

**REDLIST SPECIES OF FUNGI HELD IN THE COLLECTIONS OF
THE SLOVAK NATIONAL MUSEUM
NATURAL HISTORY MUSEUM (BRA).
IV. VULNERABLE SPECIES (VU).**

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Súhrn: *Ohrozené druhy húb v zbierkach Slovenského národného múzea – Prírodovedného múzea (BRA). IV. Zraniteľné druhy (VU).* V príspevku sú uvedené herbárové položky tých druhov húb, ktoré sú zaradené v 3. verzii červeného zoznamu húb Slovenska (Lizoň 2001) v kategórii zraniteľné (vulnerable – VU). Zo 49 druhov patriacich do tejto kategórie sa v zbierkach SNM-PM nachádza 32 druhov, pričom mnohé údaje o ich výskyte ešte neboli nikdy publikované. Zloženie druhov v kategórii zraniteľných je veľmi neproporčné, boli sem zaradené druhy mimoriadne zriedkavé aj druhy, ktoré sú pomerne hojné, ale z rôznych príčin ohrozené. Preto pri každom druhu navrhujem aj kategóriu, do ktorej by mal byť, podľa súčasných vedomostí, zaradený v ďalšej verzii červeného zoznamu.

Key words: Conservation of fungi, threatened fungi, Slovakia.

Introduction

The last version of the redlist of Slovak fungi (Lizoň 2001) consists of 309 fungal taxa, 49 of them are treated as vulnerable (VU). In the herbarium of the Natural History Museum of Slovak National Museum (BRA) 31 of them are held. However the list of the species is rather unbalanced. Some of the species as e. g. *Caloscypha fulgens*, *Amanita friabilis*, *A. ovoidea*, *A. vittadinii*, *Calvatia candida*, *Chamonixia caespitosa*, *Coltricia motagnei*, *Floccularia straminea*, *Phellinus pouzarii* or *Polyporus rhizopilus* are extremely rare and often seriously threatened, while others, as e. g. *Amanita caesarea*, *Boletus regius* or *Gyrodon lividus* are not uncommon in certain areas. That is why I propose for each of the species a new category according to the current knowledge and criteria of International Union for Conservation of Nature (IUCN).

Records of some species has never been published before and collections at BRA represents at the same time the only data about their occurrence in Slovakia.

Amanita caesarea (Scop.) Pers.

Foreign specimens:

10.6.1978, BRACR4607, Bulgaria, Mičurin town, Strandža (Medenrit) Mts., in mosses under oaks, alt. 320 m, leg. and det.: J. Kuthan;

12.6.1978, BRACR4611, Bulgaria, Stara Planina Mts., Banja village, Obsor, in mosses under oaks, alt. 120 m, leg. and det.: J. Kuthan;

- 18.6.1978, BRACR4609, Bulgaria, Ropotamo Nature reserve, Arkutino village, in dry oak forest, alt. 50 m, leg. and det.: J. Kuthan;
 6.6.1979, BRACR4606, Bulgaria, Ropotamo Nature reserve, Arkutino village, in mosses under oaks, alt. 50 m, leg. and det. J. Kuthan;

Slovak specimens:

- ??, BRACR4591, Bratislava, Gebirgsvalder;
 ??, BRACR4592, Bratislava, Gebirgsvalder;
 ??, BRACR4615, Štiavnické vrchy Mts, Prenčov village, leg. and det.: A. Kmeť;
 29.7.1892, BRACR4614, Štiavnické vrchy Mts, Počúvadlo village, Bukovec hill, in deciduous forest, leg. and det.: A. Kmeť;
 29.7.1892, BRACR4616, Almáš, Šarkan, in deciduous forest, leg. and det.: A. Kmeť;
 1896, BRACR4593, Štiavnické vrchy Mts, Prenčov village, leg. and det.: A. Kmeť;
 20.6.1964, BRACR4605, Lučenská kotlina basin, Tomášovce village, leg. Šatara;
 11.10.1967, BRACR4596, Revúcka vrchovina hills, Lovinobaňa village, leg. J. Vasil;
 25.7.1970, BRACR4602, Strážovské vrchy Mts, Trenčianske Teplice town, in deciduous forest under oaks, alt. 400 m, leg. and det.: J. Kuthan;
 28.8.1970, BRACR4599, Vtáčnik Mts., Žarnovica town, leg. and det.: I. Fábry;
 11.7.1971, BRACR4601, Považský Inovec Mts., Zlatníky village, in oak forest, alt. 400 m, leg. and det.: J. Kuthan;
 13.8.1972, BRACR4598, Rimavská kotlina basin, Jesenské village, leg. J. Homér;
 19.8.1972, BRACR4597, Malé Karpaty Mts, Borinka village, Košarisko settlement, leg. M. Harman;
 17.8.1974, BRACR4613, Strážovské vrchy Mts, Šutovce village, in oak forest (*Quercus, Carpinus*), atl. 450 m, leg. and det.: J. Kuthan;
 28.8.1974, BRACR4600, Štiavnické vrchy Mts, Baďan village, in oak forest, alt. 400 m, leg. and det.: J. Kuthan;
 12.9.1974, BRACR4603, Štiavnické vrchy Mts, Badaň village, leg. M. Horváth;
 14.9.1974, BRACR4594, Štiavnické vrchy Mts, Devičany village, leg. Z. Novák;
 14.9.1974, BRACR4595, Štiavnické vrchy Mts, Devičany village, leg. Z. Novák;
 17.8.1975, BRACR4610, Strážovské vrchy Mts, Šutovce village, in oak forest, alt. 450 m, leg. and det.: J. Kuthan;
 21.8.1976, BRACR4604, Myjavská pahorkatina Mts, Krajné village, in private garden, leg. F. Lehutová;
 29.8.1976, BRACR4621, Hronská pahorkatina Mts, Tehla village, under oaks, alt. 300 m, leg. and det.: J. Kuthan;
 20.9.1984, BRACR4608, Štiavnické vrchy Mts, Ladzany village, in oak forest, alt. 400 m, leg. and det.: J. Kuthan;
 19.8.1989, BRACR4620, Malé Karpaty Mts, Kuchyňa village, loc. Báčorisko, in deciduous forest (*Quercus, Fagus*), leg. Obetko;
 19.8.1989, BRACR4622, Hronská pahorkatina Mts, Nový Tekov village, Nový vrch settlement, in young grove of *Quercus cerris*, leg. and det.: V. Kabát;
 10.9.1989, BRACR4619, Malé Karpaty Mts, Podolie village, in oak forest, leg. M. Mocková, R. Mocko;
 10.9.1994, BRACR4617, Pohronský Inovec Mts., Zlaté Moravce town, in oak forest near restaurant Zubor, leg. and det.: V. Kabát;
 18.9.1994, BRACR4618, Štiavnické vrchy Mts, Pečenice village, oak forest, leg. C. Maceková;
 15.8.2001, BRACR4623, Štiavnické vrchy Mts, Ladzany village, Veľký Gregor hill, in oak forest, leg. and det.: I. Kautmanová;

- 5.8.2002, BRACR784, Pohronský Inovec Mts., Obyce village, Kopanice settlement, Osná dolina valley, leg. R. Palič;
- 18.6.2005, BRACR4815, Štiavnické vrchy Mts, Čajkov village, in oak forest (*Quercus cerris*), alt.720 m, leg. and det.: V. Kautman;
- 18.8.2005, BRACR4945, Štiavnické vrchy Mts, Ladzany village, Veľký Gregor hill, in xero-thermophilous oak forest, leg. and det.: I. Kautmanová.

Škubla (2003) listed numerous publications and localities of this conspicuous species. Also the number of specimens held at BRA suggests that the species is not uncommon in Slovakia, where is the northern border of its occurrence. Especially in the last years it has been recorded in great numbers at certain localities, maybe as the effect of global warming. However, this delicious edible mushroom could be threatened by overcollecting and that's why I propose to keep its current status of vulnerable species (VU).

***Amanita friabilis* (P. Karst.) Bas**

- 5.9.1981, BRACR4626, Malá Fatra Mts, Bystrička village, Bystrička stream valley, under *Alnus glutinosa*, alt. 530 m, leg. and det.: L. Hagara;
- 1.9.1981, BRACR4624, Tríbeč Mts, Skýcov village, under *Alnus glutinosa*, alt. 390 m, leg. and det.: L. Hagara;
- 3.8.1991, BRACR4625, Borská nížina lowland, Studienka village, loc. Trnie, in alneto, alt. 210 m, leg. and det.: L. Hagara;
- 8.8.2004, BRACR9700, Nízke Tatry Mts., Pavčina Lehota village, Jelšie Nature Reserve, in old flooded forest with *Alnus*, alt. 700 m, leg. and det.: I. Kautmanová.

A. friabilis is on the list of 33 endangered fungi in Europe (Dahlberg, Kroneborg 2003). This species which is not known outside Europe is redlisted in 11 countries. Hagara (1982) found the species at two localities, Bystrička and Skýcov in 1981 and both specimens are held at BRA. They were also the first records of *A. friabilis* in Slovakia and next locality was found only in 1991, also by Hagara at Studienka. Until recently the last record was made by author at Pavčina Lehota. The four specimens held at BRA represents therefore the only known records of this extremely rare species in Slovakia. Because the species grows only in alder-swamps and is threatened by drainage, eutrophication of surface water and deforestation I propose to treat it as critically endangered (CR) in future.

***Amanita ovoidea* (Bull.) Quél.**

- 27.8.1966, BRACR4654, Strážovské vrchy Mts, Mníchova Lehota village, leg. and det.: I. Fábry.

This is the first and until recently the also the last record of the species at the Slovak territory. Fábry (1967) published the detailed description of this rare species. Though the species is not easy to determine, and may be misinterpreted I propose to treat it as critically endangered (CR) in future, as did Antonín et al. (1995).

Amanita vittadinii (Moretti) Vittad.

- 8.7.1966, BRACR4656, Malé Karpaty Mts., Svätý Jur village, leg. and det.: I. Fábry;
30.5.1974, BRACR4655, Podunajská rovina Lowland, Bajč village, leg. E. Futó;
6.10.1981, BRACR4657, Hronská pahorkatina Mts, Nový Tekov village, in soil in vineyard, leg.
J. Hruška.

