).

submarginatus Bruch ex Krauss (Magill 1981:54)

Northern Cape (2722 AB: *Magill 6401*, 6402, 6403, 6406, 2722 DC: *Magill 6411*).

parvilimbatus Sim (Magill 1981:57)

Southern Transvaal (2627 AC: *Perold 1987*).

borgenii Hampe (Magill 1981:58)

Central Transvaal (2527 CA: *Magill 3005*, 2529 CB: *Magill 6387*, *Van Rooy & Perold 652*).

erosulus (C. Müll.) Par. (Magill 1981:58)

Northern Cape (2722 AB: *Van Rooy 686*, 2723 AD: *Van Rooy 682*, 2822 BA: *Van Rooy 698*) and Natal (2930 AD: *Wood 46*, 3130 AA: *Van Rooy 961*).

subobtusatus C. Müll. (Magill 1981:59)

Northern Cape (2722 AB: *Magill 6405*, *Van Rooy 685*, 2722 DC: *Van Rooy 697*, 2822 BA: *Magill 6420*) and Natal (2729 DD: *Bews sub Sim 8267*, 2828 DB: *Van Rooy 1118*, 2930 CB: *Sim 9945*, 2930 DA: *Sim 8158*, *Van Rooy 1515*, 1522). A specimen collected in southern Namibia (2718 CA: *Magill 6426*) is an additional record for the region.

fontanus (B. Pyl.) Steud. (Magill 1981:67)

Eastern Cape (3027 CA: *Nel 21*, 3027 CD: *Sim 7096*).

NANOBRYPACEAE

Nanobryum dummeri Dix. (Magill 1981:69)

Previously known only from Port St Johns in the Transkei, the species has recently been collected in a Zululand forest (2832 AB: *Harrison 846*).

ARCHIDIACEAE

Archidium

dinteri (Irmsch.) Snider (Magill 1981: 72)

An additional record of this rare species is known from central Namibia (2217 CB: *Volk 84/722*).

ohioense Schimp. ex C. Müll. (Magill 1981: 74)

Natal (2929 AA: *Esterhuysen 3459f*), Lesotho (2929 CB: *Magill 440f*), the north-western Cape (3118 CD: *Perold 1731*) and Transkei (3130 AC: *Van Rooy 1745*).

rehmannii Mitt. (Magill 1981: 77)

North-western Cape (3118 CD: *Perold 1732*, 3119 DD: *Perold 1845*).

julicaule C. Müll. (Magill 1981: 80)

Recently collected in Lesotho (2929 CB: *Magill 7087*).

DITRICHACEAE

Pleuridium

pappeanum (C. Müll.) Jaeg. (Magill 1981: 84)

Lesotho (2929 CB: *Magill 4398*) and Transkei (3228 AB: *Van Rooy 2028*).

nervosum (Hook.) Mitt. (Magill 1981: 86)

Orange Free State (2827 DA: *Van Rooy 447*, 2827 DB: *Van Rooy 421*, 2828 AC: *Perold 135f*) and Lesotho (2929 CB: *Magill 4378*, 4389).

Eccremidium exiguum (Hook. f. & Wils.) Wils. ex Salm. (Magill 1981: 89)

Central Transvaal (2428 CA: *Perold 810*, 2528 DC: *Perold 1373*).

Ditrichum

- strictum (*Hook. f. & Wils.*) *Hampe* (Magill 1981: 90)
Lesotho (2828 DD: *Van Zanten et al. 7609922, 7609978. 2929 CA: Van Rooy 3416, 3417.*)
difficile (*Dub.*) *Fleisch.* (Magill 1981: 93)
Now also known from the northern Transvaal (2329 DD: *Brenan M 3234; Magill 6552*).

DICRANACEAE

- Cladophascum gymnomitrioides (*Dix.*) *Dix. ex Sim* (Magill 1981: 110)
Northern Transvaal (2329 DB: *Brenan M 3222*), central Transvaal (2529 CB: *Volk 81/018*), eastern Transvaal (2630 AD: *Smook 4893, 2730 AC: Tölken 5718*), north-western Cape (3018 AC: *Perold 2129*) and south-western Cape (3319 AD: *Perold 2408*).

