Micacei/Domestici (BPP: 0.50 MLBS: 56% MBPP: 0.86) clade (FIG. 1). The latter was split into two subclades, one containing species of the morphologically discerned section *Domestici* plus *C. pusillulus* (= *C. heptemerus f. parvisporus*), *C. curtus* and *Coprinellus* sp. *7* (SZMC-NL-0150), hereafter referred to as Domestici clade (BPP: 0.50 MLBS: −MBPP: 0.76) and the other corresponding to section *Micacei* (Micacei clade, BPP: 1.00 MLBS: 89% MBPP: 0.94), including the setulose taxa *C. disseminatus*, *C. aureogranulatus*, *C. silvaticus*, *C. verrucispermus* and *C. xylophilus*. The position of *Coprinellus* sp. *8* (SZMC-NL-2933) has proved difficult to resolve due to a highly divergent ITS sequence. Based on morphological features (rich, thick-walled, colored veil), it would fit well in section *Domestici* but is not conspecific with any of the described species therein. All analyses place it in a transitional position between the Micacei/Domestici and the setulose clades. Similarly *C. simulans* could not be assigned a certain position in any of the analyses.

TAXONOMY

Coprinellus cinereopallidus L. Nagy, Házi, Papp & Vágvölgyi, sp. nov. FIGS. 2, 3

MycoBank MB561851

Pileus 3–6 (7) × 3–4 mm in iuventute atque clausus, usque ad 10–20 mm latus si plane expansus, ellipsoideus vel subglobosus, deinde convexus, applanatus in maturitate, leviter deliquescens, pellucide striatus usque ad centrum si udus, radialiter canaliculatus, plicatus in expansis speciminibus, omnino tenuissimis micaceis pilis obtectus, sine velo, pallidissime ochraceus vel pallide griseolus, in maturitate paene albidus vel pallide griseolo-ochraceus. Lamellae liberae, confertae, ventricosae, usque ad 1–1.5 mm latae, in iuventute albidae, deinde griseolae, demum nigrescentes, acie minute fimbriata albida. Stipes 0.5–1 mm crassus, 30–80 mm longus, elatus, fistulosus, fragilis, cylindricus vel inconspicue inflatus basim versus, minutissime omnino albis pilis pruinosus, albidus vel pallide ochraceus in maturitate. Caro inconspicua, fragilis, sine odore vel sapore conspicuo.

Sporae 8.9–14.2 × 5.8–7 µm, plerumque 12.6 × 6.6 µm, Q = 1.76–2.18, in fronte ellipsoideae apice fusiformi vel conico vel cylindrico atque basi obtusa, a latere fusiformes vel cylindricae, haud lentiformes, mediocriter rubrobrunneae, poro germinativo valde excentrico, 2–2.3 µm lato atque parvo hilo praeditae. Basidia tetrasporigera, biformia, clavata vel in medio constricta, 23–30 × 8–10 µm. Pleurocystidia absunt. Cheilocystidia lageniformia, 35–40 × 10–12 µm. Pileocystidia numerosissima, delicata, lagoeniformia collo cylindrico vel saepe sinuoso atque basi parva, elata, apice paene eadem latitudine, rotundato-inflato, interdum capitato, 62–93 × 9–18 µm, saepe luteola refractiva substantia praedito; intermixtis nonnullis robustis firmioribus cystidiis (110 × 15 µm), plerumque versus pilei centrum. Caulocystidia numerosa, lagoeniformia, collo cylindrico, plerumque sinuoso atque apice inflato-clavato, cuspide delicate rotundata, 55–88 × 17–29 µm. Sclerocystidia absunt. Velum abest. Fibulae absunt.

Pileus 4–7 × 3–5 mm when closed, ellipsoid to subcylindrical, expanding to convex-plano-convex then convex, 10–30 mm wide when fully expanded, surface translucently striate up to center when young, later radially sulcate-grooved, densely covered with short, hardly noticeable hairs, pale grayish brown to beige, darker in the center, grayish toward margin when moist, pale ochraceous brown to almost whitish when dry, weakly deliquescent; lamellae distant, free to narrowly adnate, verntricose, up to 1–1.5 mm broad, white when young becoming grayish then blackish upon spore maturation, with whitish, fimbriate edge; stipe 0.8–1.5 × 20–50 mm, fragile, fistulose, equal or slightly broadening downward, pure white, densely covered with glimmering, short hairs; context insignificant, brittle without peculiar odor or flavor.