Fábry (1967) published the record of the species at Svätý Jur in 1966 as the second for Slovakia. The first record was made by Deyl in 1953 at Kováčovské kopce. Antonín et al. (1995) published four records of this rare species, three of them held at BRA. The last known locality of its occurrence is near Rimavská Sobota town, where it was collected in 1994 (Vaník, Bútorá 1995). Voucher specimen is held at the herbarium of Technical University in Zvolen. *A. vittadinii* is sometimes hard to tell from similar *A. echinocephala* and as such may be misinterpreted. However the species is undoubtedly extremely rare in Slovakia and I propose to treat it as critically endangered (CR), as did Antonín et al. (1995).

Boletus impolitus Fr

Foreign specimens:

- 10.6.1974, BRACR4689, Bulgaria, Ropotamo Nature reserve, loc. "Arkutino", in dry forest (*Quercus, Carpinus*), alt. 45 m, leg. and det.: J. Kuthan;
6.11.2002, BRACR3286, France, Toulon, St. Tropez, in dry oak forest, leg. and det.: I. Kautmanová.

Slovak specimens:

- 1.10.1967, BRACR4693, Trnavská pahorkatina Mts., Viničné village, leg. and det.: I. Fábry;
4.9.1969, BRACR4688, Podunajská rovina lowland, Svätý Jur village, Šúr Nature Reserve, lowland flooded forest, leg. and det.: I. Fábry;
4.9.1969, BRACR4698, Podunajská rovina lowland, Svätý Jur village, Šúr Nature Reserve, in dense broadleaved forest, leg. and det.: I. Fábry;
16.8.1970, BRACR4676, Strážovské vrchy Mts, Šutovce village, in deciduous forest (*Quercus, Carpinus, Crataegus*), alt. 450 m, leg. and det.: J. Kuthan;
6.9.1972, BRACR4692, Hronská pahorkatina Mts, Pribeta village, in soil, leg. E. Futó;
26.6.1973, BRACR4674, Rimavská kotlina basin, Ožďany village, in oak forest, alt. 250 m, leg. and det.: J. Kuthan;
4.8.1973, BRACR4673, Hornonitrianska kotlina basin, Prievidza town, in soil, leg. M. Javorka;
12.9.1974, BRACR4671, Štiavnické vrchy Mts, Badaň village, in soil in forest, leg. and det.: A. Dermek;
10.10.1976, BRACR4691, Malé Karpaty Mts, Kuchyňa village, loc. Vývrať, in deciduous forest (*Carpinus, Quercus*), leg. T. Váleková;
24.10.1976, BRACR4696, Považský Inovec Mts., Radošina village, loc. Čertova pec, in beech forest, leg. A. Jakabová;
28.6.1980, BRACR4675, Myjavská pahorkatina Mts, Podkylava village, in oak forest, leg. O. Majerník;
11.9.1980, BRACR4699, Malé Karpaty Mts, Pernek village, in beech forest, leg. F. Demovič;
10.9.1981, BRACR4677, Pohronský Inovec Mts., Skýcov village, under oak, alt. 500 m, leg. and det.: J. Kuthan;

- 14.6.1983, BRACR4690, Štiavnické vrchy Mts, Ladzany village, in oak forest with *Carpinus*, alt. 450 m, leg. and det.: J. Kuthanová;
- 13.7.1984, BRACR4661, Malá Magura, Máčov village, under oak, alt. 350 m, leg. and det.: J. Kuthan;
- 28.8.1984, BRACR4697, Malé Karpaty Mts, Kuchyňa village, Prístodolok mt. loc. Vývrat, in calcareous soil, in deciduous forest, alt. 250 m, leg. V. Volf;
- 31.8.1986, BRACR4667, Strážovské vrchy Mts, Nitrica village, Drieňový vrch mt., in oak forest on the slope of the Drieňový vrch hill, loc. "Boky", on dolomites, alt. 420 m, leg. and det.: V. Hagara;
- 31.8.1986, BRACR4670, Strážovské vrchy Mts, Nitrica village, loc. Stráže, in oak forest, "Mladý háj", alt. 380 m, leg. and det.: L. Hagara;
- 9.6.1988, BRACR4664, Ipel'ská pahorkatina Mts, Brhlovce village, loc. Ladia, in oak forest, alt. 250 m, leg. and det.: J. Kuthan;
- 9.6.1988, BRACR4668, Štiavnické vrchy Mts, Ladzany village, loc. Železná baňa, in oak forest, alt. 390 m, leg. and det.: L. Hagara;
- 13.6.1988, BRACR4665, Hronská pahorkatina Mts, Podhájska village, Dlhý vrch hill, in soil under oaks, alt. 240 m, leg. and det.: J. Kuthan;
- 15.6.1988, BRACR4672, Ipel'ská pahorkatina Mts, Kalinčiakovo town, loc. Vápnik, in oak forest, alt. 240 m, leg. and det.: J. Kuthan;
- 17.9.1988, BRACR4662, Štiavnické vrchy Mts, Ladzany village, in oak forest, alt. 450 m, leg. and det.: P. Škubla;
- 17.9.1988, BRACR4666, Štiavnické vrchy Mts, Ladzany village, Veľký Gregor hill, in oak forest, alt. 450 m, leg. and det.: J. Sand;
- 17.9.1988, BRACR4669, Štiavnické vrchy Mts, Ladzany village, Veľký Gregor hill, under oaks, alt. 440 m, leg. and det.: L. Hagara;
- 19.6.1991, BRACR4663, Ipel'ská pahorkatina Mts, Brhlovce village, Kamenný chotár, loc. Ladia, under oaks, alt. 260 m, leg. and det.: L. Hagara;
- 4.10.1994, BRACR4659, Štiavnické vrchy Mts, Ladzany village, in oak forest, leg. M. Benko;
- 1.9.1995, BRACR4660, Ondavská vrchovina Mts., Bardejov town, deciduous forest (*Quercus, Fagus*), alt. 450 m, leg. L. Ďurček;
- 30.9.1995, BRACR4695, Malé Karpaty Mts, Kuchyňa village, loc. Bučková, alt. 320 m, leg. J. Sand;
- 8.9.2001, BRACR779, Košická kotlina basin, Prešov town, loc. Lesík delostrelcov – city park, leg. L. Ďurček;
- 19.10.2002, BRACR872, Malé Karpaty Mts., Kuchyňa village, loc. Bučková, in oak forest, alt. 400 m, leg. and det.: J. Červenka.

Pilát and Dermek (1974) published 5 localities of this species, but they supposed that it is probably more widespread. Škubla (2003) listed many localities of its occurrence. However the species is not easy to determine correctly and may be confused with other similar species, and that's why records without voucher specimens should be taken as not reliable. The species may be threatened by the loss of habitat and so I propose to maintain its status of vulnerable species (VU).

Boletus lupinus Fr.

- 11.9.1969, BRACR4757, Malé Karpaty Mts, Rohožník village, leg.: Z. Novák;
6.9.1970, BRACR4756, Malé Karpaty Mts, Rohožník village, leg.: Vorobsov;
19.10.1980, BRACR4758, Malé Karpaty Mts, Pezinok town, Kučičdorfská dolina valley, in soil under oaks, leg.: J. Hajdina;

Šedivý (1952) published *B. lupinus* in the list of species found at the vicinity of the Svätý Jur town in 1952. This is probably the first record of the species in Slovakia. Pilát and Dermek (1974) published it as unknown in Slovakia. Because the taxonomical concept of this variable species is still unclear, I propose to treat it as data deficient (DD) in future.

Boletus regius Krombh.

Foreign specimens:

- 19.6.1979, BRACR4763, Bulgaria, Schipka, loc. Schipcenski monastir, in soil under oak, leg. and det.: J. Kuthanová.

Slovak specimens:

- 6.9.1969, BRACR4782, Podunajská rovina lowland, Svätý Jur village, Šúr Nature Reserve, leg. and det.: A. Dermek;
16.9.1970, BRACR4760, Podunajská rovina lowland, Mudroňovo village, leg. and det.: E. Futó;
7.9.1972, BRACR4764, Strážovské vrchy Mts, Šutovce village, in oak forest, alt. 450 m, leg. and det.: J. Kuthan;
14.6.1974, BRACR4770, Podunajská rovina lowland, Mudroňovo village, in oak forest, leg. and det.: E. Futó;
12.9.1974, BRACR4759, Štiavnické vrchy Mts, Badaň village, in deciduous forest, leg. M. Horváth;
29.6.1980, BRACR4776, Štiavnické vrchy Mts, Ladzany village, in oak forest, alt. 450 m, leg. and det.: J. Kuthan;
31.7.1982, BRACR805, Trnie village, loc. Sietne, deciduous forest (*Fagus, Quercus*), leg. M. Záparka;
3.8.1982, BRACR802, Rohožník village, loc. Biele buky, in deciduous forest, leg. V. Chlumský;
9.6.1984, BRACR4777, Krupinská planina plateau, Dolná Strehová village, under oaks, alt. 250 m, leg. K. Tolnay;
14.6.1984, BRACR4771, Krupinská planina plateau, Čabradský Vrbovok village, in oak forest, alt. 300 m, leg. and det.: J. Kuthan;
14.7.1984, BRACR4766, Strážovské vrchy Mts, Nitrianske Rudno, in valle rivi Rudnianska, humi sub *Quercubus*, 380, leg. and det.: J. Kuthan,
31.8.1986, BRACR4761, Strážovské vrchy Mts, Nitrica village, Stráže village, in oak forest, on dolomites, 48 39' - 18 28', alt. 340 m, leg. L. Hagara et V. Hagara, det.: L. Hagara;
31.8.1986, BRACR4775, Strážovské vrchy Mts, Nitrica village, Stráže mt., loc. Mladý háj, on dolomites, 48 39' - 18 28', alt. 420 m, leg. and det.: L. Hagara;
14.9.1986, BRACR4783, Považský Inovec Mts., Vozokany village, in oak forest, alt. 320 m, leg. and det.: P. Škubla;
17.6.1988, BRACR4762, Krupinská planina plateau, Čabradský Vrbovok village, loc. Kotrgál, under oaks, alt. 360 m, leg. and det. L. Hagara;
17.9.1988, BRACR4780, Štiavnické vrchy Mts, Ladzany village, Veľký Gregor mt., under oaks, alt.

