



Checklist of Turkish bryophyte vegetation

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ABSTRACT: A list of the known bryophyte syntaxa in Turkey compiled according to the methodology of Braun-Blanquet is presented in this study. Altogether, 41 associations and 19 subassociations belonging to 19 alliances, 12 orders, and eight bryosociological classes have been determined to date in Turkey. Moreover, six communities and 17 units of unknown phytosociological status have also been reported. The bryosociological syntaxa are grouped on the basis of their aquatic, terrestrial, or epiphytic character and given together with their localities and synonyms.

KEYWORDS: bryophytes, bryosociology, checklist, Turkey, vegetation.

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INTRODUCTION

Turkey's geographical location and geological structure have resulted in a number of different climates, as well as in the formation of different ecosystems, including ones of the forest, mountain, steppe, wetland, coastal, and marine types. This diversity of ecosystems has led to the existence of different habitats, which has increased the species diversity of both flora and fauna. One of the most important reasons for such a rich variety is Turkey's location at the intersection of the Mediterranean, Euro-Siberian, and Irano-Turanian phytogeographical regions (AKMAN 1995). The impact of these three different phytogeographical regions has led to favourable conditions for Mediterranean elements in the south; Euro-Siberian elements in the north; and Iranian-Turanian elements in the east (DAVIS 1975). In recent years, research on bryophytes, one of the most important elements of our country's biodiversity, has increased rapidly (ÖREN *et al.* 2012; EZER *et al.* 2015; BATAN *et al.* 2017; UYAR *et al.* 2018). According to these studies, a total of 1030 bryophyte taxa have been reported in Turkey, including 835 mosses, 191 liverworts, and four hornworts (ERDAĞ & KÜRSCHNER 2017). With such a large number of taxa, Turkey has the richest bryo-diversity among the countries of South-West Asia (BATAN *et al.* 2016).

Although the number of floristic studies on bryophytes has increased rapidly over recent years, there

have been few bryosociological studies in Turkey. The first bryosociological study in Turkey was conducted by WALTHER & LEBLEBICI (1969). As a result of their study on moss vegetation in the Yamanlar Mountain-Karagöl Region north of İzmir, a total of 20 associations were determined as epilithic and epiphytic. Following this study, the bryophyte vegetation of *Liquidambar orientalis* forests and the Nif Mountains (İzmir) in southwestern Anatolia (Marmaris-Köyceğiz, Muğla) was studied by WALTHER (1975, 1979). After that, no research on bryophyte vegetation was carried out in Turkey for a long period of time. However, such research has been resumed since 1991, and many important and valuable studies have been carried out (BRULLO *et al.* 1991; KÜRSCHNER *et al.* 1998, 2006, 2007, 2012; KÜRSCHNER 1999; KÜRSCHNER & PAROLLY 1999a, b; KARA 2008; EZER 2008, 2017; KÜRSCHNER & ERDAĞ 2008, 2009; DÜZENLİ *et al.* 2009; KARA *et al.* 2011; ALATAŞ & BATAN 2014, 2015; ALATAŞ *et al.* 2015a, b, 2016, 2017; ALATAŞ & UYAR 2017; CAN GÖZCÜ 2017; EZER *et al.* 2018). The first list of the syntaxa of bryophyte vegetation in Turkey was given by KÜRSCHNER and PAROLLY (1999b). In recent years, as in other countries (BARDAT & HAUGUEL 2002; SABOVLJEVIĆ 2008; PUGLISI & PRIVITERA 2012), bryosociological studies have increased rapidly in Turkey, and the need to regenerate the relevant list of the country's bryophyte vegetation has become apparent. The aim of the present paper is to revise and assemble all bryosociological stud-

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ies in order to update the current understanding of Turkey's bryophyte vegetation.

This present checklist was created by compiling the results of studies carried out on bryophyte vegetation in Turkey between the years 1969 and 2017 and present them according to the methodology of BRAUN-BLANQUET (1964).

