

**Dančák M., Duchoslav M. & Trávníček B. (2012): Taxonomy and cytogeography of the *Molinia caerulea* complex in central Europe. – *Preslia* 84: 351–374.**

Electronic Appendix 1. – List of *Molinia* localities accompanied by brief descriptions of habitats, geographical coordinates, date of sampling, collector's name, DNA-ploidy levels and chromosome numbers (only when counted), and number of plants analysed of the populations used in this study (in parentheses). Tetraploid and hexaploid plants represent taxon *Molinia caerulea* (L.) Moench, octoploid plants represent taxon *M. arundinacea* subsp. *freyi* Dančák, and dodecaploid plants represent taxon *M. arundinacea* Schrank subsp. *arundinacea*. Localities not provided with a collector's name were examined by the first author (M. Dančák). Populations whose plants were used as standards in flow-cytometric analyses are marked with a section sign ("§"). Populations used for the biometric study are marked with an asterisk. Abbreviations of countries: AT – Austria, BG – Bulgaria, CZ – Czech Republic, DE – Germany, EE – Estonia, ES – Spain, FR – France, GR – Greece, HR – Croatia, HU – Hungary, IT – Italy, NO – Norway, PL – Poland, RO – Romania, RU – Russia, SE – Sweden, SI – Slovenia, SK – Slovakia.

**AT**, NW Austria (Oberösterreich), N bank of Vorderer Gosausee lake, S of the Gosau village, 47°31'57"N, 13°30'04"E, 2001, coll. A. Pečinka & Z. Dočkalová, 4x (3); AT, NW Austria (Salzburg), Unterach am Attersee, S of the village, 47°47'33"N, 13°28'49"E, 2010, 4x (6); AT, NW Austria (Oberösterreich), SE of Weissenbach am Attersee village, Pfafenberg, 47°46'38"N, 13°36'02"E, 2001, 2010, 4x (3); AT, NW Austria (Oberösterreich), W slope of Traunstein peak, S of the Gmunden town, 47°52'08"N, 13°49'09"E, 2002, 12x (1); AT, E Austria (Burgenland), forest S of Lockenhaus village, SW of Oberpullendorf town, 47°23'02"N, 16°25'26"E, 2011, coll. B. Trávníček, 12x (3). **BG**, Balkan Range (Central), Anton village, close to the path to Bolovan peak, 1040 m a. s. l., 42°44'48"N, 24°16'51"E, 2005, coll. M. Hájek & P. Hájková, 8x (1); BG, Pirin Mts, Razlozka Kotlovina basin, Krusheto site, between Predel saddle and the town of Razlog, 41°51'53"N, 23°22'44"E, 2004, coll. M. Hájek & P. Hájková, 4x (1); BG, Podbalkan, distr. Kazanlak (Kazanlak basin), eastern margin of the Dunavci village, 42°39'30"N, 25°16'46"E, 2005, coll. M. Hájek & P. Hájková, 4x (1); BG, Rhodopi Mts (Central), between Smolyan and Smolyanski lakes, left from the road, 41°36'23"N, 24°40'05"E, 2005, coll. M. Hájek & P. Hájková, 4x (1); BG, Rhodopi Mts (Central), Smolyan lakes, 1173 m a. s. l., 2.3 km SSW from peak Snezhanka (1926 m), 41°37'N, 24°41'E, 2001, coll. M. Hájek & P. Hájková, 8x (1); BG, Rhodopi Mts (Central), Smolyan, ca. 1 km SE from the Smolyanski lakes chalet, 41°37'01"N, 24°40'31"E, 2005, coll. M. Hájek & P. Hájková, 4x (1); BG, Rhodopi Mts (Central), Chairski lakes, 1500 m, 41°38'N, 24°28'E, 2001, coll. M. Hájek & P. Hájková, 8x (1); BG, Rhodopi Mts (Western), Tsigov Chark settlement, spring fens at S margin of the Batak damp, 7 km W of Batak town, 1100 m a. s. l., 41°56'53"N, 24°09'31"E, 2005, coll. M. Hájek & P. Hájková, 8x (1); BG, Sofia region: Plana Mt, Zheleznitsa village, spring fen and moist meadows 1 km E from the village, 980 m a. s. l., 42°32'12"N, 23°22'44"E, 2005, coll. M. Hájek, P. Hájková & I. Apostolova, 8x (1); BG, Sredna Gora Mts (Western), 0.6 km SE from peak Golyam Bogdan, in the direction to peak Mali Bogdan, 42°36'08"N, 24°28'11"E, 2002, coll. M. Hájek & P. Hájková, 8x (1); BG, Stara Planina Mts (Central), Jasenovovo village, moist rocks in calcareous canyon NW from village, 42°41'40"N, 25°18'46"E, 2005, coll. M. Hájek & P. Hájková, 4x (1); BG, Stara Planina Mts (Central), between Vasil Levski and Gavrashtica villages, 42°38'21"N, 24°55'23"E, 2005, coll. M. Hájek & P. Hájková, 4x (1); BG, Stara Planina, Vezhen-Teteven part, SW from Vezhen peak, brook valley Vartopa, 42°43'48"N, 24°22'17"E, 2002, coll. M. Hájek & P. Hájková, 8x (1); BG, Znepole region, Godetch, close to the Tzraklevtzi village, 796 m a. s. l., 23°09'10"N, 42°57'10"E, 2006, coll. M. Hájek & P. Hájková, 8x (1); BG, Znepole region, Komshtica, between