Basidiospores 9.2–13.3 × (5)5.5–7 µm, on average 12.1 × 6.5 µm, Q = 1.76–2.18, in frontal view ellipsoid to subcylindrical with obtuse base and often acute or subpapillate apex, in lateral view ellipsoid to subamygdaloid, not lentiform, with small hilum and a (strongly) eccentric, ca. 1.8–2.1 µm wide germ pore; Basidia four-spored, clavate or elongate with a median constriction, bimorphic, 21–33 × 8–10 µm; Cheilocystidia lageniform with a tapering neck and capitate apex, sparse, 35–40 × 10–12 µm; pleurocystidia absent; pilocystidia sparse, lageniform with a tapering, rarely cylindrical neck and obtuse, rounded or subcapitate, often definitely capitate apex, 67–88 × 12–22 µm; caulocystidia seldom similar to pilocystidia but generally with a larger rounded base, lageniform with cylindrical or tapering neck and rounded apex 57–113 × 15–27.5 µm; cylindrical to diverticulate veil elements present on pileus surface. Clamp connections present.

HOLOTYPE. HUNGARY, Szeged, Szeged Botanical Garden, in mown lawn on clay-like soil, 25 May 2007, *L. Nagy, SZMC-NL-0177*, (HOLOTYPE, BP).

Additional specimens examined. HUNGARY, Lakitelek, Tőserdő, Bromo sterili-Robinietum, 14 Oct 2006., *L. Nagy, SZMC-NL-1145*; THE NETHERLANDS, Alphen an der Rijn, Rioolwaterzwivering, in leaf litter, *C.B. Uljé, Uljé 1163*.

Habitat and distribution. Growing solitary on mossy, clay-like soil or leaf litter. Known from Hungary and the Netherlands.

Remarks. On account of the diverticulate veil elements on the pileus, this species belongs to the group around *C. hiascens*, which also is supported by the phylogeny. Within this group it is closest to *C. velatopruinatus* both morphologically and phylogenetically. The molecular phylogeny however clearly

