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ПЕРША ЗНАХІДКА *CAMAROSPORIDIELLA HALIMODENDRI* В УКРАЇНІ

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FIRST FIND OF *CAMAROSPORIDIELLA HALIMODENDRI* IN UKRAINE

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Camarosporidiella halimodendri Wanas., Bulgakov & K.D. Hyde (Camarosporidiellaceae, Pleosporales, Dothideomycetes, Ascomycota, Fungi) is registered on the territory of Ukraine for the first time. The specimen was collected on the dead stems of *Caragana frutex* (L.) K. Koch from the territory of National Nature Park «Dvorichanskyi» (Kharkiv region). Species identification was based on the morphological characteristics and molecular analysis of its ITS region sequence.

Camarosporidiellaceae Wanas., Wijayaw., Crous & K.D. Hyde is a family of ascigerous fungi inside *Pleosporales* Luttr. ex M.E. Barr, introduced in 2017 on the basis of formation of highly-supported monophyletic lineage in *Cucurbitariaceae* Luerss. (Wanasinghe, 2017). Members of the family are endophytic, saprobic or pathogenic on leaves and wood and characterised by Coelomycetous asexual morph.

Camarosporidiella halimodendri was described in 2017 on dying twigs and shrubs of *Halimodendron halodendron* (Pall.) Voss., and named, accordingly, after the host genus. Later it was found also on *Caragana frutex* (L.) K. Koch, *Cytisus podolicus* (Blocki) Klask. and *Lycium barbarum* L. This species till now was known only from type locality – the territory of Krasnodar region of Russia. Earlier fungi with similar morphology, that were observed on *Caragana spp.* were named *Cucurbitaria caraganae* or *Camarosporium caraganae*. But then it was found that it is a group of closely related species, that can be properly identified only by combining morphological characteristics and molecular genetic methods (Jaklitsch, 2018).

Our specimen of *C. halimodendri* was collected recently by O. Akulov on the dead stems of *Caragana frutex* (L.) K. Koch from the territory of cretaceous sediments among the steppe in the National Nature Park «Dvorichanskyi» (vicinities of Krasne Pershe village, Dvorichna district, Kharkiv region). The axenic strain was established from a single spore. Species identification was based on the morphological characteristics and molecular analysis of its ITS region sequence. Amplification of the internal transcribed spacer (ITS) region was performed using primer pairs ITS1 and ITS 4. The ITS sequence was submitted to GenBank. The specimen is deposited in the Mycological Herbarium of the V. N. Karazin Kharkiv National University, Department of Mycology and Plant Resistance as CWU (Myc) AS 8126.

Asexual morph of *C. halimodendri* is characterized by picnidial conidiomata, which are solitary or gregarious, immersed, black, unilocular, with a papillate ostiolate.

Macroconidia 18–25 × 8–12 μm, oblong, straight to slightly curved, rounded at both ends, 4–6-transverse septate, with 1–2 longitudinal septae and with 2–4 oblique septae, muriform, smooth-walled, brown to dark brown. Microconidia 4.5–7.5 × 3.5–4.5 μm, hyaline, round to oblong or ellipsoidal. Sexual morph is still unknown (Wanasinghe, 2017).

Camarosporidiellaceae as many other Dothideomycetes families comprised only of asexual taxa (Chethana, 2021). Most of them exhibit limited morphological characteristics. So, as already mentioned, this fungus can be confused with related species. Initially, we misidentified our specimen as *Camarosporidiella caraganicola* (Phukhams., Bulgakov & K.D. Hyde) Phukhams., Wanas. & K.D. Hyde and only with the use of molecular genetic methods, proper identification became possible.

The work was performed under the guidance of O. Yu. Akulov, Ph.D. and O.I. Zinenko, Ph.D. associated professors, Department of Mycology and Plant Resistance, V. N. Karazin Kharkiv National University