MATERIALS AND METHODS

Syntaxonomic scheme of Turkish bryophyte vegetation. The following syntaxonomic scheme applies exclusively to the bryophyte vegetation of Turkey. All syntaxonomic units were revised according to the International Code of Phytosociological Nomenclature (WEBER *et al.* 2000) and ordered according to VON HÜBSCHMANN (1986), DIERSSEN (2001), MARSTALLER (2006), and MUCINA *et al.* (2016). The headings of the syntaxa and syntaxonomic categories are presented in abbreviated form, i.e., All.: Alliance, Ass.: Association, Subass.: Subassociation, and Syn: Synonym.

RESULTS

Checklist

Aquatic and semi-aquatic communities

Class: *Platyhypnidio-Fontinaliotea antipyretica* Philippi 1956

Order: *Hygrohypnetalia* Krajina 1933

All.: *Racomitrium acicularis* von Krusenstjerna 1945

Ass. *Madothecetum cordaeanae* Philippi 1956

(Syn: *Lunularia cruciata-Porella cordaeana* ass. Walther 1969)

[Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969)]

Order: *Leptodictyetalia riparii* Philippi 1956

All.: *Platyhypnidion rusciformis* Philippi 1956

Ass. *Oxyrrhynchietum rusciformis* Gams ex v. Hübbschmann 1953

(Syn: *Platyhypnidietum riparioides* Gams 1927)

[Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969)]

All.: *Brachythecion rivularis* Hertel 1974

Ass. *Brachythecio rivularis-Hygrohypnetum luridi* Philippi 1965

(Syn: *Brachythecietum rivularis* Herzog ex Walther 1969)

[Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969)]

All.: *Fissidention rivularis* Marstaller 1987

Ass. *Fissidenti rivularis-Rhynchostegiellum jacquinii* Walther 1969

(Syn: *Fissidentetum rivularis* v. Hübbschmann 1971)

[Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969)]

Ass. *Fegatelletum conicae* Smarda ex Jezek & Vondráček 1962

(Syn: *Conocephalum conicum-Mniobryum delicatulum* ass. Walther 1969)

[Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969)]

Associations of uncertain syntaxonomic rank and position:

- *Barbula sinuosa-Bryum alpinum* ass. Walther 1969

[Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969)]

- *Pellia endiviifolia-Hygroamblystegium tenax* ass. Walther 1969

[Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969)]

- *Philonotetum caespitosae* ass. Walther 1969

[Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969)]

Rock communities

Class: *Racomitrietea heterostichi* Neumayr 1971

Order: *Grimmietalia commutatae* Smarda & Vanek in Smarda 1947

All.: *Grimmion commutatae* von Krusenstjerna 1945

Ass. *Grimmion commutato-campestris* von Krusenstjerna 1945

[Yamanlar Mountain / İzmir (*Grimmia laevigata-Grimmia ovalis* ass. Walther & Leblebici 1969); Beşparmak Mountain / Muğla (KÜRSCHNER & PAROLLY 1999b); Phrygian Highlands / Afyonkarahisar-Kütahya-Eskişehir-Sakarya River (KÜRSCHNER & ERDAĞ 2009)]

Subass. - *orthotrichetosum bistratosae* Kürschner & Erdağ 2009

Subass. - *anacoliotosum menziesii* Kürschner & Erdağ 2009

[Phrygian Highlands / Afyonkarahisar-Kütahya-Eskişehir-Sakarya River; Kula area / Manisa (KÜRSCHNER & ERDAĞ 2009)]

Class: *Schistidietea apocarpi* Jezek & Vondracek 1962

Order: *Schistidietalia apocarpi* Jezek & Vondracek 1962

All.: *Grimmion tergestinae* Šmarda 1947

Ass. *Orthotricho anomali-Grimmietum pulvinatae* Stodiek 1937

(Syn.: *Tortuletum muralis* (Muraletum) Waldh.1944, *Grimmio pulvinate-Tortuletum muralis* v. Hübbschmann 1950)

