

Appendix 2. Sample information and GenBank accessions of sequenced specimens.

Taxon, extraction no., location, collector coll.# (herbarium acronym and no.), GenBank no. (ITS, trnQ-rps16); *newly published sequences

Colobanthus affinis Hook. f., Min285, New Zealand, South Island, Mt. Goul, *W.R. Barker & al.* 890204/46-3 (W 2000-13630), KF737548, *KY700773; ***Colobanthus masonae*** L.B. Moore, Min280, New Zealand, *E. Hörandl & F. Hadacek* 7962 (W 1998-03654), KF737555, *KY700774; ***Facchinia herniarioides*** (Rion) Dillenb. & Kadereit, Min272, Switzerland, Valais, Britanniahütte, *M.S. Dillenberger & A.J. Moore* 2012191 (MJG 009843), KF737472, *KY700775; ***Facchinia valentina*** (Pau) Dillenb. & Kadereit, Min43, Spain, Comunidad Valenciana, Serra d'Espadà, *M.S. Dillenberger* 2307-1 (MJG 004132), KF737543, *KY700776; ***Sabulina attica*** (Boiss. & Sprun.) Dillenb. & Kadereit, Min171, Italy, Posta Manganaro, *R.P. Wagensommer s.n.* (MJG 004227), KF737460, *KY700778; ***Sabulina attica*** (Boiss. & Sprun.) Dillenb. & Kadereit subsp. *attica*, Min265, Greece, Ioannina, Astraka, *A.J. Richards s.n.* (RNG 2012-7-39), KF737450, *KY700777; ***Sabulina austriaca*** (Jacq.) Rchb., Min6, Austria, Styria, Raxalpe, *A. Tribsch s.n.* (WU), KF737508, *KY700779; ***Sabulina austriaca*** (Jacq.) Rchb., Min81, Austria, Lower Austria, between Terz and Kernhof, *A. Moore* 1064 (MJG 005184), KF737443, *KY700780; ***Sabulina austromontana*** (S.J. Wolf & Packer) Dillenb. & Kadereit, Sab4, U.S.A., Montana, Madison County, *Lesica* 7930 (MONTU 125482), *KY700759, *KY700781; ***Sabulina austromontana*** (S.J. Wolf & Packer) Dillenb. & Kadereit, Sab5, U.S.A., Montana, Glacier County, *Lesica* 5575 (MONTU 115031), *KY700760, *KY700782; ***Sabulina basaltica*** B.S. Legler, Sab1, U.S.A., Washington, Clallam County, *B.S. Legler* 14177 (WTU, holotype), *KY700761, *KY700804; ***Sabulina basaltica*** B.S. Legler, Sab3, U.S.A., Washington, Jefferson County, *B.S. Legler* 14195 (WTU, paratype), *KY700762, *KY700805; ***Sabulina biebersteinii*** (Rupr.) Dillenb. & Kadereit, Min122, Georgia, Pirikiti Khevsureti District, Dusheti District, *Shetekauri & al.* 1113 (W 2006-22657), KF737416, *KY700783; ***Sabulina californica*** (A. Gray) Dillenb. & Kadereit, Min203, U.S.A., California, Oroville, *Ahart* 12551 (2006) (JEPS 110187), KF737453, *KY700784; ***Sabulina cismontana*** (Meinke & Zika) Dillenb. & Kadereit, Min201, U.S.A., California, Oroville, *Ahart* 12548 (2006) (JEPS 110185), KF737456, *KY700785; ***Sabulina dawsonensis*** (Britton) Rydb., Sab6, U.S.A., Alaska, Black River, *Parker* 17201 (ALA H1106040), *KY700763, *KY700786; ***Sabulina dawsonensis*** (Britton) Rydb., Sab7, Canada, Yukon Territory, Beaver Creek, *Bennett* 03-0176 (ALA H1132189), *KY700764, *KY700787; ***Sabulina douglasii*** (Fenzl ex Torr. & A. Gray) Dillenb. & Kadereit, Min205, U.S.A., California, Paskenta, *Ahart* 12,574 (2006) (JEPS 108819), KF737459, *KY700788; ***Sabulina elegans*** (Cham. & Schltdl.) Dillenb. & Kadereit, Sab8, U.S.A., Alaska, Kodiak Island, *Studebaker* 07-122 (ALA H1063909), *KY700765, *KY700789; ***Sabulina elegans*** (Cham. & Schltdl.) Dillenb. & Kadereit, Sab9, U.S.A., Alaska, Ahklun Mountains, *Parker* 15665 (ALA H1132230), *KY700766, *KY700790; ***Sabulina foliosa*** (Royle ex Edgew. & Hook. f.) Dillenb. & Kadereit, Min145, Afghanistan, Baghlan, Salang pass, *Fohlen s.n.* (W 2004-01027), KF737427, –; ***Sabulina fontinalis*** (Short & R. Peter) Dillenb. & Kadereit, U.S.A., Tennessee, Trousdale County, *A. McKerrow* 93-015 (NY 02497171), JN589045, JN589447; ***Sabulina glaucina*** (Dvořáková) Dillenb. & Kadereit, Min281, Austria, Lower Austria, *T. Barta* 825 (W 2012-07412), KF737553, –; ***Sabulina glaucina*** (Dvořáková) Dillenb. & Kadereit, Min170, Romania, Bélavár, *M. Höhn s.n.* (MJG 004127), KF737519, *KY700791; ***Sabulina glaucina*** (Dvořáková) Dillenb. & Kadereit, Min176, Italy, Basilicata, Serra del Prete, *J. Klein* Car16.1 (MJG 004228), –, *KY700792; ***Sabulina helmii*** (Fisch. ex Ser.) Dillenb. & Kadereit, Min268, Russia, Bashkortostan, Ural, *I. M. Krascheninnikov s.n.* (RNG 2017-7-31), –, *KY700793; ***Sabulina juniperina*** (L.) Dillenb. & Kadereit, Min15, Greece, Achaía, Chelmós, *Hörandl & Hadaček* 7476 (W), KF737504, –; ***Sabulina kashmirica*** (Edgew. & Hook. f.) Dillenb. & Kadereit, Min114, Botanical Garden Mainz, *M.S. Dillenberger* 13024 (MJG 011706), –, *KY700794; ***Sabulina lineata*** (Boiss.) Dillenb. & Kadereit, Min17, Armenia, Ararat, Zangakatun, *Kugler & Vitek* 09-0877 (W), KF737507, *KY700795; ***Sabulina macrantha*** (Rydb.) Dillenb. & Kadereit, Sab10, U.S.A., Colorado, San Juan County, *Hartman* 5097 (KHD KHD00016803), *KY700767, *KY700796; ***Sabulina macrantha*** (Rydb.) Dillenb. & Kadereit, Sab11, U.S.A., Colorado, Garfield County, *Wingate* 10508 (KHD KHD00061331), *KY700768, *KY700797; ***Sabulina mediterranea*** (Ledeb. ex Link) Rchb., Min118, Greece, Kavála, Thasos, *Krendl s.n.* (W 1989-04139),

