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The first finding of rare fungus *Stromatonectria caraganae* (Höhn.) Jaklitsch & Voglmayr from the territory of National Nature Park «Dvorichanskyi» (Ukraine) and the analysis of its current distribution

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Stromatonectria caraganae (Höhn.) Jaklitsch & Voglmayr originally was described by Höhnel in 1905 as *Myrmaeciella caraganae* Höhn. based on the material collected in the Botanical Garden of Vienna. As synonyms for *Stromatonectria caraganae* also are names *Myrmaeciella caraganae* Höhn., *Cryphonectria caraganae* (Höhn.) Sacc. & D. Sacc. and *Endothia caraganae* (Höhn.) Merezhko [4]. Walter M. Jaklitsch and Hermann Voglmayr compared *Myrmaeciella caraganae* with other nectrioid fungi and based on molecular phylogenetic analyses of LSU sequences they replaced it into the new genus *Stromatonectria* within Bionectriaceae Samuels & Rossman [5].

The species is characterized by pulvinate yellow, orange or purple stromata erumpent from the bark of the host plant. Stromata small, up to 7 mm, multiperithecial, sometimes erumpent in groups. Asci eight-spored, fusoid or clavate, unitunicate, lacking an apical apparatus. Ascospores are hyaline, ellipsoid, oblong or fusoid with a medium or slightly eccentric septum, (10–)13–17(–21) x (4,0–) 4,7–5,7(–7,0) μm. Teleomorph can be accompanied by the anamorph and presented by the pale or yellow-colored stromata with pycnidia. Conidia are cylindrical or slightly allantoid, unicellular, hyaline, smooth, (3,0–)4,0–5,5(–7,5) x (1,0–)1,2–1,5(–1,7) μm [2, 5].

S. caraganae occurs on recently dead standing or lying branches or trunks, predominantly, *Caragana arborescens* Lam., sometimes on the other Fabaceae

representatives, such as *Colutea arborescens* L., *Laburnum anagyroides* Medik. and *Robinia pseudoacacia* L. As mentioned earlier, the first finding of *S. caraganae* was done in Austria and about 20 specimens were collected there throughout the years, but only from one region. Lectotype specimen of *S. caraganae* is preserved in the Karazin University Mycological Herbarium CWU (Myc) AS 865 ex LE 125642. Single findings were recorded from Altai Republic (CWU (Myc) AS 866 ex LE 125643) and Krasnoyarsk Krai of Russia [1]. Recently, *S. caraganae* was mentioned as a new species for China [7].

In Ukraine finds of *S. caraganae* were mentioned from the Odesa region (vicinities of Borodino village, Tarutyne district: CWU (Myc) AS 378 ex KW 5686 / 7554), Chernihiv, Donetsk, and Zakarpattia regions [2, 3]. In the Kharkiv region *S. caraganae* was found earlier on the territory of National Nature Park «Homylnansky Lysy», Zmiiv district: CWU (Myc) AS 171 and 2666 [6]. Also, there are some unpublished finds of *S. caraganae* – vicinities of Levkivka village of Zmiiv district: CWU (Myc) AS 1321 and 1322; vicinities of Chepelyne village of Zolochiv district: CWU (Myc) AS 5833, 5834 and 6026; vicinities of Staroverivka village of Nova Vodolaha district: CWU (Myc) AS 6135.

The new specimen of *Stromatonectria caraganae* was collected by Dr. O.Yu. Akulov on April 11, 2021, from the dead branches of *Caragana arborescens* L. among the cretaceous sediments on the territory of National Nature Park «Dvorichanskyi»: CWU (Myc) AS 8123.

Because the main host of *S.caraganae* is *Caragana arborescens*, the fungus can be found in Eurasia, especially Asia, where, presumably, is the area of origin of C. *arborescens*. In view of the fact that *Caragana arborescens* is ornamental and invasive species, new findings can be done in other areas.

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