[Yamanlar Mountain / İzmir (*Grimmia pulvinata-Tortula muralis* ass. and *Tortula intermedia-Tortula calcicolens* ass. Walther & Leblebici 1969)]

Associations of uncertain syntaxonomic rank and position:

- *Tortula inermis-Barbula cylindrica* ass. Walther 1969 [Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969)]

- *Trichostomum crispulum-Distichium capillaceum* ass. Walther 1969

[Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969)]

Class: *Neckeretea complanatae* Marstaller 1986

Order: *Neckeretalia complanatae* Jezek & Vondracek 1962

All.: *Plasteurhynchion meridionalis* Guerra & Varo 1981

Ass. *Antitrichietum breidlerianae* Walther 1969

Subass. - *tortuletosum hirsutae* Walther 1969

[Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969)]

Subass. - *orthotrichetosum rupestris* Walther 1969

[Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969)]

Ass. *Homalothecio sericei-Neckeradelphetum menziesii* (Varo, Guerra & Gil 1977) Guerra & Varo 1981

(Syn. *Neckeretum menziesii* Varo, Guerra & Gil 1977, nom. illeg., art. 31 ICPN, Weber *et al.* 2000)

[Yamanlar Mountain-Spil Mountain / İzmir-Manisa; Aydın Mountain / Aydın; Yılanlı Mountain / Muğla (KÜRSCHNER & ERDAĞ 2008)]

Terrestrial communities

Class: *Psoretea decipiens* Mattick ex Follmann 1974

Order: *Barbuletalia unguiculatae* von Hübschmann 1960

All.: *Grimaldion fragrantis* Smarda & Hadač in Hadač & Šmarda 1944

Ass. *Riccio sorocarpace-Pseudocrossidietum hornschuchiani* Frey, Herrstadt & Kürschner 1990

[Dilek Peninsula National Park, Aydın Dağları / Aydın (KÜRSCHNER *et al.* 2007)]

All.: *Tortellion flavovirentis* Guerra ex Guerra & Puche 1984

Ass. *Tortello flavovirentis-Bryetum dunensis* Guerra et Puche 1984

[Manavgat Area / Antalya (BRULLO *et al.* 1991)]

All.: *Mannion androgynae* Ros & Guerra 1987

Ass. *Riccio nigrellae-Oxymitretum paleaceae* Ros & Guerra 1987

[Beşparmak Mountain / Muğla (KÜRSCHNER & PAROLLY 1999b); Dilek Peninsula National Park, Aydın Dağları / Aydın (KÜRSCHNER *et al.* 2007)]

Order: *Funarietalia hygrometricae* von Hübschmann 1957

All.: *Phascion cuspidati* Waldheim ex v. Krusenstjerna 1945

Ass. *Riccio sorocarpace-Funarietum fascicularis* Lecointe 1978

[Dilek Peninsula National Park, Aydın Dağları / Aydın (KÜRSCHNER *et al.* 2007)]

Ass. *Epipterygio tozeri-Riccietum frostii* Kürschner & Parolly 1999

[Beşparmak Mountain / Muğla (KÜRSCHNER & PAROLLY 1999)]

Class: *Pleurochaeto squarrosae-Abietinelletea abietinae* Marstaller 2002

Order: *Pleurochaeto squarrosae-Abietinelletea abietinae* Marstaller 2002

All.: *Homalothecio aurei-Pleurochaetion squarrosae* (Ros et Guerra 1987) Marst. 1993

Ass. *Pleurochaeto squarrosae-Tortuletum ruralis* Brullo, Lo Giudice et Privitera 1991

[Karabiga Area/ Çanakkale (BRULLO *et al.* 1991)]

Subass. - *campylietosum chrysophylli* Brullo, Lo Giudice & Privitera 1991 ex Marstaller 2006