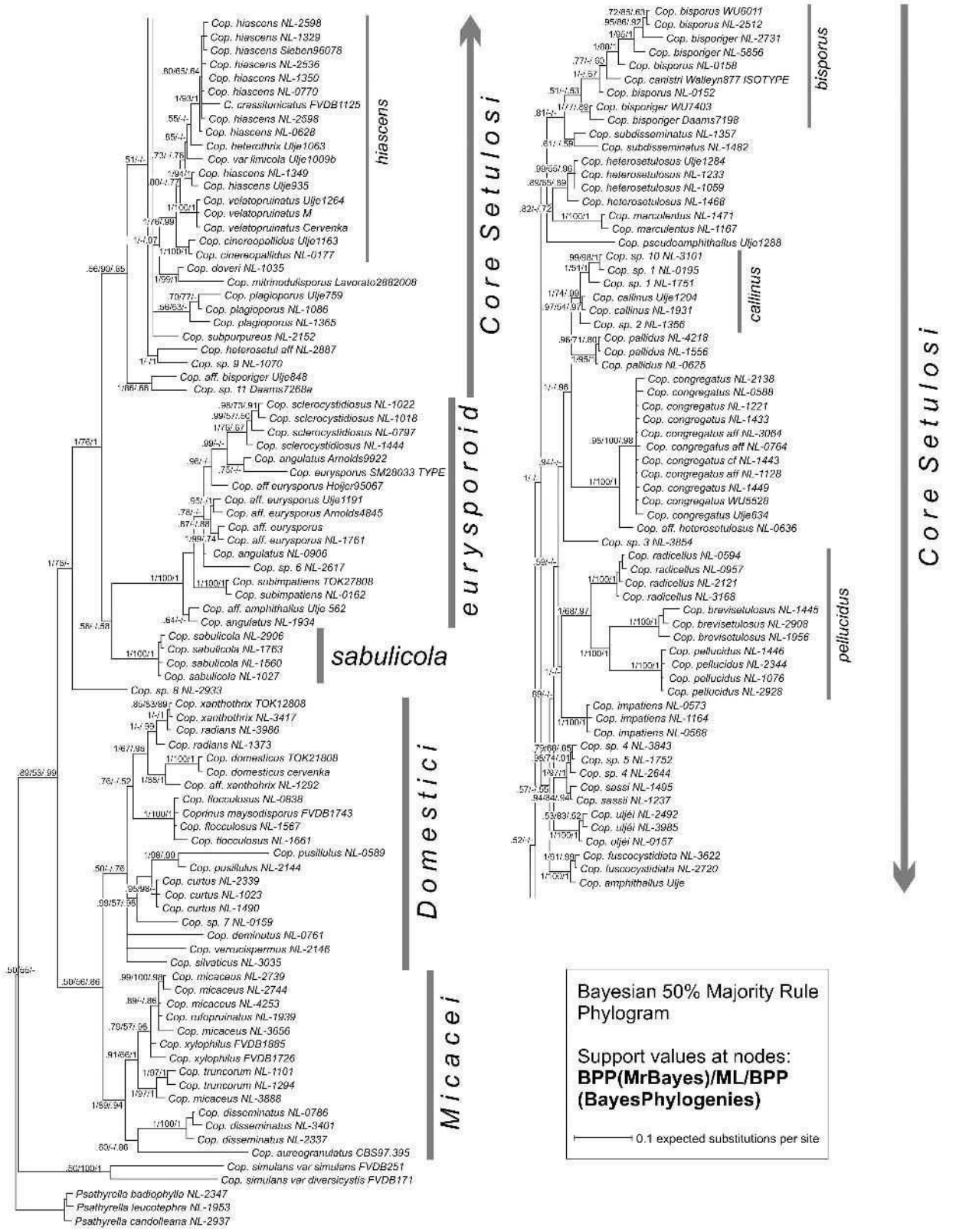

FIG. 1. Bayesian 50% majority rule consensus phylogram for 154 specimens of *Coprinellus* with the *Psathyrella candolleana* clade as outgroup. The partitioned BMCMC analysis was performed on the combined ITS + β-tubulin + nrLSU alignment and the tree and posterior probabilities were computed from 100 000 and 15 000 trees for the MrBayes MCMC and BayesPhylogenies mixture-model MCMC analyses respectively. Bootstrap values were estimated in 1000 replicates.

