

Peterka T., Hájková P., Jiroušek M., Hinterlang D., Chytrý M., Aunina L., Deme J., Lyons M., Seiler H., Zechmeister H., Apostolova I., Beierkuhnlein C., Bischof M., Biță-Nicolae C., Brancaleoni L., Čušterevska R., Dengler J., Didukh Ya., Dítě D., Felbaba-Klushyna L., Garbolino E., Gerdol R., Iemelianova S., Jansen F., Juutinen R., Kamberović J., Kapfer J., Klímová B., Knollová I., Kolari T. H. M., Lazarević P., Luostarinen R., Mikulášková E., Milanović Đ., Miserere L., Moeslund J. E., Molina J. A., Pérez-Haase A., Petraglia A., Puglisi M., Ruprecht E., Šmerdová E., Spitale D., Tomaselli M., Vassilev K. & Hájek M. (2023) Formalized classification of the class *Montio-Cardaminetea* in Europe: towards a consistent typology of spring vegetation. – *Preslia* 95: 347–383.

Supplementary Data S9. Examples of associations for individual alliances.

The associations were compiled based on literature review (Sørensen 1942, Nordhagen 1943, Hadač 1971, 1983, Hinterlang 1992, Zechmeister & Mucina 1994, Coldea 1997, Marhold & Valachovič 1998, Valachovič 2001, Hájek et al. 2005, Hájková & Hájek 2011). The associations are listed here for better interpretation and application of the proposed classification scheme. However, the list should not be understood as definite or complete syntaxonomical solution.

Montio-Cardaminetea Br.-Bl. et Tx. ex Klika et Hadač 1944

1. *Cardamino-Chryso-splenietalia* Hinterlang 1992

1.1 *Caricion remotae* Kástner 1941

Caricetum remotae Kástner 1941

Cardamino-Chryso-splenietum alternifolii Maas 1959

Pellio epiphyllae-Chryso-splenietum oppositifolii Maas 1959

Trichocoleeto-Sphagnetum Maas 1959

2. *Cardamino-Cratoneuretalia* Maas 1959

2.1 *Cratoneurion commutati* Koch 1928

Cratoneuretum falcati Gams 1927

Cratoneuro-Saxifragetum aizoides Nordhagen 1936

2.2 *Lycopodo europaei-Cratoneurion commutati* Hadač 1983

Brachythecio rivularis-Cratoneuretum Dierssen 1973 [*Pellio endiviifoliace-Cratoneuretum commutati* Rivola 1982]

Eucladietum verticillati Allorge ex Braun 1968

3. *Montio-Cardaminetalia* Pawłowski et al. 1928

Group A: Oligotrophic to mesotrophic submontane and montane springs and flushes on silty to sandy sites

3.1 *Epilobio nutantis-Montion* Zechmeister in Zechmeister et Mucina 1994

Montio-Philonotidetum fontanae Büker et Tüxen in Büker 1942

Stellario alsines-Montietum fontanae Hinterlang 1992

3.2 *Koenigio-Microjuncion* (Sørensen 1942) Hadač 1971

Equiseto palustris-Sedetum villosi Hadač 1971

Koenigio-Sedeum villosi Sørensen 1942

Group B: Mesotrophic and productive subalpine and alpine springs

3.3 *Cratoneuro filicini-Calthion laetae* Hadač 1983

Angelico pancicii-Calthetum laetae Hájek et al. 2005

Brachythecio rivularis-Cardaminetum balcanicae Marhold & Valachovič 1998

Calthetum laetae Krajina 1933

Cardaminetum opicii Szafer et. al. 1923 [*Brachythecio rivularis-Cardaminetum opicii* (Krajina 1933) Hadač 1983]

Group C: Cold oligotrophic subalpine and alpine springs

3.4 *Anthelion julaceae* Shimwell 1972

Sphagno auriculati-Anthelietum julaceae Shimwell 1972

3.5 *Mniobryo-Epilobion hornemanii* Nordhagen 1943

Mniobryo-Epilobietum hornemanni Nordhagen 1943

3.6 *Philonotidion seriatae* Hinterlang 1992

Cratoneuro-Philonotidetum seriatae Geissler 1976

Crepido paludosae-Philonotidetum seriatae Hadač et Váňa 1971

Montio-Bryetum schleicheri Br.-Bl. 1926

Saxifragetum aquaticae Br.-Bl. 1948

Saxifragetum stellaris Deyl 1940

3.7 *Swertio perennis-Anisothecion squarrosi* Hadač 1983

Allietum sibirici Šmarda 1950

Swertietum perennis Zlatník 1928

References:

- Coldea G. (ed.) (1997): Les associations végétales de Roumanie. Tome 1. Les associations herbacées naturelles. – Presses Universitaires de Cluj, Cluj-Napoca.
- Hadač E. (1971): The vegetation of springs, lakes and “flags” of Reykjanes Peninsula, SW. Iceland (Plant communities of Reykjanes Peninsula, Part 3). – *Folia Geobotanica et Phytotaxonomica* 6: 29–41.
- Hadač E. (1983): A survey of plant communities of springs and mountain brooks in Czechoslovakia. – *Folia Geobotanica et Phytotaxonomica* 18: 339–361.

- Hájek M., Tzonev R., Hájková P., Ganeva A. & Apostolova I. (2005): Plant communities of the subalpine mires and springs in the Vitosha Mt. – *Phytologia Balcanica* 11: 193–205.
- Hájková P. & Hájek M. (2011): Vegetace pramenišť (*Montio-Cardaminetea*). – In: Chytrý M. (ed.), Vegetace České republiky 3. Vodní a mokřadní vegetace, p. 580–611, Academia, Praha.
- Hinterlang D. (1992): Vegetationsökologie der Weichwasserquellgesellschaften zentraleuropäischer Mittelgebirge. – *Crunoecia* 1: 1–117.
- Marhold K. & Valachovič M. (1998): Coenotic differentiation of the infraspecific taxa of *Cardamine amara* (*Brassicaceae*) in Central Europe and the Balkna Peninsula. – *Thaiszia, Journal of Botany* 8: 147–161.
- Nordhagen R. (1943): Sikilsdalen og Norges fjellbeiter. En plantesosiologisk monografi. – *Bergens Museums Skrifter* 22: 1–607.
- Sørensen T. (1942): Untersuchungen über die Therophytengesellschaften auf den isländischen Lehmflächen („Flags“). – *Det Kongelige Danske Videnskabernes Selskab, Biologiske Skrifter* 2: 1–30.
- Valachovič M. (2001): *Montio-Cardaminetea* Br.–Bl. et R. Tx. ex Klika et Hadač 1944. – In: Valachovič M. (ed.), Rastlinné spoločenstvá Slovenska 3. Vegetácia mokradí, p. 299–344, Veda, Bratislava.
- Zechmeister H. & Mucina L. (1994): Vegetation of European springs: High-rank syntaxa of the *Montio-Cardaminetea*. – *Journal of Vegetation Science* 5: 385–402.