(Syn: *Pleurochaeto squarrosae-Tortuletum ruralis* Brullo, Lo Giudice et Privitera 1991

(subass. of *-Campylium chrysophyllum* nom. inval. (Art. 3h) Brullo, Lo Giudice & Privitera 1991)

Subass.- *rhynchostegietosum megapolitani* Brullo, Lo Giudice & Privitera 1991 ex Marstaller 2006

(Syn: *Pleurochaeto squarrosae-Tortuletum ruralis* Brullo, Lo Giudice & Privitera 1991 subass. of *-Rhynchostegium megapolitanum* nom. inval. (Art. 3h) Brullo, Lo Giudice & Privitera 1991)

Ass. *Homalothecio aurei-Pleurochaetium squarrosae* Ros & Guerra 1987

Subass. - *bartramietosum strictae* Kürschner & Parolly 1999

[Beşparmak Mountain / Muğla (KÜRSCHNER & PAROLLY 1999b)]

Associations and communities of uncertain syntaxonomic rank and position:

- *Anthoceros punctatus-Oxyrhynchium hians* community Walther & Leblebici 1969

[Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969)]

- *Fissidens viridulus-Rhynchostegiella curviseta* community Walther & Leblebici 1969

[Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969)]

- *Metzgeria furcata-Fabronia pusilla* ass. Walther 1969

[Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969)]

- *Targionia hypophylla-Funaria calcarea* ass. Walther 1969

[Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969)]

Epiphytic communities

Class: *Cladonio digitatae-Lepidozietea reptantis* Jezek & Vondráček 1962

Order: *Lophocoleetalia heterophyllae* Barkman 1958

All.: *Nowellion curvifoliae* Philippi 1965

Ass. *Dicranetum taurici* Neumayr ex von Hübschmann 1978

(Syn.: *Tetraphido pellucidae-Orthodicranetum stricti* Hébrard 1973)

[Abant Mountains / Bolu (ALATAŞ & UYAR 2017)]

Order: *Brachythecietalia rutabulo-salebrosi* Marstaller 1987

All.: *Bryo capillaris-Brachythecion rutabuli* Lecointe 1975

Ass. *Plagiothecium neglecti* Ricek 1968

(Syn.: *Plagiothecio nemoralis-Brachythecietum velutini* Vadam 1990)

[Göbü village / Zonguldak (ALATAŞ *et al.* 2015a)]

Order: *Dicranetalia scoparii* Barkman 1958

All.: *Dicrano scoparii-Hypnion filiformis* Barkman 1958

Ass. *Dicrano scoparii-Hypnetum filiformis* Barkman 1958

[Örümcek forests / Gümüşhane (ALATAŞ & BATAN 2015)]

Subass. -*sanionietosum uncinatae* Grgic 1983

[Örümcek forests / Gümüşhane (ALATAŞ & BATAN 2015)]

Class: *Neckeretea complanatae* Marstaller 1986

Order: *Neckeretalia complanatae* Jezek & Vondráček 1962

All.: *Neckerion complanatae* Smarda & Hadac ex Klika 1948 nom. cons.

Ass. *Pterigynandretum filiformis* Hilitzer 1925

[Abant Mountains / Bolu (ALATAŞ & UYAR 2017); Samanlı Mountains / Sakarya-Kocaeli-Yalova-Bursa (CAN GÖZCÜ 2017); Akyazı District / Sakarya (EZER *et al.* 2018)]

Subass. -*leucodontetosum sciuroidis* Grgić 1983

[Akyazı District / Sakarya (EZER *et al.* 2018)]

Ass. *Homalothecio sericei-Porelletum platyphyllae* Storm. ex Duda 1951

[Abant Mountains / Bolu (ALATAŞ & UYAR 2017); North Amanos Mountains / Hatay (KARA 2008); Samanlı Mountains / Sakarya-Kocaeli-Yalova-Bursa (CAN GÖZCÜ 2017)]