village and Srebrna reka valley, 1085 m a. s. l., 43°08'52"N, 23°00'13"E, 2006, coll. M. Hájek & P. Hájková, 8x (1). **CZ**, W Bohemia, Krušné Hory Mts, Velký močál peat bog NNE of Přebuz village, NE of Kraslice town, 50°23'49"N, 12°38'00"E, 2000, coll. M. Hájek & P. Hájková, 4x (1); \*CZ, W Bohemia, Doupovské vrchy Mts, pine forest N of Mnichov village, NE of Mariánské Lázně town, 50°03'00"N, 12°46'35"E, 1998, coll. J. Novosadová, 4x (2n = 36) (1) §; \*CZ, NW Bohemia, N of Jetřichovice village, NE of Děčín town, 50°52'50"N, 14°23'48"E, 1999, coll. V. Hadincová, 4x (1); CZ, N Bohemia, N bank of Máchovo jezero fishpond, NE of Staré Splavy village, 50°35'47"N, 14°38'42"E, 2010, 4x (5); CZ, N Bohemia, Krkonoše Mts, Luční hora Mt, NNE of Vrchlabí town, 50°43'36"N, 15°41'07"E, 1999, coll. K. Vincencová, 4x (1); CZ, S Bohemia, S of Mydlovary village, NW of Hluboká nad Vltavou town, 49°04'53"N, 14°21'19"E, 2003, 12x (1); CZ, S Bohemia, forest track N of Borkovice village, SW of Soběslav town, 49°13'58"N 14°38'18"E, 2010, coll. J. Buranský, 4x (4); CZ, S Bohemia, NNE of Mažice village, NW of Veselí nad Lužnicí town, 49°13'52"N, 14°37'54"E, 2003, 4x (1); CZ, S Bohemia, Borkovická blata peat bog SSW of Vlastiboř village, WSW of Soběslav town, 49°14'21"N, 14°37'35"E, 2000, coll. M. Hájek & P. Hájková, 4x (1); CZ, S Bohemia, N of Dráčov village, S of Soběslav town, 49°14'02"N, 14°42'43"E, 2001, coll. M. Hájek & P. Hájková, 4x (1); CZ, S Bohemia, S of Libenice village, NNE of Jistebnice town, 49°31'25"N, 14°34'13"E, 2001, coll. M. Hájek & P. Hájková, 4x (1); CZ, S Bohemia, forest track W of Lhenice village, E of Prachatice town, 48°59'39"N 14°08'28"E, 2010, coll. J. Buranský, 4x (2); CZ, S Bohemia, between Brloh village and Kuklov settlement, SE of Prachatice town, 48°55'52"N 14°11'43"E, 2003, coll. M. Dančák, 2010, coll. J. Buranský, 4x (5), 12x (1); CZ, S Bohemia, W of Vrábče village, SW of České Budějovice town, 48°54'57"N, 14°21'20"E, 2003, 4x (1); CZ, S Bohemia, WSW of Chvalšiny village, NW of Český Krumlov town, 48°50'60"N, 14°11'07"E, 2003, 4x (1); CZ, S Bohemia, wet pine forest near Hamry settlement, NW of Křemže village, N of Český Krumlov town, 48°55'11"N 14°16'49"E, 2010, coll. J. Buranský, 4x (4); CZ, S Bohemia, pine forests E of Holubov village, N of Český Krumlov town, 48°53'36"N 14°20'21"E, 2010, coll. J. Buranský, M. Dančák 4x (5), 12x (1); CZ, S Bohemia, bank of Horusický rybník fishpond SE of Horusice village, S of Veselí nad Lužnicí town, 49°09'07"N, 14°41'21"E, 2000, coll. M. Hájek & P. Hájková, 4x (1); \*CZ, S Bohemia, S bank of Zábřatský rybník fishpond SW of Zábřatí village, NW of Lomnice nad Lužnicí town, 49°06'04"N, 14°40'47"E, 2000, 4x (2); \*CZ, S Bohemia, Bor, Červené blato peat bog, SW of Lomnice nad Lužnicí town, 48°51'47"N, 14°48'33"E, 1999, coll. J. Novák, 2010, coll. M. Dančák, J. Buranský 4x (5); CZ, S Bohemia, pine forest WSW of Bor village, SW of Lomnice nad Lužnicí town, 48°52'47"N 14°48'04"E, 2010, coll. J. Buranský, 4x (2), 6x (1); CZ, S Bohemia, E periphery of Bor village, SW of Lomnice nad Lužnicí town, 48°53'01"N 14°48'23"E, 2010, coll. J. Buranský, 4x (1); CZ, S Bohemia, pine forest S of Bor village near Jiřikovo údolí settlement, SW of Lomnice nad Lužnicí town, 48°51'18"N, 14°48'05"E, 12x (1); CZ, S Bohemia, bank of Dvořiště fishpond, SW of Lomnice nad Lužnicí town, 49°04'12"N, 14°38'58"E, 2001, coll. M. Hájek & P. Hájková, 4x (1); CZ, S Bohemia, forest track W of Majdalena village, SE of Třeboň town, 48°57'05"N 14°49'28"E, 2010, coll. J. Buranský, 4x (3); \*CZ, S Bohemia, Žofinka peat bog SSW of Dvory nad Lužnicí village, ENE of Nové Hrady town, 48°48'56"N, 14°52'53"E, 1999, coll. J. Novák, 4x (1); CZ, S Bohemia, bank of Vltava river, E of Vyšší Brod town, 48°37'04"N, 14°20'35"E, 2003, 4x (1); CZ, S Bohemia, forest S of Nová Ves village, SE of České Budějovice town, 48°54'59"N, 14°31'50"E, 2011, coll. B. Trávníček, 4x (4), 12x (2); CZ, S Bohemia, Dáblík nature reserve N of Keblany village, SW of Trhové Sviny town, 48°49'40"N, 14°35'44"E, 2000, coll. Z. Otýpková, 4x (1); CZ, S Bohemia, bank of Matenský rybník fishpond NW of Matná village, W of Jindřichův Hradec town, 49°09'05"N, 14°55'54"E, 2001, coll. M. Hájek & P.