- 460 m, leg. and det. L. Hagara;
- 24.9.1988, BRACR4765, Malé Karpaty Mts, Rohožník village, Horný vrch hill, uder beech, alt. 420 m, leg. and det.: L. Hagara;
- 9.7.1989, BRACR4767, Biele Karpaty Mts., Ladce village, Budkov mt., in beech forest on limestones, alt. 500 m, leg. Frnčo, Buček, Kršík, det.: L.Hagara;
- 12.8.1989, BRACR4768, Javorníky Mts., Horná Maríková village, Kondrkovci settlement, at the edge of young beech forest, alt. 550 m, leg.: L. Novák, det.: L.Hagara;
- 24.9.1989, BRACR4778, Malé Karpaty Mts, Marianka village, Svätý vrch hill, in oak forest, loc. "Vy-horené", leg. and det.: J. Sand;
- 30.9.1989, BRACR4772, Malé Karpaty Mts, Kuchyňa village, Švancpošská dolina valley, in mixed forest (*Fagus*, *Quercus*, *Larix*), leg. S. Prihel;
- 1.7.1990, BRACR4774, Štiavnické vrchy Mts, Ladzany village, Veľký Gregor hill, in oak forest, alt. 340 m, leg. and det.: J. Sand;
- 14.9.1994, BRACR4773, Slanské vrchy Mts., Zámotov village, Ordánky hill, mixed deciduous forest (*Fagus*, *Quercus*, *Carpinus*, *Betula*), alt. 450 m, leg. Babej;
- 18.9.1995, BRACR4779, Veľká Fatra Mts., Kalná Roztoka village, Ublianka creek valley, under oaks, leg. and det.: L. Varjú;
- 27.7.1997, BRACR4781, Vtáčnik Mts., Žarnovica town, Horný Župkov village, in beech forest, leg. S. Danko;
- 10.6.1999, BRACR934, Horné Majere village, alt. 650 m, leg. and det.: P. Tlčimuka;
- 15.8.2001, BRACR4769, Štiavnické vrchy Mts, Ladzany village, Veľký Gregor hill, in oak forest, leg. and det.: I. Kautmanová;
- 22.8.2002, BRACR3391, Štiavnické vrchy Mts., Ladzany village, Veľký Gregor hill, alt. 570 m, leg. and det.: I. Kautmanová;
- 22.8.2002, BRACR841, Štiavnické vrchy Mts., Ladzany village, Veľký Gregor hill, in oak forest, leg. and det.: I. Kautmanová;
- 24.8.2002, BRACR761, Pohronský Inovec Mts., Obyce village, loc. Kopanice, Osná dolina valley, in oak forest, leg. Š. Kiss.

Pilát and Dermek (1974) reported it as common in some regions in southern Slovakia. Škubla (2003) listed many data on its occurrence, too. Antonín et al. (1995) treated it as endangered species, threatened by overcollecting and loss of habitat. Though the species is not uncommon in Slovakia, where is the northern border of its occurrence, it is a valuable indicator of old xerothermophilous deciduous forests, and I propose to maintain its current status of vulnerable species (VU).

Boletus speciosus Frost

- 15.9.1974, BRACR4826, Malé Karpaty Mts, Rohožník village, loc. Bílé buky, in soil in oak forest, leg. V. Chlumecký;
- 25.6.1981, BRACR4830, Malé Karpaty Mts, Kučišdorfská dolina valley, loc. Lipiny, in soil in oak forest, leg. L. Sládek;
- 1.8.1989, BRACR4829, Považský Inovec Mts., Čaradice village, in oak forest N of the village, leg. M. Svetlíková;
- 25.7.1975, BRACR4828, Malé Karpaty Mts, Rohožník village, in soil in deciduous forest (*Quercus*), leg. and det.: M. Polák;

- 31.8.1986, BRACR4831, Strážovské vrchy Mts, Nitrica village, loc. Stráže, "Mladý háj", on dolomites, alt. 480 m, leg. and det.: L. Hagara;
- 21.7.1979, BRACR4821, Myjavská pahorkatina upland, Hrašné village, (distr. urb. Myjava), in soil in deciduous forest (*Quercus, Fagus, Carpinus*), leg. D. Petrovič;
- 27.7.1997, BRACR4823, Vtáčnik Mts., Žarnovica town, Horný Župkov village, in beech forest, leg. S. Danko;
- 24.6.1994, BRACR4822, Štiavnické vrchy Mts, Ladzany village, Malý Gregor hill, in deciduous forest (*Quercus, Carpinus*), alt. 400 m, leg. and det.: P. Škubla;
- 21.7.1979, BRACR4825, Štiavnické vrchy Mts, Žemberovce village, in soil in oak forest, leg. K. Slovinec;
- 5.7.1993, BRACR4824, Ondavská vrchovina upland, Kvakovce village, loc. Viničky, under *Carpinus*, leg. and det.: S. Adamčík;
- 31.8.1986, BRACR4827, Strážovské vrchy Mts, Nitrica village, loc. Stráže, under oaks at the slope of the Stráže hill, loc. "Mladý háj", on dolomites, 48° 39' N, 18° 28' E, alt. 410 m, leg. and det.: L. Hagara;
- 15.9.1974, BRACR4832, Malé Karpaty Mts, Rohožník town, leg. V. Chlumský;
- 25.8.2002, BRACR787, Pohronský Inovec Mts., Obyce village, Kadiška recreation area, at the edge of deciduous forest (*Quercus, Carpinus*), leg. Š. Kiss;
- 22.8.2002, BRACR834, Štiavnické vrchy Mts, Ladzany village, Veľký Gregor hill, in oak forest, leg. and det.: I. Kautmanová.

The same is valid for this species, as for *B. regius*. I propose to maintain its status of vulnerable species (VU).

Boletus torosus Fr.

- 14.9.1974, BRACR4833, Štiavnické vrchy Mts, Devičany village, in soil in oak forest, leg.: Z. Novák, det.: I. Fábry;
- 14.9.1974, BRACR4835, Štiavnické vrchy Mts, Devičany village, leg. and det.: A. Dermek;
- 15.7.1981, BRACR4834, Ipeľská pahorkatina Upland, Žemberovce village, loc. Dolinky, in meadow with scattered oaks, alt. 280 m, leg. and det.: L. Hagara;
- 3.8.1982, BRACR806, Malé Karpaty Mts., Rohožník village, loc. Biele buky, in deciduous forest, leg. V. Chlumský;
- 10.8.1991, BRACR4839, Malé Karpaty Mts, Kuchyňa village, loc. Bučková, under beech in calcareous soil, alt. 480 m, leg. and det.: L. Hagara;
- 10.9.1994, BRACR4838, Štiavnické vrchy Mts, Ladzany village, in oak forest, leg. and det.: I. Kautmanová;
- 15.9.1994, BRACR4836, Malé Karpaty Mts, Kuchyňa village, loc. Bučková, in beech forest, alt. 420 m, leg. and det.: J. Sand;
- 3.8.1995, BRACR4837, Krupinská planina Plateau, Čabradský Vrbovok village, in deciduous forest (*Quercus, Carpinus*), alt. 300 m, leg. and det.: P. Škubla;
- 16.7.2005, BRACR4805, Veporské vrchy Mts, Lom nad Rimavicou village, in mixed forest (*Fagus, Picea*), alt. 400 m, leg. and det.: M. Procházka.

Pilát and Dermek (1974) published it as a species with complex and unsolved taxonomy. Until recently it is hard to tell which of the reported records are reliable. Hagara (1982a) published the specimens nr. 4833 and 4835 as the first record of the species in Slovakia

and his own collection (specimen nr. 4834) as the second one. Since then several records of this species has been published, but without voucher specimens they must be treated as not reliable. Though the species is hard to identify, it is undoubtedly rare and I propose to maintain its status of vulnerable species (VU) for future.

Calvatia candida (Rostk.) Hollós

23.10.1971, BRACR4841, Hronská pahorkatina Upland, Marcelová village, leg. and det.: I. Fábry;
7.1981, BRACR4842, Podunajská rovina lowland, Bajč, Vlkanovo, in pasture, leg. and det.: E. Futó.

Jeppson (2008) characterized it as a declining species in whole Europe, threatened by loss of habitat caused by decreased or ceased grazing. He published one collection from the vicinity of Malacky at Borská nížina lowland, in 2005. Pilát (1958) published 8 localities of the species and Škubla (2003) added another 10, mostly historical ones. Specimens held at BRA from 1971 and 1981 and Jeppson's collection from 2005 are therefore the last known record of this inconspicuous and probably often not recognized species. I propose to maintain its status of vulnerable species (VU) for future.

Caloscypha fulgens (Pers.) Boud.

20.4.2004, BRACR4971, Spišsko-šarišské medzihorie Mts., Prešov town, Terňa village, Lysá stráž mt., on northern slope of the mountain, in shrubs of *Prunus spinosa*, on soil., 69093b21 14'49 06' 500, leg. L. Ďurček, det. I. Kautmanová;
26.4.2006, BRACR9644, Strážovské vrchy Mts, Púchov town, Beluša village, in spruce forest, leg. and det. O. Roučka.

Specimen Nr. 9644 is a part of the collection of O. Roučka, who found this rare species in 2006 at one locality near Púchov town, growing in large numbers. However the occurrence was not confirmed in following years despite several visits of the site. Kuthan et al. (1999) reported a single collection from Stužica Nature Reserve in 1972, specimen is held at PRM. He also stated that the species is known from Belanské Tatry Mts. (Kubička 1976) and from the vicinity of Spišská Nová Ves. The second locality has been confirmed in 2008 when V. Ridzoň published the image of *C. fulgens* collected in that region (Anonym 2008). It is hard to decide whether this small but conspicuous species growing early in the spring is overlooked or really rare, therefore I propose to treat it as data deficient (DD) in future.

Chamonixia caespitosa Rolland

3.7.1983, BRACR4843, Malá Fatra Mts, Bystrička village, in sandy soil at the bank of the Bystrička stream, in spruce forest, alt. 597 m, leg. and det.: L. Hagara;
22.8.2005, BRACR4811, Západné Tatry Mts., Zuberec village, Mačie diery Nature Reserve, in spruce forest (*Picea abies*) on limestone, leg. and det.: I.Kautmanová;
14.7.2007, BRACR12033, Západné Tatry Mts., Zuberec village, Mačie diery Nature Reserve, in spruce forest, leg. and det.: V. Kautman.

Hagara (1985) described the collection at Bystrička as the first record of the species in Slovakia and at the same time the most eastern in Europe. Antonín et al. (1995) treated it as a critically endangered species, known only from two localities in Slovakia. Since then it has been collected at Spálený grúnik nature reserve in Orava region and later by author (spec. nr. 4811, 2033). Though the species is hypogeous and may be overlooked, it is probably really rare and I propose to treat it as vulnerable (VU) also in future.