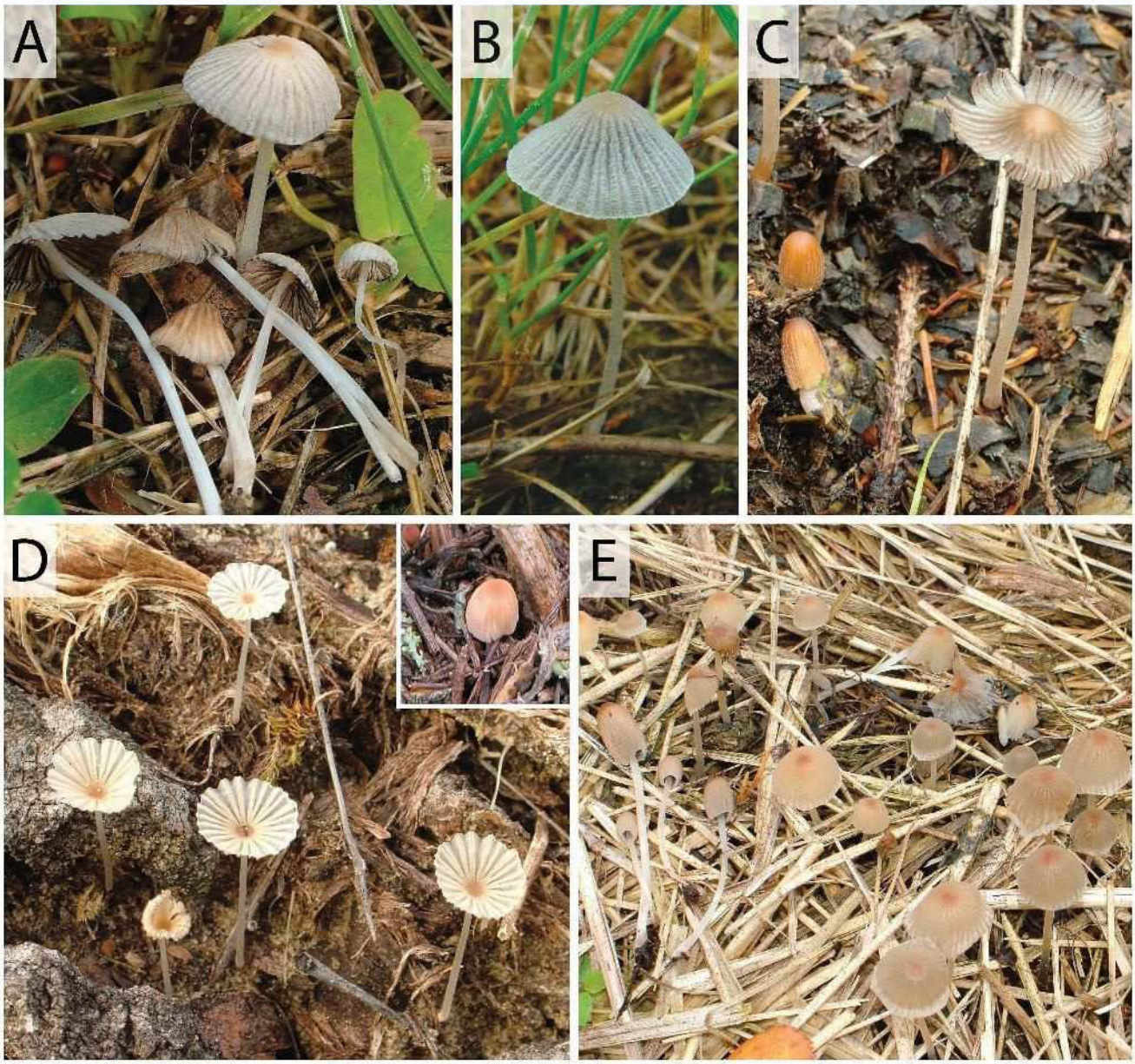

FIG. 2. Fruiting bodies of the species described in this paper. A. *C. cinereopallidus* dry specimens (holotype). B. *C. cinereopallidus*, fresh, wet specimen. C. *C. uljéi* (holotype). D. *C. sabulicola* (holotype), inset picture shows young fruiting body. E. *C. fuscocystidiatus* (holotype).

separates it from the three sequenced collections of *C. velatopruinatus* (BPP: 1.00 MLBS: 100% MBPP: 1.00). Although C. *cinereopallidus* resembles *C. velatopruinatus* in many respects, it differs in having distinctly capitate pileocystidia and lageniform cheilocystidia. The latter character is shared with *C. heterothrix*, in which the apices of the cheilocystidia are not capitate and both ends of the spores are obtuse. The grayish brown cap of *C. cinereopallidus*, which has no or faint ochraceous hues, also distinguishes it from *C. velatopruinatus* and *C. heterothrix*, which has a mainly ochraceous cinnamon-brown cap, similarly to most other species of the *C. hiascens* clade. Another species in this group is *C. minutisporus*, distinguished by its small, 7–8.5 µm long, basidiospores, a central germ pore and diminutive basidiocarps.

Coprinellus deminutus (Enderle) L. Nagy, Házi, Vágvölgyi and Papp, comb nov.

MycoBank MB561846

Basionym. *Coprinus deminutus* Enderle *Zeitschrift für Mykologie* 70:158. 2004.

