

# CATATHELASMA

a journal on biodiversity, taxonomy and conservation of fungi

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***Gliophorus psittacinus***, Javorníky, Petrovice – Medvedie,  
3 November 2018, F. Fuljer (PHFF10416). Photo F. Fuljer.



***Gliophorus reginae***, Javorníky, Petrovice – Škápová, 27 October 2017, F. Fuljer (PHFF10008). Photo M. Zajac.



***Hygrocybe pratensis* var. *pallida***, Javorníky, Makov – Holákovci, 23 September 2017, F. Fuljer (PHFF10034). Photo F. Fuljer.

## Catathelasma

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  - **book chapter:** Verbeke, A. & Vesterholt, J. 2012. *Lactarius Pers.* In: Knudsen, H. & Vesterholt, J. (eds.), *Funga Nordica*, p. 118–144, Copenhagen.
  - **data from internet:** Thiers, B. (on-line). *Index Herbariorum: A global directory of public herbaria and associated staff*. <http://sweetgum.nybg.org/ih/> [accessed 30 April 2015].
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### **HYGROCYBE (GENERA *HYGROCYBE*, *GLIOPHORUS*, *PORPOLOMOPSIS* AND *CUPHOPHYLLUS*) IN NORTHWESTERN SLOVAKIA, PART III.**

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Fuljer, F., Zajac, M., Václavová, Z., Kautmanová, I. 2019. *Hygrocybe* (genera *Hygrocybe*, *Gliophorus*, *Porpolomopsis* and *Cuphophyllus*) in northwestern Slovakia, part III. *Catathelasma* 20: 5–55.

There were recorded 33 taxa of genera *Hygrocybe* s. lat. (*Hygrocybe*, *Gliophorus*, *Porpolomopsis* and *Cuphophyllus*) during our mycological research (2014–2018) in Jablunkovské medzihorie Mts., Javorníky Mts., Kysucké Beskydy Mts., Kysucká vrchovina Mts., Moravsko-sliezske Beskydy Mts. and Turzovská vrchovina Mts. This article presents summary of our collections and follows our research carried out in 2008–2013. Taxa of *Hygrocybe* s. lat. were found collected in 108 localities (96 grasslands, 11 peat bogs and 1 heathland), including rare and very rare species, such as *Cuphophyllus flavipes*, *Cuphophyllus fornicatus*, *Hygrocybe constrictospora*, *Hygrocybe ingrata*, *Hygrocybe intermedia*, *Hygrocybe ovina*, *Hygrocybe russocoriacea* and *Hygrocybe splendidissima*. On the other hand, some of rare European species, as *Gliophorus laetus*, *Hygrocybe citrinovirens*, *Hygrocybe ingrata* and *Porpolomopsis calyptriformis*, are common in studied area. Two varieties *Hygrocybe pratensis* var. *pallida* and *Hygrocybe virginea* var. *fuscescens* were collected as new for the surveyed area too.

Fuljer, F., Zajac, M., Václavová, Z., Kautmanová, I. 2019. Lúčnice rodov *Hygrocybe*, *Gliophorus*, *Porpolomopsis* a *Cuphophyllus* na severozápadnom Slovensku, III. časť. *Catathelasma* 20: 5–55.

V rokoch 2014–2018 bolo zaznamenaných 33 taxónov lúčnic z rodu *Hygrocybe* s. lat. (*Hygrocybe*, *Gliophorus*, *Porpolomopsis* a *Cuphophyllus*) na severozápadnom Slovensku v geomorfologických celkoch Jablunkovské medzihorie, Javorníky, Kysucké Beskydy, Kysucká vrchovina, Moravsko-sliezske Beskydy a Turzovská vrchovina. V tomto článku nadväzujeme na výskum druhov rodu *Hygrocybe* s. lat. realizovaný v rokoch 2008–2013. Celkovo bolo zaznamenaných 108 lokalít s výskytom taxónov rodu *Hygrocybe* s. lat. (96 lúk a pasienkov, 11 rašelinísk, 1 vresovisko). Ďalej bolo objavených niekoľko nových lokalít v Európe veľmi vzácných druhov: *Cuphophyllus flavipes*, *Cuphophyllus fornicatus*, *Hygrocybe constrictospora*, *Hygrocybe intermedia*, *Hygrocybe ovina*, *Hygrocybe russocoriacea*, *Hygrocybe splendidissima*. Niektoré vzácne druhy v Európe ako *Gliophorus laetus*, *Hygrocybe*

*citrinovirens*, *Hygrocybe ingrata* a *Porpolomopsis calyptriformis* sú bežnými taxónmi na našom študovanom území. Nájdené boli tiež dve variety a to *Hygrocybe pratensis* var. *pallida* a *Hygrocybe virginea* var. *fuscescens*.