Subass. -*leucodontetosum sciuroidis* Marstaller 1992

[Abant Mountains / Bolu (ALATAŞ & UYAR 2017); North Amanos Mountains / Hatay (KARA 2008); Samanlı Mountains / Sakarya-Kocaeli-Yalova-Bursa (CAN GÖZCÜ 2017)]

Ass. *Anomodontetum attenuati* (Barkman 1958) Peciar 1965

[Amanos Mountains / Hatay (KARA *et al.* 2011); South Amanos Mountains / Hatay (EZER 2008)]

Subass. -*homalietosum trichomanoidis* Peciar 1965

[South Amanos Mountains / Hatay (EZER 2008)]

Ass. *Anomodonto viticulosi-Leucodontetum sciuroidis* Wisniewski 1930

(Syn.: *Anomodonto longifolii-Isothecietum myuri* Lipmaa 1935 p.p., *Neckeretum complanatae* Waldh. 1944, *Neckero-Anomodonteum viticulosi* Szafran 1955, *Neckeretum crispae* PHIL. 1965, *Neckero complanatae-Eurhynchietum striatuli* Cor. Ped. 1988)

[North Amanos Mountains / Hatay (DÜZENLİ *et al.* 2009); South Amanos Mountains / Hatay (EZER 2008); Beldibi and Babadağ Forests / Devrek-Zonguldak (ALATAŞ *et al.* 2015b); Akyazı District / Sakarya (EZER *et al.* 2018)]

Subass. -*palamocladietosum euchloronis* Kürschner & Düzenli 2009

[North Amanos Mountains / Hatay (DÜZENLİ *et al.* 2009); South Amanos Mountains / Hatay (EZER 2008)]

Ass. *Neckeretum crispae* (Kaiser 1926) Herzog & Höffler 1944

(Syn.: *Anomodonto viticulosi-Leucodontetum sciuroidis* Wisniewski 1930)

[Beldibi and Babadağ Forests / Devrek-Zonguldak (ALATAŞ *et al.* 2015b); South Amanos Mountains / Hatay (EZER 2008)]

Ass. *Neckero-Anomodontetum viticulosi* (Wiśniewski 1929) Philippi 1965

[Sakarya-Kocaeli-Yalova-Bursa (CAN GÖZCÜ 2017)]

Subass. -*anomodontetosum viticulosi* Marstaller 1980

Ass. *Palamocladio euchloronis-Leucodontetum immersi* Kürschner, Kirmaci & Parolloy 2012

[Pazar, Çayeli / Rize; Borçka / Artvin; Ayancık / Sinop; Dernekpazarı, Of / Trabzon (KÜRSCHNER *et al.* 2012)]

Subass. -*neckeretosum crispae* Kürschner, Kirmaci & Parolloy 2012

[Firtina Valley, Pazar / Rize; Borçka / Artvin (KÜRSCHNER *et al.* 2012)]

Ass. *Pseudoleskeello nervosae-Leucodontetum immersi* Kürschner, Kirmaci & Parolloy 2012

[Kaçkar Mountains / Rize; Borçka / Artvin; Ayancık / Sinop; Dernekpazarı, Of / Trabzon (KÜRSCHNER *et al.* 2012)]

Community: *Neckera complanata-Palamocladium euchloron*

[South Amanos Mountains / Hatay (EZER 2008)]

Class: *Frullanio dilatatae-Leucodontetea sciuroidis* Mohan 1978

Order: *Orthotrichetalia* Hadač in Klika & Hadač 1944

All.: *Ulotion crispae* Barkman 1958

Ass. *Lewinskyetum affinis* Alataş & Uyar 2017

[Abant Mountains / Bolu (ALATAŞ & UYAR 2017); Sakarya-Kocaeli-Yalova-Bursa (CAN GÖZCÜ 2017); Akyazı District / Sakarya (EZER *et al.* 2018)]

Ass. *Orthotrichetum lyellii* Allorge ex Lecoinge 1975

(Syn.: *Tortulo-Orthotrichetum lyellii* Walther 1979 nom. inval.)

