New national and regional bryophyte records, 12

Intending contributors to this column should consult the Instructions for Authors in Part 1 of this volume, and should address their contributions to the column editor.

1. ***Amblyodon dealbatus*** (Hedw.) P.Beauv.

Contributors: P. Hájková, M. Hájek and V. Plášek

Bulgaria: PIRIN MTS, near the path between the Vihren chalet and Kazanite meteorological station, on marble bedrock, 41°45'54"N 23°24'44"E, 2231 m a.s.l., small calcareous spring (water pH 8.2, water conductivity 203 μS cm^{-1} at 20°C), very rare, 4 July 2003, *leg.* P. Hájková & M. Hájek, *det.* V. Plášek (BRNU, SOM).

This species normally forms tufts in montane flushes and rock crevices, and in dune slacks, usually in alkaline habitats. It is reported from many other European countries, but is rare everywhere. The specimen cited above is the first collection from Bulgaria. The plants are not abundant and grow in tufts of *Gymnostomum aeruginosum* Sm. in a stony spring in which the vegetation is dominated by *Carex ferruginea* Scop., *Pinguicula balcanica* Casper and *Palustriella commutata* (Hedw.) Ochyra s. s.

2. ***Brachymenium capitulatum*** (Mitt.) Paris

Contributor: C. C. Townsend

Sudan: IMATONG MOUNTAINS, near Ailo village, *ca* 4°02'N 32°51'E, upland forest with *Albizia gummifera*, on rhizome of *Pleopeltis macrocarpa* on *Jacaranda*, 1900 m a.s.l., 12 November 1980, c.fr., *leg*. I. Friis & K. Vollesen 187B, *det*. Townsend (Priv. Herb. Townsend).

A not unexpected extension to the range of this widespread tropical African species.

3. ***Bryoerythrophyllum fuscinervium*** (Mitt.) R.H.Zander

Contributor: C. C. Townsend

Argentina: PROV. SANTA CRUZ: Parque Nacional Los Glaciares, 50°N 73°W, on damp soil over rock near a stream by the track from El Chalten to Lago Torre, near the Mirador, 575 m a.s.l., 21 January 1997, *leg*. C.C. Townsend 97/259 (BA, SGO, Priv. Herb. Townsend).

Chile: REG. MAGALLANES: Parque Nacional Torres del Paine, 51°S, 73°W, on a rock at the N.W. end of Lago Pehoe, not far from the jetty, 150 m a.s.l., 16 January 1997, *leg*. C.C. Townsend 97/198, *det*. (e dupl.) R.H. Zander (MO, SGO, Priv. Herb. Townsend); Parque Nacional Torres del Paine, on a rock near the track along the W. side of Lago Skottsberg, 160 m a.s.l., 16 January 1997, *leg*. C.C. Townsend 97/209 (Priv. Herb. Townsend).

This species was not included in Matteri (2003) and is thus regarded as new to Argentina. He (1998) does not mention it from Reg. Magallanes, and the above gatherings are the southernmost records for Chile. Since I collected the species three times during a 3-week visit, it can hardly be as uncommon in the general region as the facts would indicate. It is a small moss, but grows in dense tufts which would scarcely be overlooked by any foraging bryologist.

4. ***Bryohumbertia flavicoma*** (Müll.Hal.) J-P.Frahm

Contributor: C. C. Townsend

Kenya: SOUTH NYERI DISTRICT: Aberdare Mountains, on trunk of tree in forest above the N. side of Chania Falls, 0°27'S 36°44'E, *ca* 3030 m a.s.l., 9 April 1975, *leg*. C.C. Townsend 75/899 (EA, Priv. Herb. Townsend).

The presence of this moss in Rwanda, Tanzania, Uganda and Zaire made its discovery in Kenya merely a matter of time. When sterile, as in this case, it still has a distinctive facies unlike any *Dicranella*, which it most closely resembles, and the brownish enlarged alars and the nerve section will readily confirm a field identification.

5. ***Campyliadelphus elodes*** (Lindb.) Kanda

Contributors: P. Hájková, M. Hájek and Z. Hradílek

Bulgaria: KAZANLĂK BASIN, eastern margin of Dunavci village, 42°39'19"N 25°17'25"E, 412 m a.s.l., abundant in lowland alkaline calcareous fens (water pH 6.8, water conductivity 996 μS cm^{-1} at 20°C), 21 June 2004, *leg.* P. Hájková & M. Hájek, *det.* P. Hájková, *conf.* Z. Hradílek (BRNU, SOM).

This is the first report for *C. elodes* in Bulgaria. It was growing in extremely calcareous fens dominated by *Schoenus nigricans* L., *Eleocharis quinqueflora* (Hartmann) Schwarz, *Carex distans* L., *Carex flacca* Schreb., *Eriophorum latifolium* Hoppe, *Epipactis palustris* (L.) Crantz, *Molinia caerulea* (L.) Moench and *Succisa pratensis* Moench. It was accompanied by *Campylium stellatum* (Hedw.) J.Lange & C.E.O.Jensen and *Bryum pseudotriquetrum* (Hedw.) P.Gaertn., B.Mey. & Scherb. in some of the fens.