Hájková, 4x (1) ; \*CZ, C Bohemia, WNW of Loučeň village, N of Nymburk town, 50°17'37"N, 15°00'04"E, 1999, coll. V. Rybka & J. Novák, 4x (1) ; \*CZ, NE Bohemia, forest margin S of Spyta village, S of Česká Skalice town, 50°22'46"N, 16°02'43"E, 1998, coll. F. Krahulec, 12x (2n = 108; counted by A. Krahulcová; mentioned in Dančák 2002) (4) ; \*CZ, NE Bohemia, Dubno forest NE of Česká Skalice town, 50°24'06"N, 16°04'12"E, 1998, coll. F. Krahulec, 12x (1) ; \*CZ, NE Bohemia, Zbytka mire NE of České Meziříčí village, NW of Opočno town, 50°17'44"N, 16°03'46"E, 1999, coll. F. Krahulec, 12x (1) ; CZ, E Bohemia, SE periphery of Hradec Králové, N of Jáma fishpond, 50°11'17"N, 15°51'33"E, 2011, coll. Michal Hroneš, 4x (4) ; \*CZ, Bohemian-Moravian Highlands, wet meadow and alder wood S of Hojkov village, W of Jihlava town, 49°23'01"N 15°24'47"E, 2000, coll. M. Dančák, 2010, J. Buranský, 4x (5) ; CZ, Bohemian-Moravian Highlands, wet meadow E of Jankov village, W of Jihlava town, 49°25'00"N 15°23'53"E, 2010, coll. J. Buranský, 4x (3) ; CZ, Bohemian-Moravian Highlands, mire meadow ENE of Horní Dubenky village, NW of Telč town, 49°15'54"N 15°20'06"E, 2010, coll. J. Buranský, 4x (2) ; CZ, Bohemian-Moravian Highlands, mire meadow NW of Kaliště village, SE of Počátky town, 49°15'01"N 15°16'45"E, 2010, coll. J. Buranský, 4x (2) ; CZ, E Bohemia, southern slope of Králický Sněžník Mt, N of Velká Morava village, 50°12'08"N, 16°51'21"E, 2002, 4x (4) ; CZ, W Moravia, near Dolní Libochová village, NE of Velké Meziříčí town, 49°24'08"N, 16°10'53"E, 2001, coll. J. Smažilová, 12x (1) ; \*CZ, S Moravia, bank of Dyje river N of Bulhary village, SE of Mikulov town, 48°50'18"N, 16°44'38"E, 1997, coll. B. Trávníček, 12x (1) ; \*CZ, S Moravia, pine wood E of Ratíškovice village, S of Bzenec town, 48°55'42"N, 17°11'48"E, 2000, 12x (1) ; \*CZ, S Moravia, Písečný rybník pond NE of Milotice village, S of Kyjov town, 48°57'53"N, 17°09'10"E, 1998, coll. M. Hájek, 4x (1) ; \*CZ, S Moravia, Hodonín, central part of Důbrava wood, NW of Hodonín town, 48°52'40"N, 17°04'55"E, 2000, 4x (1), 12x (1) ; CZ, S Moravia, Doubravka meadows SW of Lanžhot village, SE of Břeclav town, 48°41'41"N, 16°56'01"E, 1999, coll. J. Novák, 12x (1) ; \*CZ, S Moravia, near Kyjovka river S of Lanžhot, SE of Břeclav town, 48°40'01"N, 16°56'16"E, 1999, coll. J. Novák, 12x (1) ; \*CZ, S Moravia, near confluence of Morava and Dyje river, S of Lanžhot village, 48°37'24"N, 16°56'17"E, 1999, coll. J. Novák, 12x (1) ; CZ, N Moravia, Hrubý Jeseník Mts, slope of Velký Máj Mt, WNW of Bruntál town, 50°02'40"N, 17°12'41"E, 2000, coll. M. Hájek & P. Hájková, 4x (1) ; CZ, N Moravia, Hrubý Jeseník Mts, peat bog S of Rejvíz village, E of Jeseník town, 50°13'13"N, 17°18'07"E, 1998, coll. A. Pečinka, 4x (1) ; CZ, N Moravia, Hrubý Jeseník Mts, northern slope of Vozka Mt, SW of Jeseník town, 50°09'25"N, 17°06'22"E, 2000, coll. M. Hájek & P. Hájková, 4x (1) ; CZ, N Moravia, Hrubý Jeseník Mts, northern slope of Velký Jezerník Mt, S of Jeseník town, 50°06'14"N, 17°12'33"E, 2000, coll. M. Hájek & P. Hájková, 4x (1) ; CZ, N Moravia, Hrubý Jeseník Mts, glacial cirque Velká kotlina, NW of Bruntál town, 50°03'26"N, 17°14'11"E, 1998, coll. A. Pečinka, 4x (1) ; \*CZ, N Moravia (Silesia), oak forest N of Vřesina village, N of Hlučín town, 49°57'30"N, 18°11'59"E, 1997, coll. A. Pečinka, 12x (1) ; CZ, C Moravia, along railway N of Štarnov village, S of Šternberk town, 49°41'44"N, 17°17'13"E, 1997, 12x (1) ; \*CZ, C Moravia, Plané loučky alluvial meadows N of Olomouc town, 49°37'18"N, 17°13'51"E, 1999, 12x (1) ; CZ, C Moravia, Obora forest S of Kotojedy village, S of Kroměříž town, 49°16'01"N, 17°24'15"E, 1998, coll. Z. Otýpková, 12x (1) ; \*CZ, C Moravia, oak-hornbeam forest ESE of Moravské Málkovice village, SE of Vyškov town, 49°15'17"N, 17°06'32"E, 1998, coll. B. Trávníček, 12x (1) ; CZ, SE Moravia, SW periphery of Rokytnice u Slavičína village, SE of Slavičín town, 49°03'44"N, 17°54'20"E, 1999, coll. M. Hájek & P. Burianová, 12x (1) ; CZ, SE Moravia, Hostětín railway station NW of Hostětín village, NE of Bojkovice town, 49°03'12"N, 17°52'15"E, 1998, 12x (1) ; CZ, SE Moravia, E of Hostětín village, NE of Bojkovice