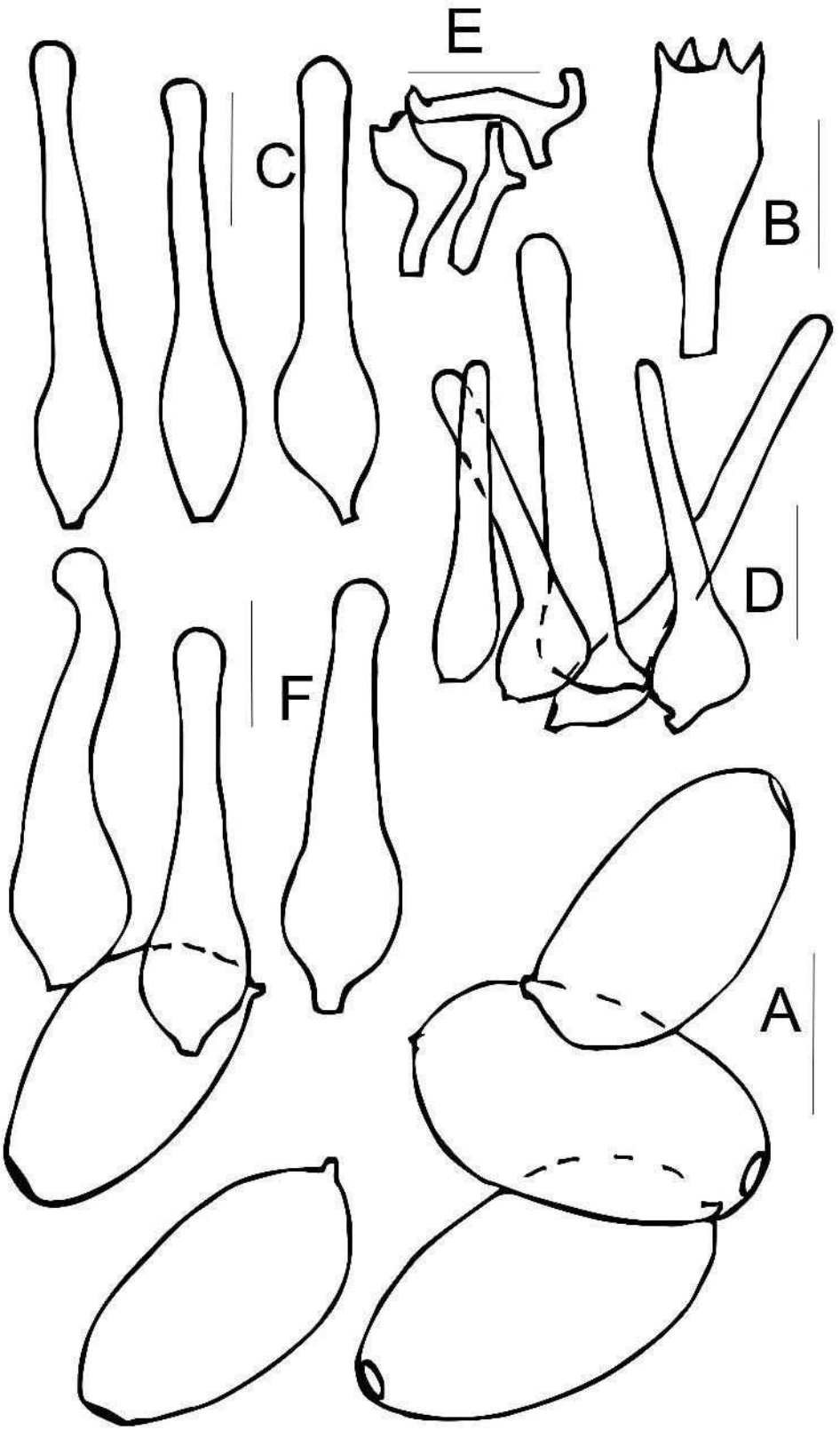

FIG. 3. *Coprinellus cinereopallidus*. A. Spores. B. Basidia. C. Pileocystidia. D. Caulocystidia. E. Veil elements. F. Cheilocystidia. Bars: A = 5 μm; B, E, F = 10 μm; C, D = 20 μm.