

***Buxbaumia aphylla* Hedw.**

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Croatia: (1) Papuk Mt, Sokolina, in the vicinity of Doljanci, 538 m a.s.l., 45.49391°N, 17.60756°E, on acidic soil, 18 July 2015, *leg./det.* Deme J., Csiky J., Kovács D. & Purger D. (JPU), repeated collection on 16th October 2015, *leg.* Alegro, A. & Šegota, V. (ZA); (2) Papuk Mt, Svinjarevac, in the vicinity of Kamenski Vučjak, 354 m a.s.l., 45.51063°N, 17.53189°E, on acidic soil and *Sphagnum* peat, 12 July 2016, *leg./det.* Csiky J., Deme J., Kovács D. & Purger D. (JPU); (3) Papuk Mt, Konjska smrt, northwest from Leštat, in the vicinity of Kamenski Vučjak, 353 m a.s.l., 45.50800°N, 17.53691°E, on acidic soil, 12 July 2016, *leg./det.* Csiky J., Deme J., Kovács D. & Purger D. (JPU).

This circumpolar boreal-montane moss (Hill & Preston, 1998) is a new species for Croatia. In the surrounding countries *B. aphylla* occurs in Bosnia-Herzegovina (LC), Hungary (VU), Montenegro (EN) and Slovenia (LC), but it was not observed in Serbia (Hodgetts, 2015). We have found 58 capsules and 12 setae at the three sites: the smallest population (10 specimens) was located at Sokolina; at the two other sites *B. aphylla* was more abundant (Svinjarevac: 29 specimens, Konjska smrt: 31 specimens). The species occurred on bare acidic soil or on *Sphagnum* peat, under the shade of beech or sessile oak trees. In six sampling plots (1 m²) the most frequent (≥50%) associated species in the moss and lichen layer were *Cladonia* spp. (incl. *Cl. fimbriata* (L.) Fr., *Cl. furcata* (Huds.) Schrad., *Cl. gracilis* (L.) Willd. and *Cl. squamosa* (Scop.) Hoffm.), *Dicranella heteromalla* (Hedw.) Schimp., *Dicranum scoparium* Hedw., *Diphyscium foliosum* (Hedw.) D.Mohr, *Hypnum cupressiforme* Hedw., *Leucobryum glaucum* (Hedw.) Ångstr., *Polytrichum formosum* (Hedw.) and *Scapania nemorea* (L.) Grolle. Only few vascular plants (mainly acidophilous species) were noticed on the poor soil in the acidophytic forests with open canopy, e.g. *Deschampsia flexuosa* (L.) Trin., *Fagus sylvatica* L., *Genista pilosa* L., *Gentiana asclepiadea* L., *Hieracium sabaudum* L., *Luzula luzuloides* (Lam.) Dandy et Wilmott, *Lychnis viscaria* L., *Quercus petraea* agg. and *Vaccinium myrtillus* L. Contrary to limestone domination in Croatia, Papuk Mt exhibits a variety of acidic eruptive and metamorphic rocks, thus being a suitable habitat for acidophilous mosses and liverworts. Several new species for Croatian bryoflora were recently recorded here; *Microlejeunea ulicina* (Taylor) A. Evans, *Rhabdoweisia fugax* (Hedw.) Bruch & Schimp., *Sciuro-hypnum flotowianum* (Sendt.) Ignatov & Huttunen, *Syntrichia calcicola* J. J. Amann and *Tortella bambergeri* (Schimo.) Broth. (Papp *et al.*, 2013). Furthermore, based on recent collections, *Dicranum spurium* Hedw. found at Svinjarevac (Alegro *et al.*, 2014b) and *Andreaea rothii* F. Weber & D. Mohr subsp. *rothii* found at Sokolina (Csiky *et al.*, 2016) were added to the checklist of Croatia as well.

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