town, 49°03'01"N, 17°53'10"E, 1998, coll. Z. Otýpková, 12x (1) ; CZ, SE Moravia, V Krátkých nature reserve N of Vápenice village, S of Bojkovice town, 48°57'29"N, 17°49'31"E, 1998, 12x (1) ; CZ, SE Moravia, W periphery of Březová village, SE of Uherský Brod town, 48°55'44"N, 17°43'54"E, 1998, coll. M. Hájek, 12x (1) ; \*CZ, SE Moravia, SE slope of Studený vrch Mt, N of Březová village, SE of Uherský Brod town, 48°56'12"N, 17°44'17"E, 1998, 12x (2) ; \*CZ, SE Moravia, Porážky meadows S of Horní Němčí village, S of Uherský Brod town, 48°53'10"N, 17°37'14"E, 1998, 12x (3) ; CZ, SE Moravia, N slope of Lesná Mt, W of Strání village, SE of Veselí nad Moravou town, 48°54'17"N, 17°39'13"E, 1998, 12x (1) ; CZ, SE Moravia, S of Korytná village, S of Uherský Brod town, 48°55'45"N, 17°40'04"E, 1998, 12x (1) ; CZ, SE Moravia, Kobylí hlava hill S of Hluk town, 48°57'33"N, 17°31'245"E, 1998, coll. M. Hájek, 12x (1) ; CZ, SE Moravia, W slope of Háj Mt, NE of Velká nad Veličkou village, SE of Veselí nad Moravou town, 48°53'32"N, 17°32'15"E, 1998, 12x (1) ; CZ, SE Moravia, N of Suchovské Mlýny village, SE of Veselí nad Moravou town, 48°53'27"N, 17°34'40"E, 1998, 12x (1) ; CZ, SE Moravia, Jazevčí meadows NE of Javorník nad Veličkou village, SE of Veselí nad Moravou town, 48°52'31"N, 17°34'16"E, 1998, coll. M. Hájek, 12x (1) ; CZ, SE Moravia, E of Suchovské Mlýny village, SE of Veselí nad Moravou town, 48°53'06"N, 17°35'34"E, 1998, 12x (1) ; \*CZ, SE Moravia, Machová meadows S of Javorník nad Veličkou village, SE of Veselí nad Moravou town, 48°49'47"N, 17°31'54"E, 1998, 12x (3) ; \*CZ, SE Moravia, Kazivec creek valley E of Suchov village, ESE of Veselí nad Moravou town, 48°54'18"N, 17°35'59"E, 1998, 12x (3) ; \*CZ, SE Moravia, Čertoryje hill SE of Tvarožná Lhota village, SE of Strážnice town, 48°51'42"N, 17°24'58"E, 1998, 12x (2) ; CZ, E Moravia, oak wood NE of Nemetice village, SW of Valašské Meziříčí town, 49°30'17"N, 17°51'18"E, 2000, 12x (1) ; CZ, E Moravia, Skalka-Polomsko nature reserve N of Rajnochovice village, SW of Valašské Meziříčí town, 49°24'52"N, 17°49'19"E, 1998, 12x (1) ; \*CZ, E Moravia Choryňský mokřad wet meadows SW of Lešná village, NNW of Valašské Meziříčí town, 49°31'08"N, 17°54'17"E, 1998, 12x (1) ; CZ, E Moravia, S periphery of Valašské Meziříčí town, 49°27'32"N, 17°57'55"E, 1998, 12x (1) ; \*CZ, E Moravia, wet meadows S of Vlčková village, NNE of Zlín town, 49°18'04"N, 17°46'01"E, 1997, 12x (1) ; \*CZ, E Moravia, Hutě settlement N of Držková village, NNE of Zlín town, 49°20'01"N, 17°46'37"E, 1997, 12x (1) ; \*CZ, E Moravia, NE of Kateřinice village, NW of Vsetín town, 49°23'13"N, 17°54'08"E, 1998, 12x (3) ; \*CZ, E Moravia, Dubcová Mt. NW of Kateřinice village, NW of Vsetín town, 49°23'00"N, 17°52'41"E, 1997, 12x (1) ; \*CZ, E Moravia, spruce forest S of Hošťálková village, W of Vsetín town, 49°20'18"N, 17°52'03"E, 1997, 4x (2n = 36) (1) §; CZ, E Moravia, NW periphery of Ratiboř village, NW of Vsetín town, 49°22'10"N, 17°53'13"E, 1998, 12x (1) ; \*CZ, E Moravia, northern slope of Drastihlava Mt S of Ratiboř village, WNW of Vsetín town, 49°20'33"N, 17°53'52"E, 1997, 12x (1) ; \*CZ, E Moravia, eastern periphery of Semetín village, NW of Vsetín town, 49°21'07"N, 17°57'18"E, 1997, 12x (2) ; CZ, E Moravia, oak-hornbeam wood W of Vesník village, N of Vsetín town, 49°22'00"N, 17°58'09"E, 1999, 12x (1) ; \*CZ, E Moravia, tufa spring near Vesník village, N of Vsetín town, 49°22'01"N, 17°59'14"E, 1997, 12x (1) ; CZ, NE Moravia, Místecký les forest, S of Frýdek-Místek town, 49°39'22"N, 18°20'10"E, 1998, 12x (2) ; \*CZ, NE Moravia, W of Baška village, S of Frýdek-Místek town, 49°39'06"N, 18°21'14"E, 1998, 12x (1) ; CZ, NE Moravia, at Veřovice railway station in E periphery of Veřovice village, S of Kopřivnice town, 49°32'11"N, 18°07'59"E, 1998, 12x (1) ; \*CZ, E Moravia, S of Hrachovec village, SE of Valašské Meziříčí town, 49°27'05"N, 18°00'18"E, 1998, 12x (2) ; \*CZ, E Moravia, NE of Zašová village, E of Valašské Meziříčí town, 49°29'36"N, 18°03'25"E, 1998, 12x (1) ; CZ, E Moravia, N periphery of Zubří village, NW of Rožnov pod Radhoštěm town, 49°29'18"N, 18°05'19"E, 1998, 12x (1) ; \*CZ, E Moravia, Vsetínské vrchy Mts, E of Hutisko-Solanec village, SE of Rožnov pod Radhoštěm town, 49°25'32"N, 18°14'49"E, 1998, 12x (1) ; \*CZ, E Moravia, W of Lidečkůvka village, N of Valašské Klobouky town, 49°12'22"N, 18°01'57"E, 1997, coll. M. Hájek, 12x (1) ; CZ, E Moravia, Kaňoury nature reserve SE of Nedašova Lhota village, SE of Valašské Klobouky town, 49°06'52"N, 18°06'24"E, 1997, 12x (1). **DE**, NW Germany