Clathrus ruber P. Micheli ex Pers.

Foreign specimens:

- 1886, BRACR4871, Alp. Marit. region littorale, Montboron, leg. J. B. Barla;
- 21.6.1966, BRACR4866, Yugoslavia, Stari Bar, on bare ground under *Olea europaea*, alt. 120 m, leg. and det.: J. Kuthan;
- 12.6.1971, BRACR4863, Bulgaria, Ropotamo Nature Reserve, part Arkutino in humid soil under deciduous trees (*Quercus*, *Fraxinus*, *Ulmus*), alt. 20 m, leg. and det.: J. Kuthan;
- 12.6.1978, BRACR4845, Bulgaria, Stara Planina region, Banja Mts., Obsor village, in soil in fallen leaves of *Quercus*, alt. 120 m, leg. and det.: J. Kuthan;
- 18.6.1978, BRACR4846, Bulgaria, Ropotamo Nature Reserve, part Arkutino, in humid soil under deciduous trees (*Ulmus*, *Fraxinus*) + *Ruscus aculeatus*, alt. 40 m, leg. and det.: J. Kuthan;
- 19.6.1978, BRACR4847, Bulgaria, Strandža Mts., Mičurin town, between villages Mičurin and Izgrev, in soil in fallen leaves of *Quercus*, leg. and det.: J. Kuthan;
- 4.6.1979, BRACR4844, Bulgaria, Banja Mts., Obsor village, in fallen leaves of *Quercus*, alt. 80 m, leg. and det.: J. Kuthan;
- 15.6.1980, BRACR4868, Yugoslavia, Autocamping Kosirina, Murter Isle, in soil under *Olea europaea*, alt. 15 m, leg. and det.: J. Kuthan;
- 19.6.1980, BRACR4864, Yugoslavia, Rijeka town, autocamping Bakarac, in soil under *Populus*, alt. 20 m, leg. and det.: J. Kuthan;
- 20.6.1980, BRACR4869, Yugoslavia, autocamping Bakarac, in soil under young pines, alt. 20 m, leg. and det.: J. Kuthanová;
- 25.9.1981, BRACR4865, Italy, Bosco di Mesola region, in delta of Po river, in soil under *Quercus illex*, leg. J. Kubička;
- 12.6.1987, BRACR4867, Yugoslavia, Rab, in garden, alt. 30 m, leg. and det.: J. Kuthanová;
- 5.11.1995, BRACR4870, Croatia, Biokovo region, Tučepi town, under *Pinus*, leg. and det.: E. Varjú.

Antonín et al. (1995) reported it as a critically endangered species, known only from 3 localities in Slovakia. Lizoň (1989) published one collection, from Šútovce, preserved at PRM. This spectacular and conspicuous species is undoubtedly extremely rare in Slovakia, where is the northern border of its occurrence, but it is widespread and common throughout whole Mediterranean region and I don't think it is threatened at all. Therefore I propose to treat it as low risk (LR) for future.

Coltricia montagnei (Fr.) Murrill

- 5.7.1966, BRACR4873, Malé Karpaty Mts, Bratislava - Karlova Ves, Devínska Kobyla Nature Reserve, southern slopes between Karlova Ves and Devín villages, alt. 250 m, leg. J. Kollár, det. F. Kotlaba;

5.7.1966, BRACR4872, Malé Karpaty Mts, Bratislava - Karlova Ves, Devínska Kobyla Nature Reserve, southern slopes between Karlova Ves and Devín villages, alt. 250 m, leg. J. Kollár, det. F. Kotlaba.

These two specimens of the same collection are the only known records of the species at the territory of Slovakia (Antonín et al. 1995). Škubla (2003) presented one unpublished Lazebníček's collection of the species at Ihľany –Majerka in Levočské vrchy Mts. but without any voucher specimen. As this relatively big and conspicuous species had not been collected since then and the locality near Bratislava is threatened by rapid urban development, I propose to treat *C. motagnei* as critically endangered (CR) if not extinct (EX) in future.

Crepidotus crocophyllus (Berk.) Sacc.

Foreign specimens:

- 15.6.1972, BRACR425, Bulgaria, Ropotamo Nature Reserve, loc. Veliov vir, alt. 30 m, leg. and det.: J. Kuthan;
16.6.1972, BRACR3469, Bulgaria, Ropotamo Nature Reserve, loc. Veliov vir, alt. 30 m, leg. and det.: J. Kuthan;

Slovak specimens:

- 6.6.1971, BRACR424, Borská nížina Lowland, Brodské village, leg. and det.: A. Dermek;
8.5.1972, BRACR427, Borská nížina Lowland, Brodské village, leg. and det.: A. Dermek
13.5.1993, BRACR428, Podunajská rovina lowland, Sihof Island on Danube river, leg. and det.: S. Adamčík;
24.9.1993, BRACR421, Borská nížina lowland, Jakubov village, Šmolzí Nature Reserve, alt. 200 m, leg. and det.: P. Škubla;
22.7.2003, BRACR89, Podunajská rovina lowland, Bratislava - Rusovce, Dolná sihof island, Q 79069a, alt. 130 m, leg. and det.: J. Červenka;
1.8.2003, BRACR2555, Podunajská rovina lowland, Bratislava-Podunajské Biskupice, Dunajské luhy protected area, on fallen trunk of poplar, alt. 135 m, leg. and det.: M. Zelenay;
19.10.2003, BRACR2551, Podunajská rovina lowland, Bratislava-Vlčie hrdlo, 48°06'23''N, 17°09'31''E, alt. 135 m, leg. and det.: M. Zelenay;
5.5.2004, BRACR3544, Borská Nížina lowland, Moravský Svätý Ján village, loc. Borové, lowland flooded forest (*Quercus*, *Acer*, *Fraxinus*), on rotten trunk of ash, alt. 250 m, leg. and det.: I. Kautmanová;
28.10.2004, BRACR3555, Podunajská rovina lowland, Bratislava - Rusovce, Dolný ostrov Nature Reserve, leg. and det.: I. Kautmanová;
20.5.2006, BRACR9161, Podunajská rovina lowland, Bratislava, Rusovce, Dunajské ostrovy protected area, in lowland flooded forest on rotten trunk of deciduous tree, alt. 160 m, leg. and det. I. Kautmanová.

Antonín et al. (1995) reported it as a critically endangered species, known only from 2 localities in Slovakia, one of them at Brodské (spec. nr. 424, 427). After the fall of „iron curtain“ in 1989, borderline localities along the Morava and Danube rivers were opened for public access and *C. crocophyllus* has been collected repeatedly in well preserved surrounding lowland flooded forests (Škubla 1994a, 1995, 1997). Also the number of speci-

mens held at BRA increased. Those localities were later proclaimed protected areas, and so the future of the species has been probably guaranteed. However, there has been only a few recent record of this conspicuous species from elsewhere – Chtelnica, (Anonym 2008, Ripková et al. 2005, 2007), and so I propose to treat it as endangered (EN) in future.

Gastrosporium simplex Mattir.

Foreign specimens:

- 7.3.1954, BRACR4876, Bohemia, Praha, Jínonice village, in steppe, leg. A. Novacký;
31.3.1957, BRACR4874, Bohemia, Praha, Radotínske údolie valley, on Homolka village, leg. F. Kotlaba et A. Novacký, det.: F. Kotlaba;
14.6.1975, BRACR4875, Bulgaria, Primorsko village, in pasture, alt. 100 m, leg. and det.: J. Kuthan.

Slovak specimens:

- 4.9.1975, BRACR582, Považský Inovec Mts., Hlohovec town, Soroš hill, leg. M. Vozárová.

Pilát (1958) published a single known record of the species at the Slovak territory, collected in 1953 at Čenkov. Specimen held at BRA is therefore the second and so far the last published collection of this inconspicuous and rare species. As it is hypogeous, it might be overlooked and so I propose to treat it as data deficient (DD) in future.

Geastrum berkeleyi Massee

- 27.10.1973, BRACR269, Podunajská rovina lowland, Imeľ village, leg.: E. Futó, det.: I. Fábry;
25.3.1974, BRACR277, Hronská pahorkatina Mts, Chotín village, leg. and det.: E. Futó;
25.9.1977, BRACR272, Podunajská rovina lowland, Bajč village, leg. and det.: E. Futó;
7.1981, BRACR216, Podunajská rovina lowland, Hurbanovo town, Konkoľ village, leg. and det.: E. Futó;
9.6.2008, BRACR12095, Borská nížina lowland, Lakšárska Nová Ves village, in weeds and shrubs at the edge of the village, leg. and det.: I. Kautmanová;
9.10.2008, BRACR????, Muránska planina Mts., Muránska Huta village, loc. Veľká lúka, along the forest road in mixed forest (*Picea*, *Abies*, *Fagus*), alt. 950 m, leg. and det.: M. Jeppson.

Kotlaba and Pouzar (1987) found it at Brezová pod Bradlom in 1985 and reported it from 5 localities in southern Slovakia, at one of them (Imeľ) as numerous. Some of the specimens are held at PRM and BRNM. Antonín et al. (1995) treated it as a critically endangered species, known only from 3 Slovak localities, one of them probably vanished. Jeppson (2008) characterized it as an extremely rare species in Slovakia with few recent records. In one locality in the Záhorská nížina fresh fruiting bodies have abounded in 2004, 2005 and 2006. This was the single known recent locality in Slovakia until October 2008, when it has been recorded by Jeppson at Muránska planina Mts. Because the species is undoubtedly rare and seriously threatened by habitat loss I propose for future to treat it as critically endangered (CR), as it is in Czech Republic.

