Index Fungorum no. 186

Effectively published 25/08/2014 13:01:50 (ISSN 2049-2375)

Nomenclatural novelties : Tuula Niskanen

Cortinarius alboglobosus Kytov., Liimat., Niskanen & Ammirati, sp.nov.
IF550723
Type. Finland, Inarin Lappi, Utsjoki, Kevo, SE slope of Jesnalvarri, mesic birch forest with some solitary pines and Populus tremula, 16 Aug 1995, I. Kytovuori IK95-509. (H, holotype; NY, isotype). GenBank no. KM273093. Diagnosis. Pileus 50-105 mm, hemispherical to broadly convex, margin more or less decurved, at first white, becoming pale brown, finely fibrillose, not hygrophanous. Lamellae crowded to moderately spaced, pale greyish brown to pale yellowish brown, later yellowish brown to dark yellowish brown. Stipe 40-90 mm long, 10-25 mm thick at apex, 15-30 mm thick at base, slightly clavate, whitish fibrillose, later pale brown. Universal veil white, fairly abundant, forming floccose girdles and zones on stipe. Basal mycelium white. Context very pale brown. Odor in lamellae indistinct or somewhat fruity. Basidiospores 7.7-8.8 x 5.2-6.1 um, av.= 8.1â€“8.4 x 5.4â€“5.8 um, Q= 1.39-1.62, Qav.= 1.43â€“1.56 (160 spores, 8 specimens), mostly ovoid with rounded apex, fairly finely to moderately, evenly verrucose, not more strongly so at the apex, moderately dextrinoid. Lamellar trama hyphae in MLZ pale yellow, smooth, granulose. Pileipellis: Uppermost epicutis hyphae 5-10 um wide, hyaline, smooth, with rice grain-like, colorless to pale olivaceous, intracellular granules (mostly on hyphal wall). Lower epicutis hyphae somewhat thicker-walled, mostly with granules. Hypoderm indistinct and poorly differentiated. The pileipellis as a whole without pigments or incrustations. ITS sequence (GenBank KM273093) distinct from other members of section Niveoglobosi. With a sister relationship to C. niveoglobosus and deviating from it in the ITS regions by more than 20 substitutions and indel positions. Sequences of C. alboglobosus from the specimens collected from the West coast of North America differ by one base change and one indel from the sequences of specimens from Europe and East coast of North America. Ecology and distribution. In Europe, Eastern North America, Eastern side of the Rocky Mountains, and in British Columbia in mixed forests, presumably associated with Betula. In Western North America, in Washington in coniferous forests. Producing fruitbodies in autumn. Other specimens examined. Canada, Quebec, Riviere-a-Pierre, S entrance of the Reserve faunique de Portneuf, coniferous dominated forest (Tsuga, Abies, Picea) with some Betula and Populus, 31 Aug. 2010, coll. K. Liimatainen (T. Niskanen 10-060) (H), GenBank no. KM273098. Finland, Kainuu, Kuhmo, Lauvuskyla, Jamasvaara, 6 Sept 2001, K. Soop (H), GenBank no. KM273094. France, Comte, Jura, Arbois, exhibition, 1 Oct 1998, H. Lindstrom 98.934 (UPS) GenBank no. KM273096. Sweden, Norrbotten, Junosuando, Karhakkavuoma, dryish spruce heath forest with Pinus, Betula and open meadows, 15 Aug 1998, Kytovuori 98-866 (H), GenBank no. KM273095. Sweden, Ã…ngermanland, Hogsjo, Mockelsjoberget, in coniferous forest, wet (Picea, Betula), 21 Aug 1992, H. Lindstrom et al. CFP 1133 (S), GenBank no. KM273097. U.S.A., Idaho, Bonner co., Squaw Creek, Priest Lake, in mixed conifer woods with Betula, 21 Sep 1999, P. B. Matheny PBM1665 (WTU), GenBank no. KM273099. U.S.A., Washington, NE of Mt. Baker, Easy Pass trailhead, coniferous forest (Tsuga heterophylla, Abies and some Picea engelmannii), 28 Sept 2009, J.F. Ammirati & T. Niskanen 09-022 (H), GenBank no. KM273100. Washington, Pend Oreille, Sullivan Cr. Rd., older growth grand fir, hemlock, and cedar, 25 Oct 2007, D. Parker 071025-1 (WTU), GenBank no. KM273101. Washington, Olympic Hot Springs Campground, old growth Douglas fir and hemlock forest, 3 Oct 1995, J.F. Ammirati JFA11484 (WTU), GenBank no. KM273102. Etymology. The name refers to the affinity to C. niveoglobosus and to the white color of the basidiomata. Notes. Cortinarius alboglobosus Kytov., Liimat. & Niskanen, Funga Nordica: 753 (2008) (invalid). Cortinarius pinetorum (Fr.) Kauffman sensu Kauffman, Papers Mich. Acad. Sci. 1: 139 (1921).
Holotype (H), IK95-509.