KF737520, –; ***Sabulina michauxii*** (Fenzl) Dillenb. & Kadereit, Canada, Manitoba, Riding Mountain National Park, *W.J. Cody* 24237 (YU 057124), JN589059, JN589450, misidentified as *S. dawsonensis* in Greenberg and Donoghue (2011) and Dillenberger and Kadereit (2014); ***Sabulina nuttallii*** (Pax) Dillenb. & Kadereit var. ***gracilis*** (B.L. Rob.) Dillenb. & Kadereit, Min199, U.S.A., California, Yosemite National Park, *Matson & al.* 1511 (2005) (JEPS 111151), KF737451, *KY700798; ***Sabulina nuttallii*** (Pax) Dillenb. & Kadereit var. ***gregaria*** (A. Heller) Dillenb. & Kadereit, Min198, U.S.A., California, Snow Mts. Wilderness, *Oswald & Ahart* 6319 (1994) (JEPS 95473), KF737446, *KY700799; ***Sabulina pichleri*** (Boiss.) Dillenb. & Kadereit, Min139, Greece, Arkadía, Leonidio, *Burri & Krendl s.n.* (W 1996-10601), KF737418, –; ***Sabulina pusilla*** (S. Watson) Dillenb. & Kadereit, Min207, U.S.A., California, Patterson, *Ertter & McNeal* 5782 (JEPS 84958), KF737452, –; ***Sabulina rimarum*** (Boiss. & Balansa) Dillenb. & Kadereit var. ***rimarum***, Min147, Turkey, Goruh, Şavşat, *F. Sorger* 81-72-82 (W 1991-00747), KF737514, –; ***Sabulina rosei*** (Maguire & Barneby) Dillenb. & Kadereit, Min204, U.S.A., California, Klamath Mountains, *Taylor* 12734 (1992) (JEPS 090761), KF737476, *KY700800; ***Sabulina rossii*** (R. Br. ex Richardson) Dillenb. & Kadereit, Sab12, Russia, Chukchi Peninsula, *Solstad* 05/0448 (ALA H1046947), *KY700769, –; ***Sabulina rossii*** (R. Br. ex Richardson) Dillenb. & Kadereit, Sab13, Canada, Nunavut, Mt. Pelly, *Gould s.n.* (ALA H1132741), *KY700770, *KY700801; ***Sabulina rubella*** (Wahlenb.) Dillenb. & Kadereit, Min195, U.S.A., *Greenhouse* 5011 (2000) (JEPS 97795), KF737481, *KY700802; ***Sabulina rubella*** (Wahlenb.) Dillenb. & Kadereit, Min240, Canada, North-West Territory, Ellesmere Island, *S.P. Thornton-Wood & R. McTeague* 182 (RNG 2017-7-79), –, *KY700803; ***Sabulina sororia*** B.S. Legler, Sab2, U.S.A., Washington, Whatcom County, *B.S. Legler* 14263 (WTU, holotype), *KY700771, *KY700806; ***Sabulina stolonifera*** (T.W. Nelson & J.P. Nelson) Dillenb. & Kadereit, Min202, U.S.A., California, Scott Mountain, *D.W. Taylor* 18120 (2002) (JEPS 100204), KF737447, *KY700807; ***Sabulina stricta*** (Sw.) Rchb., Min206, U.S.A., California, White Mountain Peak, *Morefield & Pollak* 4084 (1986) (UC 1549872), KF737449, *KY700809; ***Sabulina stricta*** (Sw.) Rchb., Sab15, U.S.A., Colorado, Park County, *Hartman* 5631A (KHD KHD00019420), *KY700772, *KY700808; ***Sabulina sublineata*** (Rech. f.) Dillenb. & Kadereit, Min116, Iran, Hamadan, Abbas-abad, Kouhe' Alvand, *Termé & Moussavi* 16380 (W 1975-6996), –, *KY700810; ***Sabulina sublineata*** (Rech. f.) Dillenb. & Kadereit, Min136, Iran, Kordestān, Hamzeh Arab, *Lamond & Termé* 42570 (W 1996-06574), KF737434, –; ***Sabulina subtilis*** (Fenzl ex Boiss.) Dillenb. & Kadereit, Min107, Iran, Hamadan, Abas Abad, *Assadi & Amini* 13605 (E 421745), KF737487, *KY700811; ***Sabulina tenuifolia*** (L.) Rchb., Min11, Greece, Dodekánisos, Karpathos, *Burri & Krendl s.n.