Gomphus clavatus (Pers.) Gray

- 15.8.1965, BRACR4914, Turzovská vrchovina Mts, Raková village, in coniferous forest (*Picea, Abies*), alt. 600 m, leg. and det.: J. Kuthan;
- 1.8.1970, BRACR4912, Strážovské vrchy Mts, Čičmany village, in coniferous forest (*Picea, Abies*), alt. 550 m, leg. and det.: J. Kuthan;
- 13.9.1970, BRACR4911, Vysoké Tatry Mts, Javorina hill, in coniferous forest (*Picea, Abies*), alt. 800 m, leg. and det.: J. Kuthan;
- 5.8.1972, BRACR4888, Malé Karpaty Mts, Kuchyňa village, loc. Vývrať, leg. A. Horváthová;
- 6.8.1972, BRACR4883, Malé Karpaty Mts, Kuchyňa village, loc. Vývrať, leg. A. Horváthová;
- 16.8.1972, BRACR4909, Veporské vrchy Mts, Čierny Balog village, Dobročský prales Nature Reserve, in mixed forest (*Pinus, Abies, Fagus*), alt. 800 m, leg. and det.: J. Kuthan;
- 7.9.1972, BRACR4910, Strážovské vrchy Mts, Fačkov village, in coniferous forest (*Abies*), alt. 550 m, leg. and det.: J. Kuthan;
- 5.8.1973, BRACR4881, Vysoké Tatry Mts, Východná village, between Východná and Važec villages, in coniferous forest, under *Abies*, alt. 850 m, leg. and det.: J. Kuthan;
- 8.8.1973, BRACR9473, Turzovská vrchovina Mts, Raková village, under spruces and pines, leg. J. Dítě;
- 16.7.1977, BRACR4908, Nízke Tatry Mts., Nižná Šuňava village, under coniferous trees (*Pinus, Abies*), alt. 850 m, leg. and det.: J. Kuthan;
- 16.7.1977, BRACR4913, Podtatranská kotlina basin, Lučivná village, in spruce forest, alt. m 600, leg. and det.: J. Kuthan;
- 12.7.1985, BRACR4879, Liptovská kotlina basin, Pribylina village, loc. Hrdovo, in spruce forest, alt. 850 m, leg. and det.: P. Škubla;
- 6.7.1988, BRACR4887, Liptovská kotlina basin, Pribylina village, loc. Hrdovo, in spruce forest, alt. 900 m, leg. and det.: P. Škubla;
- 4.8.1989, BRACR4877, Vysoké Tatry Mts, Dolina siedmich prameňov valley, on the slope of the Kobylí vrch hill, under fir, alt. 880 m, leg. and det.: J. Kuthan;
- 7.8.1989, BRACR4882, Vysoké Tatry Mts, Podbanské village, loc. Kokavský most, on the slope of the Hluchanka hill, in spruce forest, alt. 870 m, leg. and det.: J. Kuthan;
- 21.9.1996, BRACR4880, Západné Tatry mts., Podbanské village, loc. Hrdovo, in spruce forest, leg. and det.: P. Škubla;
- 20.8.1997, BRACR4878, Nízke Tatry Mts., Malužiná village, Michalovo valley, in mixed forest (*Picea, Abies, Fagus*), alt. 740 m, leg. H. Kautmanová, det. I. Kautmanová;
- 1998, BRACR4885, Slanské vrchy Mts., Pavlovce nad Topľou village, loc. Pastovníky, in beech forest, alt. 400 m, leg. and det. L. Ďurček;
- 1.8.1998, BRACR4884, Podtatranská brázda basin, Oravice village, in spruce forest, alt. 1100 m, leg. and det.: I. Kautmanová;
- 21.7.1999, BRACR4886, Nízke Tatry Mts., Malužiná village, Michalovo valley, in spruce forest, alt. 770 m, leg. B. Kautmanová, det. I. Kautmanová;
- 23.8.2005, BRACR4852, Nízke Tatry Mts., Malužiná, Michalovo valley, in mixed forest (*Picea abies, Abies alba, Fagus, Corylus*) on limestone, alt. 760 m, leg. and det.: I. Kautmanová.

This conspicuous species is listed as one of the 33 threatened fungi in Europe (Dahlberg, Croneborg 2003), redlisted in 17 European countries. The number of specimens held at BRA as well as number of records listed by Škubla (2003) may suggest that the species is

not really rare, but opposite is true. It is an indicator species of mature coniferous and deciduous forests on calcareous and subneutral soils, mainly in montane and subalpine zones and as such it is rather vulnerable, so I propose to maintain its current status (VU).

Gyrodon lividus (Bull.) Sacc.

- 15.8.1968, BRACR4925, Borská nížina lowland, Kúty village, leg. and det.: A. Dermek;
29.8.1969, BRACR4921, Borská nížina lowland, Gbely village, leg. and det.: A. Dermek;
13.9.1969, BRACR4923, Borská nížina lowland, Malacky town, in deciduous forest, leg. and det.: I. Fábry;
13.9.1969, BRACR8015, Borská nížina lowland, Malacky town, leg. and det.: I. Fábry;
15.9.1974, BRACR4922, Strážovské vrchy Mts, Dolná Poruba village, in Alnetis, alt. 400 m, leg. and det.: J. Kuthan;
21.9.1975, BRACR8004, Strážovské vrchy mts., Domanická Lehota village, under *Alnus glutinosa*, at river Hodoň, leg. J. Kubička, M. Svrček, det.: M. Svrček;
2.9.1976, BRACR4915, Strážovské vrchy Mts, Domanická Lehota village, under *Alnus glutinosa*, near the river Hodoň, leg. and det.: P. Lizoň;
19.9.1976, BRACR4916, Strážovské vrchy Mts, Kľače village, in soil in deciduous forest (*Alnus viridis*), leg. and det. J. Gáper;
16.7.1977, BRACR8016, Popradská kotlina basin, Lučivná, in soil under *Alnus*, alt. 600 m, leg. and det.: J. Kuthan;
20.9.1980, BRACR4919, Borská nížina lowland, Kuchyňa village, loc. Vývrať, in humid forest at the small lake in *Carpinus betulus* growth, leg. H. Bališová;
16.9.1980, BRACR4999, Borská nížina lowland, Studienka village, in deciduous forest (*Betula*, *Carpinus betulus*, *Corylus avellana*), leg. J. Dobiš;
15.8.1981, BRACR4996, Žiar Mts., Slovenské Pravno village, loc. Lúčky, in *Alnus incana* growth, alt. 600 m, leg. and det.: L. Hagara;
15.8.1981, BRACR4997, Žiar Mts., Slovenské Pravno village, loc. Lúčky, in *Alnus incana* growth, alt. 600 m, leg. and det.: L. Hagara;
12.9.1981, BRACR8019, Trábeč Mts, Skýcov village, between Skýcov and Topoľčianky, near the small river in *alnus* growth, alt. 300 m, leg. and det.: J. Kuthan;
10.8.1984, BRACR8024, Žiar Mts., Slovenské Pravno village, in *Alnus* growth near the house nr.2, alt. 600 m, leg. and det.: L. Hagara;
24.8.1984, BRACR8022, Žiar Mts., Slovenské Pravno village, loc. Lúčky, in *Alnus* growth, alt. 600 m, leg. and det.: L. Hagara;
26.8.1984, BRACR4920, Malá Fatra Mts, Bystrička village, Lazy settlement, in grass under *Alnus*, alt. 640 m, leg. and det.: K. Tolnay;
1.9.1984, BRACR8018, Žiar Mts., Slovenské Pravno village, in *Alnus* growth, alt. 600 m, leg. and det.: K. Tolnay;
3.8.1985, BRACR8017, Žiar Mts., Slovenské Pravno village, loc. Vlčia, in alneto, alt. 600 m, leg. and det.: L. Hagara;
14.7.1986, BRACR8025, Nízke Tatry Mts., Horná Lehota village, Suchá dolina valley, near the river Hnusná under *Alnus*, alt. 720 m, leg. and det.: J. Kuthan;
8.8.1986, BRACR8002, Skorušinské vrchy Mts., Skorušina village, Hutý settlement, in *Alnus* growth, leg. and det.: D. Mlyнарčík;
1.10.1986, BRACR8012, Slovenský raj Mts, Čingov village, in valley of the river, under *Alnus*, alt.

- 480 m, leg. and det.: J. Kuthan;
- 20.9.1987, BRACR592, Podunajská rovina lowland, Bratislava, Vajnory village, Šúr Nature Reserve, leg. and det.: D. Mlynarčík;
- 3.9.1988, BRACR8021, Nízke Tatry Mts., Liptovský Hrádok town, loc. Borová Sihot', at the Kameničné hill, in *Alnus* growth at the bank of the Váh river, alt. 630 m, leg. and det.: J. Kuthan;
- 29.9.1988, BRACR8010, Bukovské vrchy Mts, Kolbasov village, at Ulička river, under *Alnus*, alt. 300 m, leg. and det.: J. Kuthan;
- 8.1989, BRACR8023, Ondavská vrchovina Mts., Gazdovaň village, at the bank of the river Dava, leg. and det.: J. Kuthan;
- 12.8.1989, BRACR8008, Myjavská pahorkatina Mts, Bukovec village, Kamenec hill, under *Alnus* near Dankovci settlement, Q 73070, alt. 340 m, leg. and det.: L. Hagara;
- 28.9.1989, BRACR8014, Pustá Ves, Prašník, leg. R. Mocko;
- 5.10.1989, BRACR8011, Bukovské vrchy Mts, Uličské Krivé village, Rožok National Reserve, in soil under *Alnus incana*, alt. 620 m, leg. and det.: J. Kuthan;
- 13.10.1989, BRACR8013, Bukovské vrchy Mts, Zboj village, Stinská slatina National Reserve, under *Alnus*, alt. 680 m, leg. and det.: J. Kuthan;
- 24.10.1991, BRACR4924, Bukovské vrchy Mts, Humenné town, Saligov village, near the Cirocha river, at the Starina dam, on the slope of Barankovec hill, under *Alnus incana*, alt. 280 m, leg. and det.: J. Kuthan;
- 25.9.1992, BRACR8005, Ondavská vrchovina Mts., Kvakovce village, loc. Kuria hora, at the pasture near the stream under *Alnus incana*, leg. and det. S. Adamčík;
- 3.10.1992, BRACR8001, Borská nížina lowland, Studienka village, under *Alnus* in acid soil, loc "Třnie", alt. 210 m, leg. and det.: L. Hagara;
- 15.10.1992, BRACR8009, Borská nížina lowland, Studienka village, loc. Vysoká hôrka, in young *Alnus* growth, Q 74068, alt. 170 m, leg. and det.: J. Sand;
- 4.8.1993, BRACR4995, Biele Karpaty Mts., Moravské Lieskové village, loc. Zelničky, leg. Š. Figura;
- 11.9.1994, BRACR8000, Nízke Tatry Mts., Moštenica village, in flooded forest, leg. P. Schwartz;
- 15.9.1994, BRACR4998, Malé Karpaty Mts., Kuchyňa village, Bučková hill, under *Alnus glutinosa*, alt. 330 m, leg. and det.: J. Sand;
- 5.10.1994, BRACR8003, Myjavská pahorkatina Mts, Myjava town, Hurbanova dolina valley, under *Alnus*, leg. J. Lenharčík;
- 1.8.1998, BRACR8007, Podtatranská brázda basin, Oravice village, in spruce forest under *Alnus*, alt. 1100 m, leg. and det.: I. Kautmanová;
- 24.8.1998, BRACR8006, Malé Karpaty Mts, Bratislava - Kútiky, loc. Iuventa, under *Alnus*, alt. 280 m, leg. A. Horváth.