(Westfalen), forest W of Auf der Mark village, N of Kierspe town, 51°09'09"N, 07°34'27"E, 2011, coll. B. Trávníček, 4x (6) ; DE, SW Germany, Rhineland, Rhine river valley, W of Grissheim village, 47°52'34"N, 07°33'50"E, 2002 coll. Z. Otýpková, 12x (1) ; DE, S Germany, Isar river valley between Puppling village and Wolfratshausen town, 47°55'30"N, 11°26'29"E, 2002 coll. Z. Otýpková, 4x (1) ; DE, S Germany, Bavarian Alps Mts, N foothill of Brauneck Mt., close to Arzbach village, 47°41'54"N, 11°31'22"E, 2002, coll. Z. Otýpková, 4x (1). **EE**, W Estonia, Saaremaa, Vilsandi national park, SW of the village of Kihelkonna, 58°19'01"N, 21°59'26"E, 2003, 4x (1). **ES**, Andalusia, Sierra Segura y las Villas, Los Negros SE of Segura de la Sierra village, 38°16'14"N, 02°36'37"W, 2006, coll. V. Rybka, 4x (1). **FR**, S France, Gorge du Tarn NE of Le Rozier village, 44°12'45"N, 03°13'38"E, 2006, coll. V. Rybka, 4x (1) ; FR, E France, pasture NW of Dommartin-les-Cuisseaux village, 46°30'55"N, 05°17'47"E, 2004, coll. M. Duchoslav, 12x (1) ; FR, SE France, Grand Canyon du Verdon, bank of Verdon river NNW of the chalet of l'Auberge des Cavaliers, 43°44'33"N, 06°20'34"E, 2000, coll. Z. Otýpková, 4x (1) ; FR, SE France, Massif l'Esterell, near Maure-Vieil monastery, W of La Napoule town, 43°30'42"N, 06°54'27"E, 2000, coll. M. Hájek & P. Hájková, 4x (1) ; FR, SE France - Provence, E of Vescous village, NW of Nice town, 43°52'03"N, 07°03'41"E, 2004, 4x (1) ; FR, SE France, Alpes-Maritimes, Col de Tende mountain pass, N of Tende town, 44°08'55"N, 07°33'39"E, 2000, coll. M. Hájek & P. Hájková, 4x (1). **GR**, Pindos Mts, Tymfi range, between Skamneli and Iliochori villages, 39°56'25"N, 20°52'29"E, 2000, coll. M. Hájek & P. Hájková, 4x (1). **HR**, C Croatia, between Homoljac and Gornji Babin Potok villages, E of the Vrhovine village, 44°47'46"N, 15°34'30"E, 2001, 12x (2) ; HR, C Croatia, Plitvice Lakes, bank of Okrugljak lake, 44°52'24"N, 15°36'00"E, 2001, 12x (1). **HU**, W Hungary, forest road margin SW of Sopron town, 47°39'49"N, 16°33'40"E, 2011, coll. B. Trávníček, 12x (2) ; HU, W Hungary, W periphery of Köszeg town, 47°22'56"N, 16°30'41"E, 2011, coll. B. Trávníček (12x) (2) ; HU, W Hungary, forest N of Rábafüzes village, N of Szentgotthárd town, 47°00'20"N, 16°17'17"E, 2011, coll. B. Trávníček, 12x (1) ; HU, W Hungary, forest margin SE of Kétvölgy village, S of Szentgotthárd town, 46°52'34"N, 16°13'45"E, 2011, coll. B. Trávníček, 12x (3) ; HU, W Hungary, between Orfalu and Apátistvánfalva villages, S of Szentgotthárd town, 46°53'17"N, 16°15'55"E, 4. 2011, coll. B. Trávníček, 12x (3) ; HU, W Hungary, forest S of Farkasfa village, SE of Szentgotthárd town, 46°53'48"N, 16°18'50"E, 2011, coll. B. Trávníček, 12x (3) ; HU, W Hungary, forest margin SSE of Csörötnek village, E of Szentgotthárd town, 46°55'58"N, 16°22'22"E, 2011, coll. B. Trávníček, 12x (2) ; HU, N Hungary, Mátra Mts, forest road margin SE of Parádsasvár village, 47°54'33"N, 19°59'25"E, 12x (4) ; HU, N Hungary, Aggtelek karst, dry meadow SW of Aggtelek village, 48°27'21"N, 20°29'02"E, 8x (2) ; HU, NE Hungary, Zemplén Mts, forest track margin SE of Telikbánya village, 48°27'29"N, 21°23'44"E, 8x (3). **IT**, N Italy, W of Gargnano village, SW of Riva del Garda town, 45°41'18"N, 10°39'09"E, 2004, 12x (1). **NO**, SW Norway, SE of Lysebotn village, E of Stavanger town, 59°01'29"N, 06°48'32"E, 2000, 4x (1). **\*PL**, S Poland, Bór na Czerwonem peatbog, S of Nowy Targ town, 49°27'44"N, 20°02'31"E, 1998, 4x (1) ; PL, E Poland, Lublin region, Bagno Bubnow peatbog ENE of Wielkopole village, 51°20'33"N, 23°16'32"E, 1999, coll. V. Rybka, 4x (1) ; PL, S Poland, pine wood SWS of Tokarnia village (Kielce distr.), 50°44'50"N, 20°25'13"E, 2003, 4x (1) ; PL, SE Poland, Bieszczady Mts, E slope of Rabia