Cortinarius disjungendulus KytÃ¶v., Liimat. & Niskanen, sp.nov.
IF550720
Type. Sweden, Norrbotten, Junosuando, dryish Picea abies heath forest with Pinus, Betula and open meadows, 15 Aug 1998, KytÃ¶vuori IK98-861 (H, holotype; NY, isotype). GenBank no. KM273090. Diagnosis. Pileus 40-75 mm, hemispherical, then broadly convex to almost plane with a low and broad umbo, brown, silvery fibrillose especially near the margin, hygrophanous. Lamellae moderately spaced, pale greyish brown, later brown. Stipe 70-130 mm long, 9-13 mm thick at apex, cylindrical, whitish fibrillose, becoming pale brown with age, brown at the base. Universal veil white, forming girdles on the stipe. Basal mycelium white. Context pale greyish brown to brown, often darker at base of the stipe, darkening with age. Odor in lamellae indistinct. Basidiospores 9.5-10.5 x 6-6.5 um, obovoid-ellipsoid, moderately verrucose. ITS sequence (GenBank KM273090) distinct from other members of /Disjungendi. With a sister group relationship to C. disjungendus (GenBank JX407329) and deviating from it in the ITS region by six substitutions and indel positions. Ecology and distribution. In mixed forests. Producing basidiomata in late summer and autumn. Known from Northern Europe. Etymology. The name refers to the affinity to C. disjungendus.
Holotype (H), IK98-861.

Cortinarius fraudulosoides Liimat. & Niskanen, sp.nov.
IF550725
Type. U.S.A., Alaska, Fairbanks, trails at the NW side of the campus, at the end of Yukon road, Picea-dominated forest with Betula and some Populus, on needle litter, 15 Aug 2011, K. Liimatainen & T. Niskanen TN11-079 (H, holotype; NY, isotype). GenBank No. KM273107. Diagnosis. Pileus 40-80 mm, hemispherical to broadly convex, somewhat finely fibrillose, dry, very pale brown to pale brown to cream-colored, sometimes centre reddish yellow. Lamellae moderately spaced, at first very pale brown, becoming light yellowish brown. Stipe 50-90 mm long, 8-14 mm thick at apex, 13-20 mm thick at base, clavate, with a rooting base, at first white, becoming pale yellow. Universal veil whitish yellow to very pale brown, woolly, often abundant, forming incomplete girdles or patches on stipe. Basal mycelium white. Context white. Odor in lamellae very strong and unpleasant, earthy. Basidiospores 12.0-13.5(-14) x 7.5-8.5 Âµm, Q= 1.50-1.70(-1.80), amygdaloid to broadly amygdaloid and somewhat citriform, some with dark intracellular granules in MLZ, moderately dextrinoid. Lamellar trama hyphae in MLZ full of small yellowish brown

granules or particles. ITS sequence (GenBank KM273107) distinct from other species of section Arguti. With a sister group relationship to C. fraudulosus (GenBank KF732518) and C. subfraudulosus (KF732564) and deviating from them in the ITS region by five substitutions and indel positions. Ecology and distribution. In coniferous forests. Producing basidiomata in autumn. Known from U.S.A. Alaska and Germany. Other specimen examined. U.S.A., Alaska, Fairbanks, trails at the NW side of the campus, at the end of Yukon road, Picea-dominated forest with Betula and some Populus, 15 Aug 2011, K. Liimatainen & T. Niskanen 11-096 (H), GenBank No. KM273108. Additional material. Germany TUB011870 (TUB), GenBank No. AY669551/ (as C. fraudulosus). Etymology. The name refers to affinity to C. fraudulosus.

Holotype (H), TN11-079.

Cortinarius niveotraganus Kytov., Niskanen & Liimat., sp.nov.