Ďuriač (2002) and Škubla (2003) published a lot of records of this species which is far from being rare in Slovakia. Also the number of collections held at BRA is the evidence of its wide distribution. It is in no need of protection and therefore I propose to omit it from the future list of threatened species.

***Helvella leucopus* Pers Syn: *Helvella spadicea* Schaeff.**

- 24.4.1990, BRACR4584, Hronská pahorkatina Mts, Mužla village, Čenkovská lesostep nature Reserve, in sandy soil, leg. V. Řehořek;

- 24.4.1994, BRACR4583, Podunajská rovina lowland, Bratislava city, Jarovce village, in deciduous forest (*Acer, Populus*), in sand, alt. 130 m, leg. and det.: V. Kabát;
- 24.4.1994, BRACR4585, Podunajská rovina lowland, Bratislava city, Rusovce village, in lowland flooded forest, in bare soil, alt. 135 m, leg. and det.: V. Kabát;
- 28.5.1995, BRACR4586, Podunajská rovina lowland, Bratislava city, city part Ostredky, in garden, leg. -,
- 8.5.1997, BRACR4589, Malé Karpaty Mts, Bratislava city, Devín village, Devínska Kobyla Nature Reserve, in ploughed sandy soil, alt. 500 m, leg. and det.: I. Kautmanová;
- 1.5.1998, BRACR4587, Podunajská rovina lowland, Bratislava city, Petržalka city part, in flood sediments at the bank of the Danube river, alt. 150 m, leg. M. Kríž,
- 30.4.2002, BRACR2421, Podunajská rovina lowland, Bratislava city, Petržalka city part, Danube river bank /1862,5/, in sand, 78068d, alt. 135 m, leg. and det. J. Červenka;
- 30.4.2002, BRACR4588, Podunajská rovina lowland, Bratislava-Petržalka, on sandy bank of the river Danube, under poplars, alt. 135 m, leg. and det.: J. Červenka;
- 1.5.2002, BRACR3319, Podunajská rovina lowland, Bratislava city, not far from the Kopáč Nature Reserve, in ploughed sandy soil at the margin of lowland deciduous forest (*Populus, Salix, Quercus*), 48 05,180'N, 17 09,431'EO, alt. 214 m, leg. and det.: I. Kautmanová;
- 27.4.2004, BRACR3500, Podunajská rovina lowland, Bratislava city, Kopáč Nature Reserve, in young cultivated ash (*Fraxinus*), alt. 125 m, leg. and det.: I. Kautmanová;
- 1.5.2004, BRACR3490, Podunajská rovina lowland, Bratislava city, Biskupické rameno, in lowland flooded forest with *Fraxinus*, sandy-clay soil, alt. 125 m, leg. and det.: A. Janitor.

Until 1978 this species was known from Slovakia only from a single specimen found in the collections of PRM and collected at Čenkov in 1950. In 1978 Moravec (1980) observed the mass occurrence of the species at Čenkov and Chotín, frequently visited mycological hot-spots and was surprised that such a conspicuous species could have been overlooked for such a long time. Even more surprising is the fact, that the species disappeared for another 20 years and has been recorded again only in 1994 by author (Kautmanová 1997) at the vicinity of Bratislava. In following years the species has been collected repeatedly in various sites at Bratislava surrounding, often in places where the soil was disturbed by the human activity. Our observations suggest that this species is not as much rare as it is overlooked, maybe because it fruits early in the season (April – May). Therefore I propose to treat it as low risk (LR) in future, or omit it from the list of the threatened species at all.

Hygrophorus marzuolus (Fr.) Bres.

Foreign specimens:

- 3.1886, BRACR8052, Italia, in Etruzia, leg. Martelli,
- 10.6.1971, BRACR8056, Bulgaria, Goljam Persenk, loc. Čudni mostove, in mountain spruce forest, alt. 1100 m, leg. and det.: J. Kuthan.

Slovak specimens:

- 8.5.1965, BRACR8051, Oravská vrchovina Mts, Dolný Kubín town, in spruce forest, alt. 600 m, leg. and det.: J. Kuthan;
- 27.4.1968, BRACR8045, Kysucké Beskydy Mts., Oščadnica village, in coniferous forest (*Picea, Pinus*), alt. 450 m, leg. and det.: J. Kuthan;

- 9.5.1968, BRACR8048, Vysoké Tatry Mts., Východná and Važec villages, in coniferous forest, alt. 850 m, leg. and det.: J. Kuthan;
- 16.5.1969, BRACR8047, Strážovské vrchy Mts., Valaská Belá village, in spruce forest, alt. 500 m, leg. and det.: J. Kuthan;
- 21.4.1971, BRACR8046, Malá Fatra Mts., Fačkov village, in spruce forest, alt. 450 m, leg. and det.: J. Kuthan;
- 11.5.1974, BRACR8049, Turzovská vrchovina Mts., Raková village, in spruce forest, alt. 650 m, leg. and det.: J. Kuthan;
- 28.4.1979, BRACR8055, Malá Fatra Mts., Klačno village, in coniferous forest (*Pinus, Picea*), alt. 600 m, leg. and det.: J. Kuthan;
- 9.5.1980, BRACR8054, Malá Fatra Mts., Štefanová village, Vrátna dolina valley, in submontane spruce forest, alt. 700 m, leg. Z. Chalánek;
- 9.5.1980, BRACR8057, Malá Fatra Mts., Párnica village, in spruce forest, alt. 650 m, leg. Z. Chalánek;
- 15.5.1982, BRACR8050, Turzovská vrchovina Mts., Raková village, loc. Korcháň, in spruce forest, alt. 650 m, leg. and det.: J. Kuthan;
- 1.5.1986, BRACR8053, Kysucké Beskydy Mts., Oščadnica village, Velká Rača hill, in spruce forest, alt. 850 m, leg. O. Kovář;
- 14.3.2008, BRACR9819, Strážovské vrchy Mts., Bánovce nad Bebravou, Trenčianske Jastrabie village, in beech forest, alt. 600 m, leg and det.: V. Kautman, P. Žitňan.

Dermek and Lizoň (1980) published the species from a single locality near Čadca and no more data were published. Specimens held at BRA represent therefore our only knowledge about the occurrence of the species in Slovakia. Though the sites are not numerous, it seems that at certain localities it is collected each year, according to local people. Carphophores fruiting early in the season, are usually completely hidden in fallen leaves and hard to find, so maybe they are more common than supposed. However the species is undoubtedly rare and I propose to maintain its status of vulnerable species (VU) also for future.

***Hypholoma myosotis* (Fr.) M. Lange**

Foreign specimens:

- 16.8.1969, BRACR8060, Moravia, Moravskoslezské Beskydy Mts., Čeladenka stream, Podolánky Nature Reserve, in spruce forest with Sphagnum, alt. 600 m, leg. and det.: J. Kutha;
- 20.8.1994, BRACR8058, Sibiria, Kedrovka, in marsh with *Carex*, alt. 400 m, leg. and det.: S. Adamčík;
- 28.8.1994, BRACR8059, Sibiria, Arangatui, in Sphagnum, alt. 400 m, leg. and det.: S. Adamčík;
- 27.8.1975, BRACR8063, Bohemia, Jeseníky Mts., Rejvíz village, Rejvízské rašeliniště peatbog under spruce, alt. 750 m, leg. and det.: J. Kuthan;
- 11.8.1976, BRACR8064, Ražice vilalge near Písek, loc. Režabinec, in Sphagnum and *Carex*, leg. J. Kubička.

Slovak specimens:

- 7.8.1977, BRACR8062, Podtatranská brázda basin, Zverovka village, in spruce forest with sphagnum and birch, alt. 850 m, leg. and det.: J. Kuthan;
- 15.9.1984, BRACR8061, Vysoké Tatry Mts, Tatrská Štrba village, in sphagnum under spruce and birch, alt. 600 m, leg. and det.: J. Kuthan;

3.10.2003, BRACR4686, Podtatranská kotlina Mts., Važec village, loc. Važecké lúky, in sphagnum, leg. and det.: T. Niskanen.

Kuthan (1989) reported a single collection from Tatranská Štrba in 1970 and in 2000 it was found during the mycological meeting at Orava (Škubla 2003). Those two published records, together with 3 specimens held at BRA are all we know about the occurrence of the species in Slovakia. However, it is small, inconspicuous, resembling many related species, so maybe it would be better to treat it as data deficient (DD) in future.

Lactarius volemus (Fr.) Fr.

Foreign specimens:

- 17.6.1973, BRACR8068, Bulgaria, Ropotamo Nature Reserve, loc. Arkutino, alt. 40 m, leg. and det.: J. Kuthan;
31.5.1976, BRACR8099, Bulgaria, Banja, Obzor, in oak forest, alt. 80 m, leg. and det.: J. Kuthan;
18.6.1978, BRACR8078, Bulgaria, Ropotamo Nature Reserve, loc. Arkutino, in oak forest, alt. 45 m, leg. and det.: J. Kuthan.