* (W 2001-0003917), KF737510, *KY700813; ***Sabulina tenuifolia*** (L.) Rchb., Min12, Austria, Lower Austria, Steinfeld, *Barta s.n.* (W 2000-0009796), KF737505, *KY700814; ***Sabulina tenuifolia*** (L.) Rchb., Min44, Spain, Pais Vasco, Arantzazu, *M.S. Dillenberger* 3107-4d (MJG 004124), KF737417, *KY700815; ***Sabulina tenuifolia*** (L.) Rchb., Min101, Saudi Arabia, Jalal Ad Dafa, *Collenette* 8544 (E 118360), –, *KY700812; ***Sabulina thymifolia*** (Sibth. & Sm.) Dillenb. & Kadereit, Min262, Lebanon, North Lebanon, *The Darwin Project* 561 (RNG 2012-7-59), KF737435, *KY700816; ***Sabulina thymifolia*** (Sibth. & Sm.) Dillenb. & Kadereit, Min263, Lebanon, Beirut, *The Darwin Project* 552 (RNG 2012-7-58), KF737545, *KY700817; ***Sabulina umbellulifera*** (Boiss.) Dillenb. & Kadereit subsp. ***pontica*** (Bornm.) Dillenb. & Kadereit, Min278, Turkey, Sivas, Kunduz Dag, *F. Sorger* 69-52-3 (W 1991-00931), KF737550, –; ***Sabulina umbellulifera*** (Boiss.) Dillenb. & Kadereit subsp. ***umbellulifera***, Min277, Turkey, Antalya, Susuzdag, *F. Sorger* T-65-24-62 (W 1991-00493), KF737547, –; ***Sabulina velenovskyi*** (Rohlena) Dillenb. & Kadereit, Min173, Macedonia, Ohrid, Galičica Mt., *Klein & Gencheva* 2.9.14.3 (MJG 004108), KF737461, *KY700818; ***Sabulina verna*** (L.) Rchb. subsp. ***hercynica*** (Willk.) Dillenb. & Kadereit, Min267, Germany, Lower Saxony, Harz, *G. Gottschlich* 9068 (RNG 2012-7-32), KF737477, *KY700819; ***Sabulina verna*** (L.) Rchb. subsp. ***kabylica*** (Pomel) Dillenb. & Kadereit, Min244, Morocco, Marrakech, *S.L. Jury & al.* 18913 (RNG 2012-7-73), KF737468, *KY700820; ***Sabulina verna*** (L.) Rchb. subsp. ***verna***, Min154, France, Alpes Maritimes, *Moore & Ichter* 1267 (MJG 004018), KF737432, *KY700821; ***Sabulina verna*** (L.) Rchb. subsp. ***verna***, Min286, Italy, Lombardia, Passo di Croce Domini, *M.S. Dillenberger* 201278 (MJG 009755), KF737554, –; ***Sabulina villarsii*** (Balb.) Rchb., Min111, Spain, La Masella, Como Oriola, *Nualart & al. s.n.* (BC 864134), –, *KY700822; ***Sabulina villarsii*** (Balb.) Rchb., Min112, Spain, Berguedà, Bagà, *Soriano & Forurs* 2703 (BC 865921), KF737421, *KY700823; ***Sabulina viscosa***

(Schreb.) Rchb., Min250, Bulgaria, Sozopol, *OPTIMA ITER IX 551* (RNG 2012-7-13), KF737464, *KY700824; *Sagina micropetala* Rauschert, Min209, Germany, Rhineland-Palatinate, Mainz, *M.S. Dillenberger 20121* (MJG 007678), KF737496, *KY700825; *Sagina procumbens* L., Min183, Bulgaria, Kyustendil, Rila, *Klein & Gencheva 29.8.7.2* (MJG 004137), KF737444, *KY700826.