skała Mt, S of the Wetlina village, 49°06'12"N, 22°27'34"E, 2002, 8x (1). **\*RO**, N Romania, northern foothill of Tibleş Mts, near Dragomireşti village, SW of Vişeu de Sus town, 47°40'N, 24°19'E, 1999, coll. M. Hájek & P. Burianová, 8x (1) ; RO, N Romania, northern foothill of Tibleş Mts, near Săliştea de Sus village, SW of Vişeu de Sus town, 47°38'N, 24°21'E, 1999, coll. M. Hájek & P. Burianová, 8x (1) ; \*RO, N Romania, northern foothill of Tibleş Mts, near Ieud village, WSW of Vişeu de Sus town, 47°40'N, 24°14'E, 1999, coll. M. Hájek & P. Burianová, 8x (1) ; \*RO, N Romania, northern foothill of Tibleş Mts, near Botiza village, WSW of Vişeu de Sus town, 47°39'N, 24°09'E, 1999, coll. M. Hájek & P. Burianová, 8x (1) ; RO, NE Romania, close to Chiril village S of Câmpulung Moldovenesc town, 47°24'N, 25°34'E, 2002, coll. M. Hájek & P. Hájková, 8x (1) ; RO, NE Romania, close to Paltinu village N of Câmpulung Moldovenesc town, 47°38'N, 25°32'E, 2002, coll. M. Hájek & P. Hájková, 8x (1) ; \*RO, C Romania, northern foothill of Retezat Mts, near Nuşoara village, S of Hunedoara town, 45°28'N, 22°55'E, 1998, coll. Z. Otýpková & P. Burianová, 8x (2n = 72) (1) ; RO, C Romania, northern foothill of Ceahlău Mts, SW of Ceahlău village, NW of Bicaz town, 47°00'N, 25°54'E, 2001, coll. M. Hájek & P. Hájková, 8x (2) ; RO, SW Romania, N margin of Ciclova Montana village, SE of Oraviţa town, 45°01'38.26"N, 21°43'35.57"E, 2000, 8x (1). **RU**, NW Russia, Cola peninsula, Kandalaksha bay, bank of a river ENE of Luvenga village, ESE of Kandalaksha town, 67°07'40"N, 32°49'30"E, 1998, coll. K. Vincencová, 4x (1) ; RU, NW Russia, Cola peninsula, Kandalaksha bay, NW of Luvenga village, ESE of Kandalaksha town, 67°06'50"N, 32°41'37"E, 1998, coll. K. Vincencová, 4x (1). **SE**, SW Sweden, SSE of Tanum village, NNW of Uddevalla town, 58°42'11"N, 11°21'42"E, 2000, 4x (1) ; SE, S Sweden, coastal dunes at Skummeslöv village, S of Halmstad town, 56°27'17"N, 12°54'29"E, 2000, 4x (1). **SI**, NW Slovenia, Julijske Alpe Mts, W foot of Triglav peak, E of Trenta village, 46°22'30"N, 13°48'03"E, 2001, 4x (1) ; SI, NW Slovenia, Julijske Alpe Mts, Vrata valley, Slap Peričnik waterfall SW of Mojstrana village, 46°26'20"N, 13°53'38"E, 2001, 4x (1) ; SI, W Slovenia, ENE of Zatočin village, N of Tolmin town, 46°11'60"N, 13°44'32"E, 2001, 4x (1) ; SI, W Slovenia, Slap Virje waterfall SW of Plužna village, W of Bovec town, 46°20'06"N, 13°30'51"E, 2001, 12x (1) ; SI, S Slovenia, vineyards E of Korte village, S of Izola town, 45°29'36"N, 13°40'32"E, 2001, 12x (1) ; SI, SW Slovenia, S of Šempas village, E of Nova Gorica town, 45°54'57"N, 13°44'15"E, 2001, 12x (1). **SK**, SW Slovakia, southern margin of Malé Leváre village, NNW of Malacky town, 48°29'38"N, 16°58'09"E, 1998, 12x (1) ; \*SK, SW Slovakia, wet meadow S of Zohor village, S of Malacky town, 48°18'17"N, 16°58'16"E, 4x (1), 12x (1) ; SK, SW Slovakia, aspen wood N of Zohor village, S of Malacky town, 48°20'03"N, 16°58'40"E, 1998, 4x (1) ; \*SK, SW Slovakia, meadows S of Závod railway station W of Závod village, N of Malacky town, 48°31'57"N, 17°00'33"E, 1998, 4x (2), 12x (1) ; \*SK, SW Slovakia, northern margin of Plavecký Štvrtok village, S of Malacky town, 48°22'44"N, 17°00'39"E, 2000, 4x (4), 6x (2n = 54) (1) ; SK, SW Slovakia, pine wood near Dolné Valy settlement SE of Borský Svätý Jur village, N of Malacky town, 48°34'11"N, 17°06'06"E, 1998, 4x (2n = 36) (1) § ; \*SK, SW Slovakia, bank of the Rudava river near the village of Studienka, NE of the town of Malacky, 48°30'40"N, 17°07'25"E, 1998, 4x (1) ; SK, SW Slovakia, mire wood Červený rybník W of Lakšárska Nová Ves village, NE of Malacky town, 48°34'40"N, 17°07'33"E, 2000, 4x (1) ; \*SK, SW Slovakia, mire wood N of Lakšárska Nová Ves village, NE of Malacky town, 48°36'04"N, 17°10'06"E, 2000, 4x (2) ; \*SK, SW Slovakia, pine forest SW of Lakšárska Nová Ves village, NE of Malacky town, 48°34'03"N, 17°09'02"E, 1998, 4x (1) ; \*SK, SW Slovakia, Malé Karpaty Mts, Jurské jazero mire, WNW of Svätý Jur village, SW of Pezinok town, 48°15'31"N, 17°09'17"E, 1999, coll. M. Hájek & P. Burianová, 4x (1) ; \*SK, SW Slovakia, Malé Karpaty Mts, Nad Šenkárkou mire, NW