Slovak specimens:

- 16.7.1874, BRACR8069, Malé Karpaty Mts., Bratislava-Lamač, in forest, leg. and det.: J. Bolla;
1890, BRACR3354, Štiavnické vrchy Mts., Prenčov village, leg. and det.: A. Kmeť;
1896, BRACR3353, Štiavnické vrchy Mts., Prenčov village, leg. and det.: A. Kmeť;
27.8.1896, BRACR3351, Štiavnické vrchy Mts., Prenčov village, Sitno mt., loc. Buzalka, leg. and det.: A. Kmeť;
1.10.1896, BRACR3352, Štiavnické vrchy Mts., Prenčov village, Kotliny, leg. and det.: A. Kmeť;
9.9.1962, BRACR8073, Levočské vrchy Mts., Kežmarok town, military area, in mosses in forest, leg. and det.: E. Končeková;
23.7.1963, BRACR8072, Zvolenská kotlina basin, Kováčová village, in deciduous forest, leg. and det.: E. Končeková;
25.7.1965, BRACR8075, Malé Karpaty Mts., Pezinok town, leg. and det.: I. Fábry;
29.8.1965, BRACR8098, Turzovská vrchovina Mts, Raková village, in coniferous forest (*Pinus, Picea*), alt. 650 m, leg. and det.: J. Kuthan;
11.7.1971, BRACR8077, Považský Inovec Mts., Zlatníky village, loc. Kulháň, in oak forest, alt. 400 m, leg. and det.: J. Kuthan;
30.7.1972, BRACR8071, Malé Karpaty Mts., Bratislava city, Kamzík mt., in soil, leg. L. Opold;
2.8.1973, BRACR8070, Malé Karpaty Mts., Kuchyňa village, loc. Vývrať, in soil, leg. and det.: A. Dermek;
6.9.1975, BRACR8097, Strážovské vrchy Mts., Šutovce village, in deciduous forest, alt. 550 m, leg. and det.: J. Kuthan;
19.7.1976, BRACR8105, Strážovské vrchy Mts., Šutovce vilalge, in deciduous forest under oak, alt. 550 m, leg. and det.: J. Kuthan;
28.7.1978, BRACR8104, Lučenská kotlina basin, Lučenec town, in soil, leg. J. Bračok;
17.7.1981, BRACR8076, Ipel'ská pahorkatina Mts, Žemberovce willage, loc. Dolinky, alt. 270 m, leg. and det.: L. Hagara;
27.7.1981, BRACR8066, Ipel'ská pahorkatina Mts, Žemberovce vilalge, loc. Dolinky, in oak forest, alt. 270 m, leg. and det.: L. Hagara;

- 11.9.1981, BRACR8102, Pohronský Inovec Mts., Skýcov village, in oak forest, alt. 500 m, leg. and det.: J. Kuthan;
- 2.7.1982, BRACR8091, Rimavská kotlina basin, Šafárikovo village, in *Quercus cerris* growth, alt. 280 m, leg. and det.: L. Hagara;
- 13.8.1983, BRACR8100, Cerová vrchovina upland, Šávoľ village, in deciduous forest N of the village, alt. 350 m, leg. and det.: K. Tolnay;
- 3.8.1984, BRACR8088, Cerová vrchovina upland, Šávoľ village, in deciduous forest, alt. 250 m, leg. K. Tolnay;
- 18.8.1984, BRACR8092, Malá Fatra Mts, Bystrička village, in beech forest at the Bystrička river bank, alt. 750 m, leg. and det.: L. Hagara;
- 25.9.1984, BRACR8089, Strážovské vrchy Mts., Seč village, Flintov laz (Rybníky) settlement, in beech forest, alt. 570 m, leg. and det.: L. Hagara;
- 11.8.1985, BRACR8086, Malá Fatra Mts, Bystrička village, loc. Hrádok, in mixed forest (*Picea, Abies, Fagus*), alt. 570 m, leg. and det.: L. Hagara;
- 8.9.1985, BRACR8090, Biele Karpaty Mts., Sobotište-Kramárovci settlement, loc. Uchánok, under beech, alt. 520 m, leg. and det.: L. Hagara;
- 10.9.1985, BRACR8101, Nitrianska pahorkatina Mts, Nemečky village, in oak forest, alt. 310 m, leg. and det.: L. Hagara;
- 17.9.1985, BRACR8085, Slovenský raj Mts, Smižany village, loc. Hradisko, on the slope of Čingov hill, in spruce forest, alt. 550 m, leg. and det.: J. Kuthan;
- 2.8.1986, BRACR8087, Hornonitrianska kotlina basin, Nováky town, loc. Srdce, in oak forest, alt. 280 m, leg. and det.: L. Hagara;
- 26.7.1987, BRACR8103, Malé Karpaty Mts., Marianka village, loc. Na Fuskovom, in mosses under oak, alt. 320 m, leg. and det.: J. Sand;
- 17.7.1988, BRACR8095, Vihorlatské vrchy Mts., Kaluža village, loc. Bogdanka, in oak forest, alt. 185 m, leg. J. Humeňanský;
- 9.8.1988, BRACR8083, Stolické vrchy Mts., Ďubákovo village, loc. Jasenina, in beech forest, alt. 985 m, leg. J. Humeňanský;
- 4.9.1988, BRACR8096, Čergov Mts., Hradisko village, in beech forest, alt. 710 m, leg. J. Humeňanský;
- 13.9.1988, BRACR8081, Podtatranská kotlina basin, Tatranská Štrba village, in mixed forest (*Picea, Betula*) Tatranská Štrba, alt. 900 m, leg. and det.: P. Škubla;
- 20.5.1989, BRACR8084, Malé Karpaty Mts., Marianka village, loc. Na Fuskovom, in mixed forest (*Fagus, Quercus, Pinus*), Q 77068, alt. 290 m, leg. and det.: J. Sand;
- 19.7.1989, BRACR8082, Laborecká vrchovina upland, Stakčín village, loc. Maňov, in oak forest, alt. 300 m, leg. and det.: J. Kuthan;
- 29.6.1990, BRACR8094, Bukovské vrchy Mts, Ruské village, in Cirocha river valley, under *Carpinus*, alt. 450 m, leg. and det.: J. Kuthan;
- 7.8.1990, BRACR8093, Bukovské vrchy Mts, Smolník village, at the foot of the Borsúk hill, under *Carpinus*, alt. 550 m, leg. and det.: J. Kuthan;
- 2.8.1991, BRACR8080, Malé Karpaty Mts., Kuchyňa village, loc. Bučková (Zámoček), under oaks, alt. 500 m, leg. and det.: L. Hagara;
- 26.7.2001, BRACR8079, Volovské vrchy Mts, Betliar village, in public garden under oaks, alt. 400 m, leg. and det.: I. Kautmanová;
- 28.8.2004, BRACR3522, Nízke Tatry Mts., Malužiná village, Michalovo valley, in mixed forest (*Picea, Abies, Fagus*), alt. 760 m, leg. and det.: I. Kautmanová.

Škubla (2003) listed numerous records of this once common and popular edible mushroom. Also from the list of specimens held at BRA is evident that this species is neither rare, nor threatened. Therefore I propose to omit it from the list of threatened species in future.

Myriostoma coliforme (Dicks.) Corda

- 10.7.1969, BRACR8134, Podunajská rovina lowland, Hurbanovo village, leg. and det.: E. Futó;
15.7.1969, BRACR8138, Podunajská rovina lowland, Imeľ village, leg. and det.: E. Futó;
18.9.1970, BRACR8136, Podunajská rovina lowland, Imeľ village, leg. and det.: E. Futó;
24.10.1970, BRACR8135, Borská nížina lowland, between Rohožník and Malacky villages, leg. I. Fábry;
30.8.1971, BRACR8132, Podunajská rovina lowland, Imeľ village, leg. and det.: E. Futó;
22.7.1974, BRACR8124, Podunajská rovina lowland, Imeľ village, in sandy soil under *Robinia*, leg. and det.: E. Futó;
26.7.1974, BRACR8125, Podunajská rovina lowland, Imeľ village, in sandy soil under *Robinia*, leg. and det.: E. Futó;
28.7.1974, BRACR8130, Podunajská rovina lowland, Imeľ village, in *Robiniagrowth*, leg. and det.: E. Futó;
11.8.1974, BRACR8129, Podunajská rovina lowland, Balvany village, in sandy soil in *Robiniagrowth*, leg. and det.: E. Futó;
12.8.1974, BRACR8141, Podunajská rovina lowland, Imeľ village, in sandy soil under *Robinia*, leg. and det.: E. Futó;
13.8.1974, BRACR8119, Podunajská rovina lowland, Bajč village, loc. Vľkanovo, in sandy soil, leg. and det.: E. Futó;
13.8.1974, BRACR8127, Hronská pahorkatina Mts, Chotín village, in soil in *Robinia* growth, leg. and det.: E. Futó;
13.8.1974, BRACR8137, Hronská pahorkatina Mts, Dolný Peter village, in sandy soil in *Robinia* growth, leg. and det.: E. Futó;
18.8.1974, BRACR8122, Podunajská rovina lowland, Imeľ village, in soil in *Robinia* growth, leg. and det.: E. Futó;
18.8.1974, BRACR8123, Podunajská rovina lowland, Imeľ village, in soil in *Robinia* growth, leg. and det.: E. Futó;
20.8.1974, BRACR8131, Podunajská rovina lowland, Imeľ village, in sandy soil in *Robinia* growth, leg. and det.: E. Futó;
27.8.1974, BRACR8142, Podunajská rovina lowland, Imeľ village, in soil in *Robinia* growth, , leg. and det.: E. Futó;
18.9.1975, BRACR8126, Podunajská rovina lowland, Marcelová village, in soil in *Robinia* growth, leg. P. Lizoň;
7.1981, BRACR8128, Podunajská rovina lowland, Kameničná – Balvany village, in soil in *Robinia* growth, leg. and det.: E. Futó;
7.1981, BRACR8140, Podunajská rovina lowland, Imeľ village, in soil in *Robinia* growth, leg. and det.: E. Futó;
2.10.1984, BRACR8118, Podunajská rovina lowland, Marcelová, in soil in *Robinia* growth, leg. P. Lizoň et L. Opold, det.: P. Lizoň;
14.6.1987, BRACR8120, Krupinská planina upland, Temšák village, at the bank of Olvár river, under

- Robinia*, alt. 140 m, leg. and det.: J. Kuthan;
- 2.9.1988, BRACR8117, Podunajská rovina lowland, Imeľ village, in *Robinia* growth under *Syringa vulgaris* in cemetery, alt. 110 m, leg. and det.: P. Škubla;
- 4.3.1989, BRACR8121, Podunajská rovina lowland, Vozokany village, in *Robinia* growth cca 2 km N of the village, alt. 120 m, leg. and det.: P. Škubla;
- 14.10.1989, BRACR8139, Podunajská rovina lowland, Vozokany village, in sandy soil in *Robinia* growth 2 km NE of the village, alt. 115 m, leg. and det.: P. Škubla;
- 25.2.2000, BRACR8133, Podunajská rovina lowland, Bratislava, Lieskovec, in silva frondosa (*Populus*, *Robinia*, *Corylus*), alt. 300 m, leg. and det.: V. Kautman.

