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Errata

Corrigendum: A new species of *Agaricus* (section *Sanguinolenti*) from Rome, Italy

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A corrigendum on
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Recently, we realised we have committed an error in the published article "A new species of Agaricus (section Sanguinolenti) from Rome, Italy" (Italian Journal of mycology, vol 51, pp. 1–10). In the article we described the new species *Agaricus hortusdamarum* A. Ferretti, I. Saar & A. Knijn based on two separate findings. The manuscript was written after a single specimen found in November 2020 which was confirmed to be a new species by molecular analyses and afterwards results were integrated upon the collection of five basidiomata in December 2021. After publication of the article, molecular analyses on one of the specimens of the second finding, although found in the same collection site and season and with a macroscopic appearance like the *Agaricus hortusdamarum* holotype, identified it as *Agaricus bisporus* (J.E. Lange) Imbach.

Although Figures 2a, c and e are from the *A. hortusdamarum* holotype, Figures 2b and d belong to a specimen of *A. bisporus*. The molecular analysis described in the article remains valid as it treated only the barcode sequence obtained from the holotype. Also, the macromorphological description was compiled based upon the holotype with only slight modifications after the second finding. As mentioned before, the macroscopic appearance of basidiomata of the two species was very similar; the most marked difference was that for *A. bisporus* the white universal veil left appendiculate remains along the entire circumference, while the *A. hortusdamarum* holotype had only some

remains. Furthermore, *A. bisporus* had a persistent marked good fungal smell, against the mild fungal smell of *A. hortusdamarum*.

Microscopic characters shown in Figures 5a and b are from the *A. hortusdamarum* holotype, while Figures 5c, d and e were obtained from *A. bisporus* specimens. For the sake of clarity, we repropose the Taxonomy section in toto, exclusively based upon the holotype specimen.

Taxonomy

Agaricus hortusdamarum A. Ferretti, I. Saar & A. Knijn, *sp. nov.*

Index Fungorum IF559484

Typification – Holotypus: Italy, Rome, Parco dei Daini, urban park, under *Cupressus sempervirens*, 41.916111°N, 12.493055°E, 14 Nov 2020, leg. Arnold Knijn, Amalia Ferretti (TUF105944, ITS sequence UDB0799866).

Etymology – hortusdamarum is a compound noun created from the Latin words for park/garden (hortus) of red deer (damarum, genitive plural), a translation of Parco dei Daini, where the holotype was collected.

Macromorphology – Pileus convex then plane and depressed, diameter ~9 cm, reddish-brown, squamulose, white trama exposed under the scales. The pileus margin slightly exceeded the lamellae, appendiculate with remains of the universal veil. Lamellae free, crowded, intercalated with lamellule, ventricular, at first pale, with age brown to dark brown. Stipe about 8.5 cm, cylindrical, central, fistulose, greyish-white, with an evanescent disappearing greyish-white membranous annulus, with a bulbous base covered with white mycelium. Stipe trama whitish, turning very slowly reddish brown when handled or cut (Fig. 2c). Odour: slight fungal smell.

Micromorphology – Basidiospores (one basidioma, n = 32) smooth, ellipsoid, the major part with a brown colouration, few of them with apiculum, lipid droplets and some granules were evident inside (Fig. 5a). Their average size was 6.1 × 4.6 µm [(7.1)–6.1–(5.2) × (5.2)–4.6–(3.9) µm], Qm=1.3 Q= [(1.5)–1.3–(1.2)]. Basidia bisporic and trisporic (Fig. 5b), 18–25 × 7–8 µm, with sterigmata up to 3.8 µm long (average 3.4 µm). Cheilocystidia abundant, hyaline, septate, cylindrical and clavate (Fig. 5a), single septated elements measuring 24–48 µm × 11–17 µm. Such cheilocystidia origin from the lamellar trama, as was described for *Agaricus iranicus* Mahdizadeh, Safaie, Goltapeh, L.A. Parra & Callac.

Habitat – On needle debris of pine and cypress, in urban park, autumn.

Distribution – So far only known from Italy.

Comments – Most similar to the closely related species *A. iranicus*. *Agaricus hortusdamarum* differs in an evident although slow reddish-brown discoloration when touched, scraped and cutted the stem surface and in cap with darker brown squamules. Microscopic evidence of larger cheilocystidia supports the distinction between the two species. Both species grow in temperate environments but *A. iranicus* presence is reported only in Asia and *A. hortusdamarum* is found in southern Europe. ITS barcode: eight single-nucleotide variations occur between both species, two of which identified as species-specific markers for *A. iranicus*.

The discussion of the article remains valid as a whole since it only discussed results obtained from the holotype. We would like to apologise for the inconvenience we have caused with this regrettable error and state that this does not affect the validity of the new species in any way. The original article has been updated.