[Nif Mountain / İzmir (WALTHER 1979); Abant Mountains / Bolu (ALATAŞ & UYAR 2017); North Amanos Mountains / Hatay (KARA 2008); Sakarya-Kocaeli-Yalova-Bursa (CAN GÖZCÜ 2017); Akyazı District / Sakarya (EZER *et al.* 2018)]

Ass. *Orthotrichetum pallentis* Ochsner 1928

[Boraboy and Destek forests / Amasya (ALATAŞ *et al.* 2017); Akyazı District / Sakarya (EZER *et al.* 2018)]

Subass. -*Isothecietosum alopecuroidis* Alataş, Ezer, Uyar & Ören 2018

[Akyazı District / Sakarya (EZER *et al.* 2018)]

Ass. *Orthotrichetum striati* (Gams 1927) Marstaller 1985

(Syn.: *Orthotrichetum speciosi* Barkman 1958)

[Quercus vulcanica forests / Isparta-Konya (KÜRSCHNER *et al.* 2006); Abant Mountains / Bolu (ALATAŞ & UYAR 2017); North Amanos Mountains / Hatay (KARA 2008); South Amanos Mountains / Hatay (EZER 2008); Sakarya-Kocaeli-Yalova-Bursa (CAN GÖZCÜ 2017); Boraboy and Destek forests / Amasya (ALATAŞ *et al.* 2017); Akyazı District / Sakarya (EZER *et al.* 2018)]

Ass. *Pylaisietum polyanthae* Felföldy 1941

[Göbü village / Zonguldak (ALATAŞ *et al.* 2015a); Fener area / Zonguldak (ALATAŞ & BATAN 2014)]

Subass. -*lophocoleetosum heterophyllae* Kara, Ezer & Alataş 2015

[Göbü village / Zonguldak (ALATAŞ *et al.* 2015a)]

Ass. *Orthotricho straminei-Pterigynandretum filiformis* Gillet 1986

[Beldibi and Babadağ Forests / Devrek-Zonguldak (ALATAŞ *et al.* 2015b); Abant Mountains / Bolu (ALATAŞ & UYAR 2017); Sakarya-Kocaeli-Yalova-Bursa (CAN GÖZCÜ 2017)]

All.: *Syntrichion laevipilae* Ochsner 1928

Ass. *Syntrichietum laevipilae* Ochsner 1928

(Syn.: *Uloto phyllanthae-Tortuletum laevipilae* Barkman 1958)

[Sakarya-Kocaeli-Yalova-Bursa (CAN GÖZCÜ 2017)]

Subass. -*orthotrichetosum lyellii* Duv. & Lecointe 1975

[Sakarya-Kocaeli-Yalova-Bursa (CAN GÖZCÜ 2017)]

Ass. *Syntrichietum papillosoe* Jaeggli 1934

(Syn.: *Orthotrichetum fallcis* v. Krusenstjerna 1945, *Syntrichietum laevipilae* Ochsner 1928, *Fabronietum pusillae* Ochsner 1936)

[Fener area / Zonguldak (ALATAŞ & BATAN 2014)]

All.: *Fabronion pusillae* (Barkman 1958) Gil & Guerra 1981

Ass. *Cryphaetum arborae* Barkman 1958

[Bucak Sweetgum Forest Nature Park and Karacaören Dams / Burdur (ALATAŞ *et al.* 2016)]

Subass. -*orthotrichetosum diaphani* Lecointe 1975

Ass. *Orthotricho franzoniani-Antitrichietum breidleri-anae* Walther 1969

(Syn.: *Orthotricho lyellii-Antitrichietum californicae* All. ex Varo *et al.* 1977)

[Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969); Nif Mountain / İzmir (WALTHER 1979); Yılanlı Mountain / Muğla (KÜRSCHNER 1999)]