6. ***Didymodon insulanus*** (De Not.) M.O.Hill

Contributor: C. C. Townsend

Kenya: NORTH NYERI DISTRICT: on acid rocks by track not far from the forest lodge west of the Sirimon Track, Mount Kenya, 0°9'S 37°19'E, *ca* 2120 m a.s.l., 6 April 1975, *leg*. C.C. Townsend 75/850 (Priv. Herb. Townsend), growing with *Trichostomum fragilifolium* Dixon.

Though this species is previously unrecorded from tropical Africa, I can find nothing in general appearance, leaf form, areolation or nerve section to separate this from the widespread European species. Other European mosses are found on Mount Kenya (e.g. *Bryum alpinum* Huds. ex With., *Bryoerythrophyllum recurvirostrum* (Hedw.) P.C.Chen, *Grimmia longirostris* Hook., *Hedwigia ciliata* (Hedw.) P.Beauv., *Leptodon smithii* (Hedw.) F.Weber & D.Mohr).

7. ***Ditrichum gracile*** (Mitt.) Kuntze [*D. crispatissimum* (Müll.Hal.) Paris]

Contributor: C. C. Townsend

Kenya: NORTH NYERI DISTRICT: on peaty ground by the Sirimon Stream, Mount Kenya, 0°9'S 37°19'E, 3600 m a.s.l., 4 April 1975, *leg.* C.C. Townsend 75/763 (EA, NAI, Priv. Herb. Townsend).

This is apparently the first report of *D. gracile* from Africa.

8. ***Drepanocladus polygamus*** (Schimp.) Hedenäs

Contributors: D. Quandt and A. Vanderpoorten

Venezuela: MÉRIDA: Sierra de La Culata, in a flushed, grazed meadow, 8°45'N 71°4'W, *ca* 2000 m a.s.l., January 2004, *leg.* A. Vanderpoorten *V140*, *conf.* L. Hedenäs (LG).

Drepanocladus polygamus is widespread in Arctic to temperate parts of North America and Eurasia, rare in some subtropical areas of southern Asia and Africa. It is also reported from New Guinea, Australia, New Zealand, South Georgia and Antarctica. In Central and South America, the species is known from a few localities in the Dominican Republic, Ecuador, Peru, Bolivia, Chile, Paraguay, Uruguay and Tierra del Fuego (Hedenäs, 2003; Ochyra & Matteri, 2001).

9. ***Eremonotus myriocarpus*** (Carrington) Lindb. & Kaal. ex Pearson

Contributors: H. Kürschner and G. Parolly

Turkey: RIZE: Ikizdere, Kafkuma Yayla, 40°49'42.8"N 40°38'21.3"E, 2180 m a.s.l., on moist detritus and humus layers beneath *Rhododendron caucasicum* scrub, 16 September 2004, *leg.* H. Kürschner & G. Parolly *04-996* (B, Priv. Herb. H. Kürschner).

This is the first report of this palaeo-arctic taxon for Turkey and S.W. Asia. It was collected from the subalpine belt of the western Dogu Karadeniz Daglari, where it grows on moist sandstone, detritus and humus layers in the understorey of the *Rhododendron caucasicum* Pall. scrubland (Vaccinio myrtilli-Rhododendrion caucasici Vural 1996), along with *Andreaea rupestris* Hedw., *Dicranum scoparium* Hedw., *Jungermannia hyalina* Lyell, *Racomitrium elongatum* Frisvoll, *Rhytidium rugosum* (Hedw.) Kindb. and *Sphagnum squarrosum* Crome. It forms very thin, brownish or reddish mats with small shoots arising from older horizontal or flagelliform axes. Perianths were well developed in female plants. In Europe this species is distributed in the mountains of Spitsbergen, Greenland, Fennoscandia, Ireland, Great Britain, C. Europe (Alps), S.E. France (Pyrenees), the Carpathians and Bulgaria.

10. ***Epipterygium tozeri*** (Grev.) Lindb.

Contributor: C. C. Townsend

Kenya: NORTH NYERI DISTRICT: Aberdare Mountains, very little on soft rock at the back of the cave behind Cave (Queen's Cave) Waterfall, 0°29'S 36°42'E, 3050 m a.s.l., 16 February 1985, *leg.* C.C. Townsend 85/562 (Priv. Herb. Townsend).

Epipterygium tozeri is otherwise known in tropical Africa only from the Cape Verde Islands and Rwanda (cf. O'Shea, 2003), but will surely be found elsewhere.

11. ***Epipterygium tozeri*** (Grev.) Lindb.

Contributor: C. C. Townsend

Nepal: on soil on vertical bank of gully, Phulchowki, *ca* 18 km S.E. of Kathmandu, 27°45'N 85°12'E, 1680 m a.s.l., in considerable shade, 1 March 1992, *leg.* C.C. Townsend 92/141 (Priv. Herb. Townsend).

Though widespread in Asia, including northern India, and recently recorded from Bhutan by Long (1994), *E. tozeri* was not previously known from Nepal.

