Cosmospora stegonsporii Rossman, Farr & Akulov, **sp. nov.**

***MycoBank*:** MB 511279.

***Etymology*:** Named after the associated host fungus.

***Latin diagnosis*:** Ascomata *Stegonsporiis* insidentia, globosa vel late pyriformia, 175–220 µm diam, 150–175 µm alta, brevi papilla, 30–40 µm diam, rubra vel atrorubra, KOH+ atrorubra. Asci cylindrici, 85–98 × 11–14 µm. Ascosporae 16–18 × 8–9.5 µm, late ellipsoideae, extremis late rotundatis, 1-septatae, leviter constrictae, maturitatae pallidae fuscae, laeves vel subtiliter spinulosae. Status asexualis *Fusarii* cf. *merismoidis* similis.

***Description*:** *Ascomata* superficial to partially immersed in soft, blackened mass of host conidia, globose to broadly pyriform, 175–220 µm diam, 150–175 µm high, often collapsed laterally or not, with short, indistinct, slightly darkened papilla, 30–40 µm diam, ascomata smooth to slightly scurfy, shiny at apex, red to dark red, KOH+ dark red, solitary or two to three together, scattered. *Asci* cylindrical, 85–98 × 11–14 µm, apex simple, 8-spored, ascospores obliquely monostichous. *Ascospores* 16–18 × 8–9.5 µm, broadly ellipsoidal, ends broadly rounded, 1-septate, slightly constricted, each cell multi-guttulate, hyaline when young, pale brown at maturity, smooth to finely spinulose.

***Cultural characteristics*:** Anamorph produced on 2 % potato-dextrose agar under alternating near-ultraviolet and fluorescent light (12/12 h): *Fusarium* cf. *merismoides*-like, culture slow-growing, 2.2–2.6 cm after 9 days, sporulating in centre, slimy, salmon colony, less slimy at margins. No microconidia produced. Macroconidia straight to slightly curved or wavy, cylindrical, slightly beaked at both ends, mostly 3-septate, 42–51 × 4.8–5.2 µm, occasionally 5-septate, 50–58 × 4.8–5.2 µm.

***Typus*: Ukraine**, Kharkov, Kharkov University Botanic Garden, 50.01.674N, 036.14.043E, on *Stegonsporium pyriforme* (Hoffm.: Fr.) Corda on bark of fallen trunk of *Tilia cordata*, 12 November 2006, collected by A. Akulov, determined by A. Rossman, CWU (Myc.) AS 2099, **holotypus**, BPI 878274, **isotypus**, culture ex-type AR 4385 = CBS 122305.

***Notes*:** This species is undoubtedly a member of the genus *Cosmospora* Rabenh.[1] as evidenced by the fungicolous habit, distinct ascomatal wall structure, ascospores that turn pale brown at maturity, and anamorph in the slow-growing *Fusarium* cf. *merismoides* group. This new species has ascospores that are similar in size to *C. stilbosporae* (Tul. & C. Tul.) Rossman & Samuels and *C. wegeliana* (Rehm) Rossman & Samuels. The ascospores of *C. stilbosporae* are fusiform. Both *C. stilbosporae* and *C. wegeliana* have pyriform ascomata each with a broad, blunt apical disk, while the new species lacks a broad apex. The anamorph of *Cosmospora wegeliana* is not known to produce macroconidia. Most species of *Cosmospora* occur on bark or stromatic pyrenomycetes[1] including those species recently described[1–5]. No species of *Cosmospora* has previously been described on or associated with *Stegonsporium* Corda or any dematiaceous hyphomycete.

***Colour illustrations*:** *Tilia cordata* in Kharkov University Botanic Garden (A. Akulov); ascomata, longitudinal section of ascoma, asci, ascospores (D. Farr). Scale bars = 100 µm, 20 µm, 10 µm.

***References*:** [1]Rossman AY, Samuels GT, Rogerson CT, Lowen RL (1999). Genera of *Bionectriaceae*, *Hypocreaceae*, and *Nectriaceae* (*Hypocreales*, *Ascomycetes*). *Studies in Mycology* **42**: 1–248. [2]Hosoya T, Tubaki K (2004). *Fusarium matuoi* sp. nov. and its teleomorph *Cosmospora matuoi* sp. nov. *Mycoscience* **45**: 261–270. [3]Nirenberg HI, Samuels GJ (2000). *Nectria* and *Fusarium*. II. *Cosmospora zealandica* comb. nov. and its anamorph, *Fusarium zealandicum* sp. nov. *Canadian Journal of Botany* **78**: 1482–1487. [4]Nong Y, Zhuang W-Y (2005). Preliminary survey of *Bionectriaceae* and *Nectriaceae*, *Hypocreales*, *Ascomycetes*) from Jigongshan, China. *Fungal Diversity* **19**: 95–107. [5]Zhuang W-Y, Zhang X-M (2002). Re-examination of *Bionectriaceae* and *Nectriaceae* (*Hypocreales*) from tropical China on deposit in HMAS. *Nova Hedwigia* **74**: 275–283.

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