Dicranella

- symonsii *Dix.* (Magill 1981: 122)
South-western Cape (3218 BB: *Perold 1921. 3219 AC: Perold 1954*).
rigida *Dix. ex Sim* (Magill 1981: 122)
North-western Cape (3118 DB: *Oliver 7277*).

Oreoweisia erosa (*C. Müll.*) *Kindb.* (Magill 1981: 127)

New from the Orange Free State (2729 CD: *Perold 1272*).

Leucoloma

- syrrhopodontioides *Broth.* (Magill 1981: 136)
Northern Transvaal (2230 CC: *Von Breitenbach 205*).
rehmannii (*C. Müll.*) *Rehm. ex Par.* (Magill 1981: 136)
Recently collected in the Transkei (3129 BC: *Van Rooy 1849, 3130 AC: Van Rooy 1780*).

Microcampylopus perpusillus (*Mitt.*) *Broth.* (Magill 1981: 138)

Central Transvaal (2429 DD: *Perold 984. 2529 CB: Van Rooy & Perold 640*).

Campylopus

- delagoae (*C. Müll.*) *Par.* (Magill 1981: 140)
Northern Transvaal (2330 CC: *Perold 2452*).
stenopelma (*C. Müll.*) *Par.* (Magill 1981: 142)
Northern Transvaal (2330 CC: *Brenan M 2811*).
subchlorophyllosus *C. Müll. ex Rabenh.* (Magill 1981: 144)
Lesotho (2828 DA: *Deall & Killick 107, 109. 2929 CB: Deall & Killick 161b*).
pallidus *Hook. f. & Wils.* (Magill 1981: 147)
New from western Transvaal (2526 DD: *Perold 889*) and the Transkei (3129 BC: *Van Rooy 1874*).
introflexus (*Hedw.*) *Brid.* (Magill 1981: 150)
Northern Transvaal (2230 CC: *Bosman PRE-CH 1356, 2330 CC: Von Breitenbach 101*).
pilifer *Brid.* (Magill 1981: 152)
Southern Cape (3322 AC: *Cholnoky 1020, 3325 CD: Smook 3825a*).
procerus (*C. Müll.*) *Par.* (Magill 1981: 153)
Northern Transvaal (2329 DD: *Magill 6516*).

CALYMPERACEAE

- Calymperes rabenhorstii *Hampe & C. Müll.* (Magill 1981: 164)
Previously known only from a single specimen collected in Zululand, the species is now also known from the eastern Transvaal (2430 DB: *Retief et al. 1139a*).

Syrrhopodon

- uncinifolius *C. Müll.* (Magill 1981: 167)
Transkei (3128 BC: *Van Rooy 2262, 2264. 3129 BC: Van Rooy 1882, 1843, 1908. 3130 AC: Van Rooy 1762, 1784*).
obliquirostris *C. Müll.* (Magill 1981: 169)
Recently collected in the Transkei (3129 BC: *Van Rooy 1880*).

ENCALYPTACEAE

- Encalypta vulgaris *Hedw.* (Magill 1981: 174)
New from the eastern Cape (3027 CD: *Van Rooy 2792. 3027 DC: Van Rooy 2751, 2762*).

POTTIACEAE

- Anoetangium wilmsianum (*C. Müll.*) *Par.* (Magill 1981: 181)
Eastern Cape (3027 CB: *Van Rooy 2715. 3027 DD: Oliver 8357*).
Hymenostylium recurvirostrum (*Hedw.*) *Dix.* (Magill 1981: 182)
Transkei (3129 BA: *Van Rooy 1839*).
Gymnostomum aeruginosum *J.E. Sm.* (Magill 1981: 183)
Recently collected in the eastern Transvaal (2630 CC: *Perold 1082*) and the eastern Cape (3027 CA: *Van Rooy 2622*).
Aloina bifrons (*De Not.*) *Delgadillo* (Magill 1981: 193)
Now also known from the northern Cape (2823 BC: *Magill 6491a*).
Acalon rufochaete *Magill* (Magill 1981: 201)
Northern Cape (2824 DA: *Magill 6501*).