Ass. *Scorpiurio sendtneri-Zygodontetum vulgare* Walther 1975

[Marmaris-Köyceğiz / Muğla (WALTHER 1975; KÜRSCHNER *et al.* 1998); South Amanos Mountains / Hatay (EZER 2008)]

Ass. *Brachythecio olympici-Dicranoweisietum cirrate* Walther 1969

(Syn.: *Dicranoweisio cirratae-Brachythecietum olympici* Walther 1979, nom. invers. İllegit., cf. Barkman *et al.* 1986, CPN Art. 29)

[Yamanlar Mountain / İzmir (WALTHER & LEBLEBICI 1969); Nif Mountain / İzmir (WALTHER 1979); Yılanlı Mountain, Akyaka Area, Kiran Mountain / Muğla; Honaz Mountain / Denizli (KÜRSCHNER 1999)]

Ass. *Pterigynandro filiformis-Orthotrichetum speciosi* Guerra 1982

[Abant Mountains / Bolu (ALATAŞ & UYAR 2017); North Amanos Mountains / Hatay (KARA 2008); Sakarya-Kocaeli-Yalova-Bursa (CAN GÖZCÜ 2017)]

Ass. *Leptodonto smithii-Leucodontetum sciuroidis* Privitera & Puglisi 1997

(Syn.: *Leptodontetum smithii* Jaggi 1933 nom. inval.)

[Bucak Sweetgum Forest Nature Park and Karacaören Dams / Burdur (ALATAŞ *et al.* 2016); North Amanos Mountains / Hatay (KARA 2008); South Amanos Mountains / Hatay (EZER 2008)]

Subass. -*cinclidotetosum mucronati* Kärchner, Tonguç & Yayıntaş 1998

Associations and communities of uncertain syntaxonomic rank and position:

- *Rhynchostegiella* var. *litorea-Scorpiurium circinatum* ass. Walther 1975

(Syn.: *Scorpiurietum circinati* Giacomini 1951)

[Marmaris-Köyceğiz / Muğla (WALTHER 1975)]

- *Tortulo-Brachythecietum condensatae* ass. Walther 1979

[Nif Mountain / İzmir (WALTHER 1979)]

- *Hypnum cupressiforme - Anomodon viticulosus* Ezer 2017

[Kadıncık Valley / Mersin (EZER 2017)]

- *Palamocladium euchloron - Alleniella complanata* Ezer 2017

[Kadıncık Valley / Mersin (EZER 2017)]

- *Porella platyphylla - Homalothecium sericeum* Ezer 2017

[Kadıncık Valley / Mersin (EZER 2017)]

- *Leucodon sciuroides - Anomodon viticulosus* Ezer 2017

[Kadıncık Valley / Mersin (EZER 2017)]

- *Leptodon smithii - Zygodon rupestris* Ezer 2017

[Kadıncık Valley / Mersin (EZER 2017)]

In conclusion, we note that the present checklist includes 41 associations and 19 subassociations belonging to 19 alliances, 12 orders, and, eight bryosociological classes. It also includes six communities and 17 phytosociological units which have unknown status.

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Botanica SERBICA



REZIME

Pregled vegetacije mahovina u Turskoj

Mevlüt ALATAŞ

Uradu je prikazana lista vegetacijskih jedinica mahovina u Turskoj, rađena prema metodologiji Braun-Blanquet-a. Ukupno je utvrđeno prisustvo 41 asocijacije i 19 subasocijacija, svrstanih u 19 sveza, 12 redova i 8 klasa. Štaviše, zabeleženo je i 6 zajednica i 17 jedinica nepoznatog fitocenološkog statusa. Briološke vegetacijske jedinice su prikazane u skladu sa njihovim akvatičnim, terestičnim i epifitskim karakterom, zajedno sa njihovim lokalitetima i sinonimima.

KLJUČNE REČI: mahovine, briocenologija, ček-lista, Turska, vegetacija.

