

Notes on two hydnums
– *Bankera violascens* and *Sarcodon versipellis*

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This article deals with two questions concerning to hydneous fungi. I do not accept the name *Bankera cinerea* (Bull.: Fr.) Rauschert for *Bankera violascens* (Alb. et Schw.: Fr.) Pouz. The reason is that Bulliard's illustration of *Hydnum cinereum*, on which Rauschert based his combination, in my opinion does not show a species of the genus *Bankera*. The characters, on which this statement is based, are given.

The specimens of *Sarcodon balsamiodorus* Pouz. in *schaedis* from herbaria (PRM, BRA) belong, also according to the description of fresh material, to *Sarcodon versipellis* (Fr.) Quél.

Key words: Combination, *Bankera cinerea*, Bulliard's illustration, exsiccates, *Sarcodon balsamiodorus*.

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Článek komentuje dva otazníky vyvstávající při studiu lošáků. Neakceptuji jméno *Bankera cinerea* (Bull.: Fr.) Rauschert pro *Bankera violascens* (Alb. et Schw.: Fr.) Pouz., neboť exempláře *Hydnum cinereum* na Bulliardově ilustraci, na kterých Rauschert zakládá svou kombinaci, podle mého názoru nejsou jedinci rodu *Bankera*. Podávám popis znaků, na kterých zakládám své tvrzení.

Položky *Sarcodon balsamiodorus* Pouz. in *schaedis*, uložené v pražském (PRM) a bratislavském (BRA) herbáři, patří podle popisu čerstvého materiálu k *Sarcodon versipellis* (Fr.) Quél. [Vycházejí z uvedeného synonymního jména, navrhuji pro tento druh české jméno masozub (nebo lošák) balzámový namísto dřívě užitého lošák šedý (Veselý 1925) – toto jméno natolik neodpovídá skutečnosti, že by nemělo být používáno.]

During the study of some genera of hydneous fungi, some problems arose. The results (or maybe a contribution to discussion) of two of them are presented here.

Bankera cinerea or *Bankera violascens*?

Rauschert (1988) has proposed the new combination *Bankera cinerea* (Bull.: Fr.) Rauschert instead of the so far used *Bankera violascens* (Alb. et Schw.: Fr.) Pouz. He does so in accordance with Bulliard's illustration (Bulliard 1789; Latin description in Bulliard 1791: 309), in which he recognized this species. In



Fig. 1. The reproduction of Bulliard's illustration of *Hydnium cinereum*. The irregular outgrowths in the centre of pileus are well visible at the upper right specimens, the overgrown branchlet at the lower left ones.

this case the description of *Hydnium cinereum* Bull. relating to the mentioned illustration would be the first description of this species, because Albertini and Schweinitz described *Hydnium violascens* Alb. et Schw. in the year 1805 (Albertini and Schweinitz 1805).

Maas Geesteranus (1958) has discussed the possible identity of *Hydnium cinereum* Bull. with *Bankera violascens* (Alb. et Schw.: Fr.) Pouz. in reaction to Lundell's opinion that Bulliard's fungus could be *Hydnium nigrum* var. *melilotinum* (Quél.) Lundell (= *Phellodon niger* (Fr.: Fr.) P. Karst.; Lundell 1947: 3) or *Hydnium amicum* Quél. (= *Phellodon confluens* (Pers.) Pouz.; Lundell 1947: 1). Maas Geesteranus mentions characters which are corresponding to the genus *Bankera* or directly to the species *Bankera violascens* (Alb. et Schw.: Fr.) Pouz. as depicted in Bulliard's illustration:

- the smooth stipe, with at the most a thin layer of a superficial tomentum ("quelquefois aussi sa surface est pubescente...") which may bind vegetable debris;

- the cut specimen suggests that the context is homogeneous;
- the clustered growth;
- the general colouring of the carpophore;
- the pronounced funnelled shape of the full-grown pileus in some of the specimens;
- the radial striation;
- the concentric zones or rugosities in the centre of the pileus;
- the long stipe, which is unknown in *Phellodon confluens*, and
- the colour of its context, which excludes *Phellodon niger*.

Maas Geesteranus stresses the spiny "cap" in young stages, which he considers characteristic of the genus *Phellodon*, as the only character which could raise doubts about the identity of Bulliard's fungus.

It is however not *Phellodon confluens* (Pers.) Pouz. and even less *Phellodon niger* (Fr.: Fr.) P.Karst. (nobody really ever saw *Phellodon niger* with pale brown context at all). But it is not a *Bankera* species either.

This statement is based on the following facts:

- The branchlet which is passing through the basidiome is overgrown by the basidiome (picture down left) - this never occurs in the genus *Bankera* and is characteristic of the genera *Phellodon* and *Hydnellum* on the other hand.
- The stipe swelling in the lower part is characteristic of *Hydnellum* (the stipe of *Bankera violascens* is conically tapering in the lower part).
- The spiny "cap" when young, which is characteristic of the genus *Phellodon*, can be characteristic of some species of the genus *Hydnellum* as well.
- The centre of the pileus is covered by irregular outgrowths evidently accompanied by irregularity of its growth, while the scales of the genera *Sarcodon* and *Bankera* are the result of breaking up the originally smooth cuticle.