Phascum

- peraristatum *C. Müll.* (Magill 1981: 202)
Northern Cape (2824 DA: *Magill 6497*).
leptophyllum *C. Müll.* (Magill 1981: 204)
Northern Transvaal (2329 BB: *Ellis PRE-CH 13109*), central Transvaal (2528 CA: *Sieyn PRE-CH 12921. 2529 CB: Magill 6362: Van Rooy & Perold 667*), southern Transvaal (2628 AA: *Brenan M 3364*), north-western Cape (2917 DB: *Perold 1394a*) and southern Cape (3423 AA: *Cholnoky 594, 616*).

Tortula

- porphyreoneura (*C. Müll.*) *Townsend* (Magill 1981: 213)
Central Transvaal (2528 CA: *Perold 127*), northern Cape (2624 DD: *Perold 1381*), north-western Cape (2817 CA: *Oliver et al. 1651*) and south-western Cape (3318 DD: *Perold 1197*).
ammonsiana *Crum & Anderson* (Magill 1981: 216)
Northern Cape (2723 AD: *Magill 6396, 6399*), north-western Cape (2919 AC: *Magill 6461*), Transkei (3129 CA: *Van Rooy 1984, 2172*) and the eastern Cape (3027 CB: *Van Rooy 2709. 3027 CD: Van Rooy 2785*).

pagorum (*Milde*) *De Not.* (Magill 1981: 217)

Western Transvaal (2526 CA: *Magill 6388*) and the northern Cape (2625 AB: *Magill 6392. 2822 BA: Magill 6421, 6422, 6423. 2822 CB: Van Rooy 746*).

papillosa *Wils. ex Spruce* (Magill 1981: 218)

Recently found in the Orange Free State (2828 AB: *Perold 1358*).

chisosa *Magill, Delgadillo & Stark* (Magill et al. 1983)

Central Transvaal (2428 CC: *Smook 2714*), eastern Transvaal (2430 CC: *Magill 3134*), north-western Cape (2816 DB: *Oliver et al. 548. 2817 AC: Van der Westhuizen PRE-CH 13115. 2917 BA: Magill 6436, 6440: Van Rooy 712, 715. 2917 DB: Perold 1389, 1392: Schelpe 7751, 7763. Smook 3593b. 2918 CA: Perold 2058*) and the south-western Cape (3218 BB: *Magill & Schelpe 4035. 3219 AA: Schelpe 4970*).

Weisiopsis involuta *Magill* (Magill 1981: 225)

Previously known only from the type locality in Botswana, the species has recently been collected on limestone in northern Namibia (1816 DB: *Brusse 4176*).

Hyophila

- involuta (*Hook.*) *Jaeg.* (Magill 1981: 228)
Northern Transvaal (2329 DB: *Magill 6507*) and central Transvaal (2529 AD: *Perold 965, 966, 967. 2529 CB: Magill 6384*).
baginsensis *C. Müll.* (Magill 1981: 230)
Now also known from the central Transvaal (2527 CA: *Venter 2018*).

Didymodon

- australasii (*Hook. & Grev.*) *Zander* (Magill 1981: 232, *Van Rooy 1989*)
Natal (2929 CB: *Van Rooy 1365*).
ceratodonteus (*C. Müll.*) *Dix.* (Magill 1981: 233)
Northern Cape (2724 BA: *Van Rooy 681*).
xanthocarpus (*C. Müll.*) *Magill* (Magill 1981: 235)
Recently collected in dry river valleys of eastern Lesotho (2928 BB: *Van Rooy 3217. 2928 BD: Van Rooy 3191. 2929 AC: Van Rooy 3319*).