M. coliforme is also one of the 33 threatened fungi of Europe (Dahlberg, Croneborg 2003), redlisted in 12 countries and threatened by loss of habitat. Specimens Nr. 8134, 8138, 8136 and 8132 were published by Fábry (1974) who first referred about the species as common in southernmost Slovakia. However most of the known collections were made by Futó and after his death the species has been recorded only sporadically and almost exclusively at the same localities (Kotlaba 1971). The last published record was probably by Szabóová (1985) from the Révayovská pustatina. The record of the species made by V. Kautman at the vicinity of Bratislava may suggest more broader occurrence of this undoubtedly rare species. Considering its uncommonness in Europe I propose to maintain its current status of vulnerable species (VU).

Omphalina discorosea (Pilát) Herink et Kotl.

Foreign specimens:

- 20.6.1970, BRACR8149, Bulgaria, Ropotamo nature reserve, loc. Arkutino, on decayed trunk (? *Ulmus*), alt. 20 m, leg. and det.: J. Herink;
- 7.6.1974, BRACR8150, Bulgaria, Ropotamo nature reserve, loc. Arkutino, on decayed trunk (*Ulmus*), alt. 25 m, leg. and det.: J. Kuthan;
- 6.6.1975, BRACR8147, Bulgaria, Ropotamo nature reserve, loc. Arkutino, on decayed trunk (*Ulmus*) and *Fraxinus*, alt. 25 m, leg. and det.: J. Kuthan;
- 8.6.1982, BRACR8145, Bulgaria, Ropotamo nature reserve, loc. Arkutino, on decayed trunk of *Ulmus*, alt. 10 m, leg. and det.: J. Kuthan;
- 18.6.1995, BRACR8148, Moravia, Břeclav town, Pohansko region, on rotten trunk of *Populus* sp., leg. and det.: L. Hagara;
- 19.6.1995, BRACR8146, Moravia, Lanžhot village, Ranšpurk Nature reserve, leg. and det.: L. Varjú.

Slovak specimens:

- 2.10.1983, BRACR8143, Podunajská rovina lowland, Bajč village, in deciduous forest, on rotten trunk of deciduous tree (? *Ulmus*), alt. 200 m, leg. and det.: J. Kuthan;
- 20.5.1994, BRACR8151, Podunajská rovina lowland, Bratislava - Petržalka, loc. Pečenský les, on rotten trunk (*Populus*?), alt. 130 m, leg. M. Procházka, V. Kabát, det. M. Procházka;
- 1.10.1994, BRACR8152, Podunajská rovina lowland, Bratislava - Petržalka, loc. Pečenský les, leg. and det.: V. Kabát;
- 18.5.1997, BRACR8144, Podunajská rovina lowland, Bratislava - Petržalka, loc. Pečenský les, on dead trunk of *Populus alba*, alt. 130 m, leg. and det.: D. Mlyнарčík;
- 21.5.2004, BRACR3529, Bratislava - Rusovce, Horná Sihof island, alt. 130 m, leg. and det.: L. Pomšár;

- 22.5.2004, BRACR3551, Bratislava - Rusovce, Dunajské ostrovy nature reserve, in lowland flooded forest, leg. and det.: I. Kautmanová;
- 20.5.2006, BRACR9334, Podunajská rovina lowland, Bratislava-Rusovce, Dunajské ostrovy nature reserve, in lowland flooded forest at the fallen rotten trunk of deciduous tree, alt. 160 m, leg. and det.: I.Kautmanová.

Procházka (1994) published it as a new species for Slovakia from the locality Pečenský les at the bank of the Danube river near Bratislava city. Since then the species has been collected repeatedly at the same locality and in nearby lowland flooded forests on both sides of Danube river. In good weather conditions it has been observed in great numbers. However most of the localities are situated in the vicinity of Bratislava city and are permanently threatened by the urban development. Kotlaba et. al (1995), published another locality from Bajč in southern Slovakia. They also suggest that the species may be extinct in western Europe. Though the species is small and inconspicuous it is probably really rare, occurring only in well preserved forests with lot of decaying wood, and I propose to treat it as endangered (EN) in future.

Phellinus pouzarii Kotl.

- 28.9.1988, BRACR8154, Bukovské vrchy Mts, Nová Sedlica village, loc. Kamenná lúka, on dead trunk of white fir, alt. 750 m, leg. and det.: J. Kuthan.

Kotlaba (1968) described it as a new species and reported 5 localities of its occurrence in Czech Republic and one in Slovakia – Dobročský prales virgin forest, where it was collected in 1964. Later he published it also from Badínsky prales virgin forest (Kotlaba 1984). Kuthan et al. (1999) found it at Bukovské vrchy (the specimen held in BRA) which is the easternmost locality of its occurrence. He also reported it from Štiavnické vrchy Mts. and Kremnické vrchy Mts. Though the species may be overlooked and not recognized, it is bound to very old, almost virgin forest-like habitatst and I propose to treat it as endangered (EN) in future.

Polyporus rhizophilus Pat.

- 25.6.1985, BRACR4089, Štiavnické vrchy Mts, Malé Kozmálovce village, loc. Kozmálovská, at the slope of Plešovica hill, in grass in steppe, alt. 180 m, leg. and det.: J. Kuthan, rev. S. Ripková.
- Suza (1935) described it as a new species for former Czechoslovakia, from a single locality near Kozárovce. Šebek (1962) published it from Strážovské vrchy Mts. Kotlaba (1984) published 2 localities (Chotín, Kozárovce) of this small polypore, growing saprotrophically on the dead stems and leaves of grasses in southern areas. Specimens collected in 1949 and 1951 are held at PRM and BRNM. Lizoň (1977) reported the collection of the species at Chotín in 1975, during the field excursion of the mycological meeting. Until recently the last known record of *P. rhizophilus* has been published by Mihál (1989) from Muránska planina Mts. from 1988. Specimen held at BRA is probably the single preserved collection of this rare species in Slovakia. As the species is rather inconspicuous, growing hidden in tall grass, and may be more widespread than supposed, I propose to treat it as data deficient (DD) in future.

Sarcosphaera coronaria (Jacq.) J. Schröt.

18.7.2001, BRACR749, Nízke Tatry Mts., Malužiná village, Michalovo valley, Sielnice hill, *Pulsatilo slavicae-Piceetum*, alt. 1000 m, leg. and det.: I.Kautmanová;

13.6.2004, BRACR3540, Nízke Tatry Mts., Malužiná village, Michalovo valley, in spruce forest on limestones, alt. 760 m, leg. and det. I. Kautmanová; 2007

Strejček (1951) published the short report about the collection of *S. coronaria* in Kováčovské kopce Mts. This is probably the first record of the species at the Slovak territory. Since then more than 30 records has been published (Lizoň 2006). On web pages devoted to fungi of Slovakia (Anonym 2008) several pictures of this conspicuous species has been published in the last years, suggesting that it is spreading, or simply attracting the interest of more mycologists. The species has been included into the list of 33 threatened fungi in Europe proposed for listing in Bern Convention (Dahlberg, Croneborg 2003) and is redlisted in 14 European countries. However its frequent occurrence along the tourist paths, roads and on clearings suggests that though the species is undoubtedly rare, it is not seriously threatened by human activities and I propose to treat it as low risk (LR) in future.

Suillus flavidus (Fr.) C. Presl

Foreign specimens:

9.8.1977, BRACR8155, Bohemia, Krušné hory Mts., Jelení village, loc. Velký močál, in wet soil in peat (+*Pinus mugo*), alt. 920 m, leg. A. Šteklová.

Slovak specimens:

14.7.1977, BRACR8157, Vysoké Tatry Mts, Štrbské Pleso village, in peatbog under *Pinus mugo*, alt. 1000 m, leg. and det.: J. Kuthan;

1.9.1984, BRACR8156, Vysoké Tatry Mts, Tatranská Štrba village, in peatbog under *Pinus*, leg. and det.: J. Kuthan.

Pilát and Dermek (1974) published the single known locality of the species in Slovakia at Víglaš.

Škubla (1988) reported it from Tatranské Matliare. Kuthan (1989) reported it from Štrbské Pleso, probably the specimen held at BRA. Though the species is undoubtedly rare, according to its habitat (marshes and peatbogs at high altitude) and possibility of misinterpretation, it might be more common than supposed. However I propose to maintain its current status of vulnerable species (VU) for future.

Suillus sibiricus (Singer) Singer

21.7.1989, BRACR8159, Vysoké Tatry Mts, Štrbské Pleso village, loc. Solisko, at the bank of the lake, in soil under *Pinus cembra*, alt. 1350 m, leg. and det.: J. Kuthan;

21.7.1989, BRACR8160, Vysoké Tatry Mts, Štrbské Pleso village, near villa Hviezdoslav, in grass under *Pinus cembra*, alt. 1350 m, leg. and det.: J. Kuthan;

7.8.1989, BRACR8158, Vysoké Tatry Mts, Štrbské Pleso village, loc. Solisko (Furkotská dolina valley), under *Pinus cembra*, alt. 1550 m, leg. and det.: J. Kuthan.

One of the 33 threatened fungi of Europe (Dahlberg, Croneborg 2003) redlisted in 7 countries. Mycorrhizal with *Pinus cembra* and threatened by loss of habitat (winter sports, intensification of forestry and agriculture in subalpine regions). Příhoda (1971) reported a single collection from Tatranská Javorina and specimens held at BRA represent probably the only known localities of its occurrence. With its status of threatened European species in mind, I propose to treat it as endangered (EN) in future.

Xerocomus moravicus (Vacek) Herink

Foreign specimens:

15.6.1975, BRACR8163, Bulgaria, Ropotamo nature reserve, in valley of the Ropotamo river, in soil in oak forest, alt. 70 m, leg. and det.: J. Kuthan.

Slovak specimens:

- ??, BRACR8164, Malé Karpaty Mts., Kuchyňa village, loc. Vývrat, in soil in deciduous forest, leg. V. Volf, P. Lizoň, det. P. Lizoň;
- 30.8.1980, BRACR8162, Zvolenská kotlina basin, Sliach village, in soil in public garden under *Tilia* sp., leg. M. Záparka;
- 13.8.2000, BRACR8161, Malé Karpaty Mts., Marianka village, in deciduous forest (*Fagus*, *Carpinus* among *X. chrysenteron*), alt. 280 m, leg. and det.: J. Sand.

Antonín et al. (1995) treated it as a critically endangered species, known from 2 localities in Slovakia (Kuchyňa, Kozárovce). Together with specimens held at BRA that is all what is known about its current distribution. However the species is rather similar to some closely related *Xerocomus* species and may be overlooked or unrecognized, so I propose to treat it as data deficient (DD) species in future.

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