of Limbach village, NW of Pezinok town, 48°18'47"N, 17°10'43"E, 1999, coll. M. Hájek & P. Burianová, 4x (1) ; SK, SW Slovakia, Malé Karpaty Mts, bank of Buková dam, SW of Buková village, S of Senica town, 48°32'18"N, 17°22'03"E, 1999, coll. M. Hájek & P. Burianová, 12x (1) ; \*SK, W Slovakia, Biele Karpaty Mts, Šance settlement NW of Moravské Lieskové village, NW of Nové Mesto nad Váhom town, 48°52'17"N, 17°44'21"E, 1997, 12x (1) ; \*SK, W Slovakia, Biele Karpaty Mts, Šance settlement (at international border) NW of Nová Bošáca village, N of Nové Mesto nad Váhom town, 48°54'10"N, 17°45'28"E, 1999, 12x (3) ; SK, W Slovakia, Biele Karpaty Mts, near Palčie settlement NW of Chochoľná village, W of Trenčín town, 48°54'10"N, 17°52'59"E, 1998, coll. M. Perný, 12x (1) ; SK, W Slovakia, Biele Karpaty Mts, near Pod

Tlstou horou settlement NW of Chocholná village, W of Trenčín town, 48°53'02"N, 17°53'29"E, 1998, coll. M. Perný & M. Hájek, 12x (1) ; SK, W Slovakia, Biele Karpaty Mts, meadows NW od Adamovské Kochanovce village, SW of Trenčín town, 48°52'24"N, 17°54'21"E, 1998, coll. M. Perný & M. Hájek, 12x (1) ; \*SK, W Slovakia, Biele Karpaty Mts, spring fen S of Horná Súča village, NNW of Trenčín town, 48°56'50"N, 17°58'35"E, 1998, coll. M. Hájek & K. Devánová, 12x (1) ; \*SK, W Slovakia, Strážovské vrchy Mts, SE periphery of Omšenie village, E of Trenčianske Teplice town, 48°53'59"N, 18°13'57"E, 1998, 12x (1) ; SK, W Slovakia, Strážovské vrchy Mts, S margin of the village of Belušské Slatiny, S of the town of Púchov, 49°01'53"N, 18°20'50"E, 2000, 12x (1) ; \*SK, W Slovakia, Strážovské vrchy Mts, W slope of Rokoš Mt, E of Uhrovské Podhradie village, NE of Bánovce nad Bebravou town, 48°45'58"N, 18°24'28"E, 2000, 12x (3) ; SK, W Slovakia, near the settlement of Müller S of the village of Radobica, SE of the town of Partizánske, 48°32'50"N, 18°30'32"E, 1998, 12x (1) ; SK, W Slovakia, near the settlement of Štiefleje S of the village of Radobica, ESE of the town of Partizánske, 48°34'10"N, 18°30'50"E, 1998, 12x (1) ; \*SK, W Slovakia, oak wood NE of Horná Ves village, ESE of Partizánske town, 48°36'40"N, 18°30'40"E, 2000, 12x (1) ; SK, W Slovakia, Strážovské vrchy Mts, near Vrchteplá village, E of Považská Bystrica town, 49°07'43"N, 18°33'55"E, 2000, coll. M. Hájek & P. Hájková, 12x (1) ; \*SK, S Slovakia, bank of catch-water drain S of Blahová village, NW of Dunajská Streda town, 48°04'16"N, 17°32'09"E, 1998, 4x (1) ; SK, S Slovakia, along railway E of Kútники village, SE of Dunajská Streda town, 47°58'37"N, 17°40'15"E, 1998, 4x (1) ; \*SK, S Slovakia, bank of catch-water drain SE of Čiližská Radvaň village, SW of Veľký Meder town, 47°48'50"N, 17°43'37"E, 1998, 4x (1) ; SK, S Slovakia, near the railway station of the village of Chotín, NE of the town of Komárno, 47°48'23"N, 18°11'40"E, 1999, 4x (1) ; \*SK, S Slovakia, near railway S of Dvory nad Žitavou village, E of Nové Zámky town, 47°58'22"N, 18°14'36"E, 1999, coll. V. Rybka & J. Novák, 4x (2) ; SK, S Slovakia, sand dunes in pine-oak forest N of Čenkovo settlement, NE of Kravany nad Dunajom village, W of Štúrovo town, 47°46'43"N, 18°31'44"E, 1998, 4x (1) ; \*SK, S Slovakia, Štiavnické vrchy Mts, Holý vrch settlement W of Babiná village, N of Krupina town, 48°26'06"N, 19°02'09"E, 1999, 12x (1) ; SK, NW Slovakia, W of Mútnianská Pila village, NW of Námestovo town, 49°28'05"N, 19°17'21"E, 1998, 4x (1) ; \*SK, NW Slovakia, Beňadovské rašelinisko mire SW of Beňadovo village, W of Námestovo town, 49°25'16"N, 19°19'47"E, 1998, 4x (2n = 36) (1) ; SK, NW Slovakia, S of Oravské Veselé village, NW of Námestovo town, 49°26'11"N, 19°24'21"E, 1998, 4x (1) ; SK, NW Slovakia, Oravská Magura Mts, spring mire on N slope of Minčol Mt, SW of Hruštín village, NNW of Dolný Kubín town, 49°16'42"N, 19°15'11"E, 1999, 4x (1) ; SK, NW Slovakia, Oravská Magura Mts, peat bog between Minčol and Kubínska hoľa Mt, NNW of Dolný Kubín town, 49°16'20"N, 19°15'41"E, 1999, 4x (1) ; \*SK, NW Slovakia, Malá Fatra Mts, Domašínsky meander nature reserve, SE of Strečno village, NW of Martin town, 49°10'20"N, 18°53'42"E, 1999, 12x (1) ; SK, NW Slovakia, W periphery of Vrútky village, NW of Martin town, 49°06'26"N, 