Barbula

- crinita *Schultz* (Magill 1981: 237)
Southern Transvaal (2627 BA: *Mogg 35661. 2628 AD: Mogg 37590a*).
acutata *C. Müll.* (Magill 1981: 239)
Central Cape (2922 BC: *Smook 4484. 3025 CA: Smook 3239*).
eubryum *C. Müll.* (Magill 1981: 245)
Northern Transvaal (2328 CC: *Smook 4193*).
afrofontana (*C. Müll.*) *Broth.* (Magill 1981: 246)
Central Transvaal (2527 DD: *Perold 246*) and southern Transvaal (2627 AC: *Perold 1985*).

Bryoerythrophyllum jamesonii (*Tayl.*) *Crum* (Magill 1981: 248)

New from the eastern Cape (3027 DC: *Russell 3761*) and Transkei (3129 BB: *Van Rooy 1706*).

Phasconica tisserantii *P. Varde* (Magill 1981: 251)

Southern Cape (3325 BB: *Schrire 1889*).

Timmiella pelindaba *Magill* (Magill 1981: 253)

Now also known from the eastern Cape (3027 CA: *Van Rooy 2637, 2643*).

Tortella

- xanthocarpa (*C. Müll.*) *Broth.* (Magill 1981: 255)
Lesotho (2828 DC: *Deall & Killick 85. 2929 CA: Van Rooy 3426. 2929 CB: Deall & Killick 149*), the eastern Cape (3027 CB: *Van Rooy 2725. 3227 DD: Van Rooy 940*) and Namibia (1823 AB: *Hardy 5601*).
fragilis (*Hook. & Wils.*) *Limpr.* (Magill 1981: 258)
Eastern Cape (3127 BB: *Hilliard & Burt 13146*).

Oxystegus cylindricus (Brid.) Hilp. (Magill 1981: 259)
Lesotho (2929 CC: Magill 4312).

Weissia

- dieterlenii* Ther. (Magill 1981: 263)
Eastern Cape (3027 CC: Van Rooy 2660, 3027 DC: Van Rooy 2765).
humicola C. Müll. (Magill 1981: 266)
Transkei (3128 BC: Van Rooy 2274).
latiuscula C. Müll. (Magill 1981: 267)
Now also known from the eastern Cape (3027 CB: Van Rooy 2710).

GRIMMIACEAE

Grimmia

- apocarpa* Hedw. (Magill 1981: 274)
New from the Transkei (3228 BD: Van Rooy 2072, 2073).
ovalis (Hedw.) Lindb. (Magill 1981: 277)
Recently collected in the Transkei (3128 BC: Van Rooy 2282).
laevigatam (Brid.) Brid. (Magill 1981: 277)
Namibia (2816 BC: Van der Westhuizen PRE-CH 13112a) and the
northern Cape (2822 CB: Van Rooy 747).

REFERENCES

EDWARDS, D. & LEISTNER, O.A. 1971. A degree reference system for citing biological records in southern Africa. *Mitteilungen der Botanischen Staatssammlung, München* 10: 501–509.

- MAGILL, R.E. 1981. Bryophyta. In O.A. Leistner, *Flora of southern Africa*. Part. 1 Mosses, Fascicle 1 Sphagnaceae–Grimmiaceae. Botanical Research Institute, Department of Agriculture and Fisheries, Republic of South Africa.
- MAGILL, R.E., DELGADILLO, C. & STARK, L.R. 1983. *Tortula chisosa* sp. nov., a bistratose-leaved species from the United States, Mexico and southern Africa. *Annals of the Missouri Botanical Garden* 70: 200–202.
- VAN ROOY, J. 1985. Bryophyta. In G.E. Gibbs Russell *et al.*, List of species of southern African plants, Edn 2, Part 1. *Memoirs of the Botanical Survey of South Africa* No. 51: 1–31.
- VAN ROOY, J. 1986. Bryophyta. In Staff of the National Herbarium, New taxa, new records and name changes for southern African plants. *Bothalia* 16: 109, 110.
- VAN ROOY, J. 1988. Bryophyta. In G.E. Gibbs Russell *et al.*, New taxa, new records and name changes for southern African plants. *Bothalia* 18: 294, 295.
- VAN ROOY, J. 1989. Bryophyta. In B.C. de Wet *et al.*, New taxa, new records and name changes for southern African plants. *Bothalia* 19: 276.

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