IF550724

Type. Finland, Pohjois-Hame, Virrat, Salmela S, between the road and the lake Navettasalmi, young spruce - birch forest planted on old field, 9 July 1998, I. Kytovuori IK98-033 (H, holotype; NY isotype). GenBank no. KM273103. Diagnosis. Pileus 40-90 mm, hemispherical, then broadly convex, with a low and broad umbo, when young covered with white fibrils, first white to greyish white, then brown, with hygrophanous streaks. Lamellae moderately spaced, whitish grey when young, often with a bluish tint, later brown. Stipe 60-110 mm long, 9-15 mm thick at apex, 13-25 mm at base, clavate, first white, later pale brown. Universal veil white, often forming a sock-like sheath on stipe. Context brownish white, often with a bluish tint at stipe top. Smell in lamellae strong, fruity, recalling C. traganus. Basidiospores 8.6-10.9(-11.6) x 5.2-6.3 um, av.= 9.2â€“9.9(10.8) x 5.5â€“6.0(6.2) um, Q= 1.54-1.76, Qav.= 1.58â€“1.74 (280 spores, 14 specimens), amygdaloid to narrowly ellipsoid, strongly verrucose, verrucosity strongest at the apex, dark brown, moderately dextrinoid. Lamellar trama hyphae pale olivaceous yellow to yellow in MLZ, smooth, often granulose-guttulate. Pileipellis: Uppermost epicutis hyphae pale olivaceous, thin-walled, 2-8 um wide, smooth to very finely, densely scabrous (parietal pigment). Lower epicutis hyphae somewhat thick-walled, hyaline, smooth, 5-12 um wide. Hypoderm indistinct and poorly differentiated. ITS sequence (GenBank KM273103) distinct from other members of the section Telamonia. With a sister relationship to C. agathosmus (GenBank EU433388) and deviating from it in the ITS region by 19 substitutions and indel positions. Ecology and distribution. In deciduous forests and in wooded yards, often in planted Betula forests, mostly on somewhat rich soil, early in the season, sometimes already in June. Other specimens examined. Finland, Etela-Hame, Kylmakoski, Mellola, Onnela, in planted Betula forest, 6 July 2004, M. Toivonen, K. Liimatainen & T. Niskanen F04-014a (H), GenBank no. KM273104. Enontekion Lappi, Enontekio, SE part of the fjeld Tarju, upper oroboreal zone, mesic Betula forest, 4 Aug 1998, T. Bonsdorff & I. Kytovuori 98-311 (H), GenBank no. KM273105. Sweden, JÃ¤mtland, H. LindstrÃ¶m 90.094 (UPS) GenBank no. KM273106. Etymology. The name refers to the white basidiomata and C. traganus-like smell. Notes. Cortinarius niveotraganus Kytov., Niskanen & Liimat., Funga Nordica: 749 (2008) (invalid).

Holotype (H), IK98-033.

Cortinarius olididisjungendus Liimat., Niskanen, Dima & Kytov., sp.nov.

IF550721

Type. Canada, Ontario, Muskoka, Lake of Bays, mixed forests of coniferous and deciduous trees, 15 Sept 2007, anonymous, TN07-191 (H, holotype; NY, isotype). GenBank no. KM273091. Diagnosis. Pileus 45-85 mm, hemispherical, then broadly convex to almost plane with a low and broad umbo, brown to reddish brown, silvery fibrillose especially near the margin, hygrophanous. Lamellae moderately spaced, pale brown, later brown to dark brown. Stipe 60-120 mm long, 7-13 mm thick at apex, 9-20 mm at base, cylindrical to clavate, whitish fibrillose, becoming brown with age, especially at the base. Universal veil white, forming girdles on the stipe. Basal mycelium white. Context pale greyish brown to brown, often darker at base of the stipe, darkening with age. Odor in lamellae aromatic. Basidiospores 9.5-10.5(-11) x 6-6.5 um, obovoid-ellipsoid, moderately verrucose. ITS sequence (GenBank KM273091) distinct from other members of /Disjungendi. With a sister group relationship to C. piceidisjungendus (GenBank KM273092, holotype) and deviating from it in the ITS region by 8 substitutions and indel positions. Ecology and distribution. In mixed forests, presumably associated with different deciduous trees. Producing basidiomata in late summer and autumn. Wide spread, to date known from Eastern Canada, Ontario and from Northern and Central Europe. Producing basidiomata from late August to October. Etymology. The name refers to the odor of the lamellae and affinity to C. disjungendus.

Holotype (H), TN07-191.

Cortinarius piceidisjungendus Kytov., Liimat., Niskanen & Ammirati, sp.nov.

IF550722

Type. U.S.A, Washington, Kittitas County. Table Mountain, subalpine forest, Abies, Picea, Pinus, Larix, 47_5_09N, 120_35_07W, 9 Oct 2011, Ammirati & Liimatainen TN11-443 (H, holotype; NY, isotype). GenBank no. KM273092. Diagnosis. Pileus 50-100 mm, hemispherical, then broadly convex to almost plane with a low and broad umbo, brown to reddish brown, silvery fibrillose especially near the margin, hygrophanous. Lamellae moderately spaced, pale greyish brown, later brown to dark reddish brown. Stipe 50-110 mm long, 7-16 mm thick at apex, 12-27 mm at base, cylindrical to somewhat clavate, firm, whitish fibrillose, becoming brown with age, especially at the base. Universal veil white, forming girdles on the stipe. Basal mycelium white. Context brown, dark brown at base of the stipe, darkening with age. Odor in lamellae indistinct. Basidiospores 10-11.5(-12) x 6.5-7.5 um, obovoid-ellipsoid, moderately verrucose. ITS sequence (GenBank KM273092) distinct from other members of /Disjungendi. With a sister group relationship to C. olididisjungendus (GenBank KM273091, holotype) and deviating from it in the ITS region by 8 substitutions and indel positions. Ecology and distribution. In mesic coniferous forests. Producing basidiomata from late August to October. Wide spread, to date known from Finland, Sweden, and Western U.S.A, Alaska and Washington. Etymology. The name refers to the habitat with coniferous trees and affinity to C. disjungendus.

Holotype (H), TN11-443.