18°53'44"E, 1999, 12x (1) ; SK, NW Slovakia, Sokol Mt foothill N of Krpeľany village, NE of Martin town, 49°08'18"N, 19°05'38"E, 2004, 4x (1) ; SK, NW Slovakia, tufa spring Močiar between Stankovany and Kralovany village, 49°09'14"N, 19°09'06"E, 1997, coll. M. Hájek, 4x (2n = 36) (1) ; \*SK, NW Slovakia, fen meadows W of Rojkov village, NW of Ružomberok town, 49°08'53"N, 19°09'19"E, 1999, 4x (1) ; SK, N Slovakia, Veľký Choč Mt foothill E of Valaská Dubová village, S of Dolný Kubín town, 49°08'55"N, 19°18'41"E, 2004, 4x (1) ; \*SK, C Slovakia, fen meadows N of Socovce village, S of Martin town, 48°57'23"N, 18°51'49"E, 1999, 4x (1), 12x (1) ; SK, C Slovakia, fen meadows E of Rakša village, NE of Turčianske Teplice town, 48°52'46"N, 18°53'32"E, 1999, 4x (1) ; SK, C Slovakia, Veľká Fatra Mts, Drieňok Mt summit, E of Mošovce village, NE of Turčianske Teplice town, 48°53'24"N, 18°57'42"E, 1999, 12x (1) ; SK, C Slovakia, Veľká Fatra Mts, W slope of Drieňok Mt, E of Mošovce village, NE of Turčianske Teplice town, 48°53'17"N, 18°56'54"E, 1999, 12x (1) ; SK, C Slovakia, Veľká Fatra Mts, Ostrá Mt summit, SE of Blatnica village, S of Martin town, 48°55'03"N, 18°58'21"E, 1999, 4x (1) ; SK, C Slovakia, Veľká Fatra Mts, S slope of Tlstá Mt, E of Blatnica village, S of Martin town, 48°55'60"N, 18°58'20"E, 1999, 4x (1) ; SK, C Slovakia, NW bank of Turček dam NE of Turček village, N of Kremnica town, 48°46'19"N, 18°56'17"E, 1998, coll. V. Tlusták, 12x (1) ; SK, C Slovakia, E margin of Slovenská Ľupča village, ENE of Banská Bystrica town, 48°46'12"N, 19°17'25"E, 1999, 12x (1) ; SK, C Slovakia, Poľana Mts, wet forest along road between Čačín and Hrochoť village, SE of Banská Bystrica town, 48°39'41"N, 19°16'41"E, 1999, 12x (1) ; SK, C Slovakia, NW of Horná Ždaňa village, SW of Žiar nad Hronom town, 48°34'37"N, 18°44'26"E, 1998, coll. F. Krahulec, 12x (1) ; SK, N Slovakia, Chočské vrchy Mts, SE slope of Čabrať Mt, N of Ružomberok town, 49°05'37"N, 19°17'14"E, 1999, 12x (1) ; \*SK, N Slovakia, tufa springs Bešeňovské travertiny N of Bešeňová village, E of Ružomberok town, 49°06'21"N, 19°26'200"E, 1998, coll. M. Hájek, 4x (1) ; SK, N Slovakia, N of Pribylina village, NE of Liptovký Hrádok town, 49°06'20"N, 19°48'24"E, 1998, 4x (1) ; SK, N Slovakia, W of Važec village, ENE of Liptovský Hrádok town, 49°03'60"N, 19°56'51"E, 1999, 4x (1) ; \*SK, N Slovakia, Belianské lúky mire S of Výborná village, N of Kežmarok town, 49°12'47"N, 20°23'08"E, 1998, 4x (2n = 36) (1) ; SK, C Slovakia, Muránska planina Mts, limestone rocks in Javorníková dolina valley W of Muráň village, NW of Revúca town, 48°44'09"N, 20°00'11"E, 1999, 4x (1) ; \*SK, NE Slovakia, Sivá brada tufa spring S of Jablonov village, E of Levoča town, 49°00'26"N, 20°43'19"E, 1999, 4x (1) ; \*SK, NE Slovakia, Salvátor spring S of Šindliar village, WNW of Prešov town, 49°02'52"N, 20°56'35"E, 1999, 4x (1) ; \*SK, E Slovakia, Slovenské rudohorie Mts, N of Kojšov village, SE of Gelnica town, 48°50'04"N, 20°59'05"E, 2000, 8x (1) ; \*SK, E Slovakia, Slovenské rudohorie Mts, S margin of Prakovce village, SE of Gelnica town, 48°48'33"N, 20°54'23"E, 2000, 8x (1) ; \*SK, SE Slovakia, roadside between Lubeník and Revúcka Lehota village, SE of Revúca town, 48°39'44"N, 20°10'53"E, 1999, 8x (2n = 72) (1) ; SK, SE Slovakia, northern margin of Jovice village, SE of Rožňava town, 48°38'02"N, 20°33'08"E, 1999, 8x (2n = 72) (1) ; \*SK, SE Slovakia, sink hole near Domicia cave, SE of Dlhá Ves village, S of Rožňava town, 48°28'330"N, 20°27'52"E, 1999, 8x (2n = 72) (1) ; \*SK, E Slovakia, Bukovské vrchy Mts, between Borsuk and Čierťaž Mt, N of Nová Sedlica village, NE of Snina town, 49°05'14"N, 22°30'04"E, 2000, coll. J. Roleček, 8x (1) ; SK, NE Slovakia, Novosedlické bahno mire NW of Nová Sedlica village, NE of Snina town, 49°03'35"N, 22°28'44"E, 2006, 8x (1) ; SK, NE Slovakia, Hypkaňa mire S of Zemplínske Hámre village, S of Snina town, 48°54'47"N, 22°09'49"E, 2006, 8x (1) ; SK, Vihorlat, Podstávka mire S of Zemplínske Hámre village, S of Snina town, 48°55'20"N, 22°09'30"E, 2011, coll. B. Trávníček, 4x (1) ; \*SK, E Slovakia, SE of Zbudza village, NE of Michalovce town, 48°48'04"N, 21°54'50"E, 2000, 8x (1).