

CUDONIELLA ACICULARIS

VIKTOR KUČERA⁵

Key words: Ascomycota, biodiversity

INTRODUCTION

During field excursions in Vihorlat Mts. in 2002, we have found a *Cudoniella* growing on wood of an oak stump. It was later identified as *C. acicularis* (Ripková & al., 2007), a species not reported before from Slovakia. Later in 2010 Jaroslav Kuriplach collected a fungus that was identified as *Cudoniella clavus* but detailed study and microscopical examination of the specimen proved that it represents also *C. acicularis*.

MATERIAL AND METHODS

The macro-morphological characters of collections were observed in fresh material. The micro-morphological structures were observed in dried material using a light microscope with an oil immersion lens. Fragments of fruit-bodies were examined in 5% KOH, Melzer's reagent and a solution of Congo red in ammonia. Values of micro-morphological characters were evaluated as average plus and minus standard deviation of 30 measurements for each. Identification and nomenclature is based on Dissing (2000). Voucher specimens have been deposited in the herbarium of the Institute of Botany (SAV).

RESULTS

***Cudoniella acicularis* (Bull.: Fr.) J. Schröt.**

Apothecia (0,5)1–8(12) mm high, solitary, scattered, stipitate, pin-shaped, outside glabrous (see photographs on p. [36]). Fertile part globose or convex at the apex with deflexed margin, 2–10 mm broad, whitish sometimes with grayish or reddish tint. Sterile part short, cylindrical, white or slightly buff, (3)5–7(10) mm long, 1–2 mm thick. Asci (100)105–110(120) × 9–12 µm, 8–spored, cylindrical-clavate with narrowed obtuse apex, the pore doesn't turn blue in Melzer's reagent. Spores (17)19–22 × 4–5 µm, hyaline, usually irregularly biseriate, 0–3–septate, almost cylindrical, sometimes slightly curved, tapering towards both ends. Paraphyses hyaline, cylindrical, slender 1,5 to 4 µm thick on the apex, septate, sometimes branched near the basal part.

⁵ Institute of Botany, SAS, Department of Cryptogams, Dúbravská cesta 9, SK-845 23 Bratislava; viktor.kucera@savba.sk

HABITAT. On stump of *Quercus* and on wood-chips of *Fagus* immersed in wet soil.

DISTRIBUTION. North America, Europe, Korea (Dissing, 2000, Dennis, 1967, Han & al., 2010).

SPECIMENS STUDIED. Vihorlat Mts., Jovsianska hrabina National Nature Reserve, ca 1.5 km NE of the church in the village of Jovsa, 48°49'24"N, 22°06'44"E, Q 7198d, alt. ca 180 m., 15. 10. 2002, V. Kučera (SAV); Malé Karpaty Mts., Modra – Harmonia, Q 7669b, 9. 10. 2010, J. Kuriplach (SAV).

DISCUSSION

Cudoniella acicularis is probably an overlooked species. It grows in autumn on dead stumps, woodchips, on fallen trunks or branches of trees. It requires adequate moisture and parts of substrate are immersed in water or wet soil (but it can occur in quite dry places). The Korean specimens have spores larger than European collections and differs also in grayish color (Han & al., 2010). Fall growth and association with of hard wood of deciduous trees distinguish this taxon from *C. clavus*. Jindřich (2009) admitted occurrence also on coniferous trees. *Cudoniella tenuispora*, that was reported from Slovakia, has different cup-shaped apothecia, usually blackish band on the margin of thecium and it occupies water habitats.

The species has wide distribution but it is quite rare almost everywhere. It should be included in the red list of Slovak fungi as an vulnerable species.

ACKNOWLEDGEMENTS

Author would like to thank Jaroslav Kuriplach for giving his collection for scientific study and for photographs, Slavomír Adamčík, Soňa Jančovičová and Stanislav Glejdura for assistance in the field and consultations and Pavel Lizoň for commenting the draft of the manuscript. This study was supported by grant VEGA 2/0062/10.

REFERENCES

- Dennis, R. W. G. 1978. British Ascomycetes. Vaduz.
Dissing, H. 2000. *Cudoniella* Sacc. In: L. Hansen & H. Knudsen (eds), Nordic macromycetes 1: 177–183.
Han S.-K., S.-H. Oh., & K.-J. Kim. 2010. Eight unrecorded higher fungi identified at the Korea National Arboretum. *Mycobiology* 38: 81–88
Jindřich, O. 2009. Vodomilné vřeckovýtřusé houby. *Mykol. Sbor.* 86: 104–106.

Ripková S. & al. 2007. Fungi of the Protected Landscape Area of Vihorlat / Huby chránenej krajinej oblasti Vihorlat. Institute of Botany of the Slovak Academy of Sciences, Bratislava, 149 pp.

Viktor Kučera: *Cudoniella acicularis*. *Catathelasma* (13): 25-27, 2011.

C. acicularis je zriedkavý druh, pred rokom 2002 na Slovensku neznámy. Bol zrejme prehliadaný alebo zamieňaný za *C. clavus*.



Cudoniella aciculare

(Malé Karpaty, Modra – Harmónia; see p. 25)



Cudoniella aciculare

(Malé Karpaty, Modra – Harmónia; see p. 25)