12. ***Grimmia poecilostoma*** Cardot & Sebille

Contributors: R. Ochyra and A. Chlebicki

India: JAMMU AND KASHMIR: Ladakh, Karakoram Mountains, Shyok Valley, Digar, 34°13.719'N 77°42.401'E, 3244 m a.s.l., on dry and highly insolated rock in desert, 27 June 2004, *Chlebicki s.n.* (KRAM).

Grimmia poecilostoma is a widely distributed but scattered pan-Holarctic moss species having a strongly dissected range confined to S.W. North America, Europe including the Mediterranean and the Caucasus, and Asia (Muñoz, 2000). On the latter continent it predominantly occurs in Central Asia, including Kyrgyzstan, Kazakhstan, Turkmenistan (Muñoz & Pando, 2000) and Tadzhykistan (Mamatkulov, 1990), Mongolia (Abramova & Abramov, 1983) and China (Cao, He & Vitt, 2003). The present discovery of the species in the Karakoram in N.W. India is closely associated with the Central Asian part of its range. Determination of the Indian material is somewhat uncertain due to the sterile condition of the plants. The gametophytes of *G. poecilostoma* bear a close resemblance to *Guembelia tergestina* (Bruch & Schimp.) Ochyra & Żarnowiec and both species are very easily distinguished when fertile, the former having an asymmetric capsule set on a curved and eccentrically attached seta, and the latter having a symmetric capsule situated on a short straight seta. The Indian material is placed in *G. poecilostoma* on account of the leaf areolation in the basal part which consists of quadrate to short-rectangular cells with thin to moderately thickened walls and suprabasal cells which are perfectly bistratose in transverse section. In contrast, in *G. tergestina* the basal juxtacostal cells are long-rectangular and markedly thick-walled, marginal cells have markedly incrassate transverse walls and the suprabasal cells are irregularly unistratose in cross-section. In addition, Greven (1995) stated that *G. poecilostoma* is associated with acidic substrata, whereas *G. tergestina* is a moss of basic substrata, but Muñoz (1999) showed that these ecological preferences are not valid for distinction of both species since *G. poecilostoma* often grows on limestone rocks as well. Nonetheless, the Indian record of *G. poecilostoma* was made from granite rocks.

13. ***Hennediella antarctica*** (Ångstr.) Ochyra & Matteri

Contributor: R. Ochyra

Îles Crozet: Île de la Possession, rock outcrop midway down southern slopes of Crique de Navire, 46°25'S 51°50'E, 70 m a.s.l., on soil exposed by slip in *Poa pratensis* grassland, 23 January 1979, Bell *1921* (AAS, KRAM).

Hennediella antarctica is a widely distributed species in the southern hemisphere with maximum occurrence on subantarctic South Georgia and in the northern maritime Antarctic (South Orkneys, South Shetlands and Anvers Island) whence it has long been known under the local name *H. austrogeorgica* (Cardot) Blockeel until Ochyra (1998) reduced this name to synonymy with *H. antarctica*. The species is exceedingly rare in continental Antarctic, on Îles Kerguelen, in the southernmost tip of South America and on the South Island of New Zealand where it has long been known as *Pottia macrophylla* R.Br.bis but this name has also been reduced to synonymy with *H. antarctica* (Ochyra, 1998). Here, the range of the species is extended to the Îles Crozet archipelago in the subantarctic where it was once discovered on Île de la Possession. The local plants are characterized by having a well-developed marginal border which is coarsely toothed and bistratose in places in the distal part and, in this character as well as the lingulate to spathulate leaves, the plants fall quite well within the range of variation of *H. antarctica*.

14. ***Homomallium andoi*** Higuchi & Nishimura

Contributor: C. C. Townsend

Nepal: Gorkha, on a *Ficus* tree at the start of the ascent to the Prithvi Narayan Shah fort, 27°59'N 84°38'E, *ca* 1220 m a.s.l., 6 March 1992, c.fr., *leg*. C.C. Townsend 92/18, *det*. Higuchi (HIRO, TNS, Priv. Herb. Townsend).

According to Professor Higuchi (pers. comm.), no previous record is known from Nepal, though this species was recently described from Pakistan (Higuchi, Nishimura & Inoue, 1994).

15. ***Hygroamblystegium varium*** (Hedw.) Mönk.

Contributors: D. A. Quandt and A. Vanderpoorten

Venezuela: STATE OF TACHIRA: El Cobre, Finca La Huerfana, 7°59'27"N 72°4'3"W, in abundance on rocks within the cloud forest, *ca* 2300 m a.s.l., *leg*. A. Vanderpoorten *V151* (LG) and within a swampy meadow at the same altitude with *Philonotis*, January 2004, *leg*. A. Vanderpoorten *V3, V28*; D. Quandt *A10019* (LG).

Hygroamblystegium varium is widespread in temperate North America and Eurasia. It is also reported from North Africa and Australia. In Central and South America, the species was previously known from a few localities in Mexico, Guatemala, Bermuda, Colombia, Ecuador, Peru, Brazil, Bolivia and Argentina (Hedenäs, 2003).

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