These are the reasons why it is not possible to consider the fungi in Bulliard's illustration as representatives of the genus *Bankera*. This is also why it is not possible to accept Rauschert's combination *Bankera cinerea* (Bull.: Fr.) Rauschert and it is necessary to preserve the name *Bankera violascens* (Alb. et Schw.: Fr.) Pouz. for this species.

The identity of *Sarcodon balsamiodorus*

There are some specimens in the herbaria Prague (PRM) and Bratislava (BRA) named *Hydnum (Sarcodon) balsamiodorus* Pouz. in schaedis or *Hydnum (Sarcodon) balsamiolens* Pouz. in schaedis. The description of fresh type material (collected 20. VII. 1969 at Raková near Čadca, Slovakia), kindly offered to me by Z. Pouzar, is adduced here in comparison with the appearance of the same fungus more than 20 years later, as there is the opportunity to see it personally in Prague herbarium.

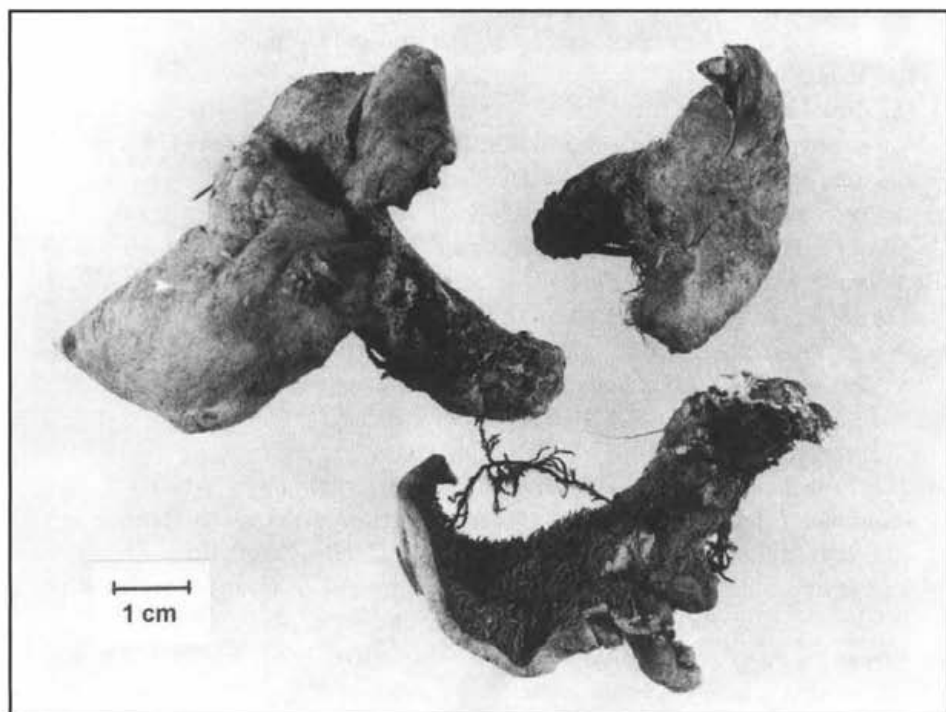


Fig. 2. Macroscopical view on specimens documented in PRM as *Sarcodon balsamiolens* Pouz. (ined.) cropped at Raková near Čadca (Slovakia), in mixed wood (*Picea abies*, *Abies alba*, *Pinus sylvestris* etc.), 15. VII. 1967, leg. J. Kuthan, det Z. Pouzar.

The fresh pileus is about 80 mm wide, early flatly infundibuliform, mostly obvolvately bent, even split, coloured ochreous-orange, its surface is smooth with innate squamules; the pileus of the exsiccate is beige, ochraceous to light brown, quite smooth, the squamules can only be seen, not touched. The fresh stipe is 40–50 mm long, 18–28 mm thick, cylindrical, peak prolonged in the lower part, the colour of its surface is orange-brown; the stipe of the exsiccate changed its colour like the pileus and is smooth. The spines are not silvery in the fresh material (in contrast to *Sarcodon fennicus* (P. Karst.) P. Karst.), there is a strange odour from the fresh spines, somewhat like camphor (different from the odour of *Hydnelium suaveolens* (Scop.: Fr.) P. Karst., not so sweet – compared with fresh material); the spines of the exsiccate are brown to purple-brown, decurrent to the stipe. The

fresh context is light white-greenish on cutting; the context of exsiccate is beige to nearly white (distinctly lighter than the surface of the pileus), the green hue has disappeared; it does not change its colour by reaction with a KOH solution (examined only on the exsiccate).

If we add the microscopic characters of our specimens to this description, oblately tuberculiform, 4-5 μm large spores and the presence of clamp-connections on the hyphae, it is evident that specimens preserved in the mentioned herbaria under the name of *Sarcodon balsamiodorus* (or *S. balsamiolens*) belong to the species *Sarcodon versipellis* (Fr.) Quél.

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