**Key words:** Agaricomycotina, Hygrophoraceae, waxcaps, grasslands, bogs, meadows, pastures, threat

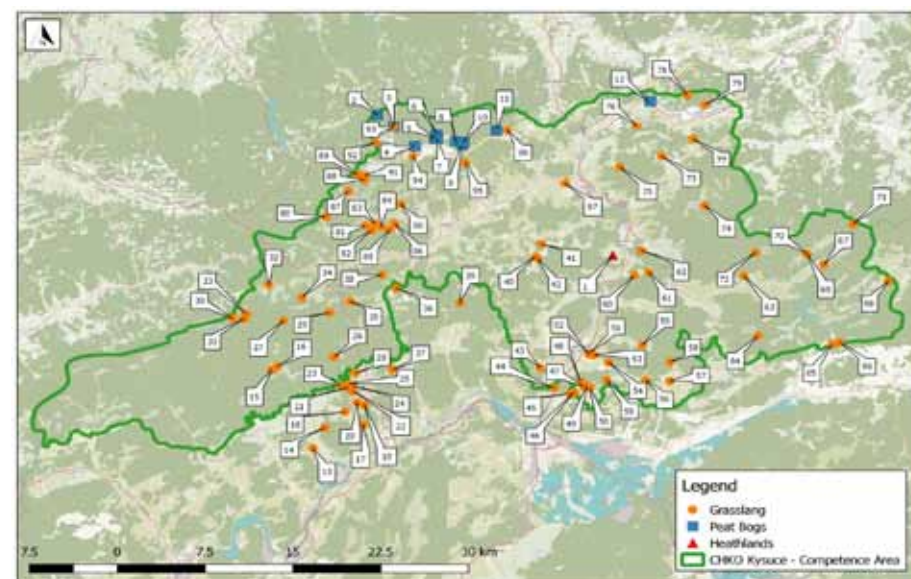
### Introduction

*Hygrocybe* species are bioindicators of conservation value of meadows or grasslands (Adamčík & Kautmanová 2005). They are colourful, usually red, orange or yellow coloured, some of *Cuphophyllus* species are brown, orange, whitish or white with brown tinges. In Europe, they can be found most often in so called „waxcap grasslands“, which are characterized by being unfertilised, short-sward (through grazing or mowing), moss-rich, and long-established (Griffith et al. 2002). They can be found also in bogs, heathlands, near the roads, at grassy places near houses or cottages, old overgrown stone pits, younger forests, bushes etc. (Boertmann 2010). Waxcap grasslands and their associated fungi (CHEG species – *Clavariaceae*, *Hygrocybe*, *Entoloma* and *Geoglossaceae*) are of conservation concern, since unfertilised grasslands (formerly commonplace) have declined dramatically as a result of changes in agricultural practice. As a result, by 1993, 89% of European *Hygrocybe* species appeared on one or more national red lists of threatened fungi (Griffith et al. 2002). Following the molecular phylogeny, European *Hygrocybe* species were splitted to six new genera: *Chromosera*, *Cuphophyllus*, *Gliophorus*, *Gloioxanthomyces*, *Hygrocybe* and *Porpolomopsis*. Some of these species can be distinguished by the macroscopic features, as well as by size and shape of the spores. However, some are very hard to identify, so genetic identification is often required (Lodge et al. 2014). This paper is the third part of the mycological survey of the genus *Hygrocybe* s. lat. in the Kysuce region. It is focused on knowledge about new localities of the 33 taxa of *Hygrocybe* s. lat. found during our recent research.

### Material and Methods

This research follows two articles, both published in *Catathelasma* journal (Zajac & Zajacová 2013, Zajac et al. 2016). Studied material was collected in northwestern Slovakia, in six geomorphological areas (Jablunkovské medzihorie Mts., Javorníky Mts., Kysucké Beskydy Mts., Kysucká vrchovina Mts., Moravsko-sliezske Beskydy Mts., Turzovská

vrchovina Mts.). These areas are situated in Kysuce region and Považie region with total number of 108 localities of the genus *Hygrocybe* s. lat. (Fig. 1; CHKO = protected landscape area). The research was provided during five years (2014–2018). The nomenclature follows latest version of Index Fungorum (2019). The macro-morphological descriptions were based on fresh material. Both collections of species *Hygrocybe constrictospora* were microscopically identified. All basidiomata were cleaned and carefully dried, as soon as possible. For each taxon, localities were listed alphabetically within the geomorphological units. The geomorphological area, village or town, part of the village, type of locality with recent management, altitude, GPS coordinates (with the accuracy of 2–3 m), date, collector (initials of collectors: Filip Fuljer–FF, Milan Zajac–MZ, Zuzana Václavová–ZV), collection and voucher number for each specimen were specified. Species frequency was estimated in accordance with the following scale: 1–4 localities–very rare species, 5–9 localities–rare species, 10–19 localities–common species, 20 and more localities–very common species. The studied specimens are kept in private herbaria of authors (Filip Fuljer–PHFF and Milan Zajac–PMZ).



**Fig.1:** Map of the studied area with localities visited in 2014–2018

**Shortcuts – geomorphological areas:** 1.) Jablunkovské medzihorie Mts.–JM, 2.) Javorníky Mts.–JA, 3.) Moravsko-sliezske Beskydy Mts.–MB, 4.) Kysucké Beskydy Mts.–KB, 5.) Kysucká vrchovina Mts.–KV, 6.) Turzovská vrchovina Mts.–TV

**Heathlands:**

1 JA, Krásno nad Kysucou, Zákysučie

**Peat bogs:**

2 MB, Klokočov, Biely Kríž  
3 MB, Klokočov, Marejkovci 1  
4 MB, Klokočov, Vojtkovci  
5 MB, Klokočov, u Plechov  
6 MB, Klokočov, Zajacovci 1  
7 MB, Klokočov, Zajacovci 2  
8 MB, Olešná, Škulovská ráztoka  
9 MB, Olešná, Žubrinovci 1  
10 MB, Staškov, Žubrinovci 2  
11 MB, Raková, Repčákovci 2  
12 JM, Čierne, Polesie

**Meadows and grasslands:**

13 JA, Hvozdnica, Višňové  
14 JA, Štiavnik, Tancová  
15 JA, Štiavnik, Baránkovci  
16 JA, Štiavnik, u Rogov  
17 JA, Bytča-Pšurnovice, Tomborov Salaš  
18 JA, Bytča-Pšurnovice, Čebecké dlžiny  
19 JA, Petrovice, Škápová + Petrovice, Škápová 2  
20 JA, Petrovice, near ski slope  
21 JA, Petrovice, Benková  
22 JA, Petrovice, under the Medvedie hill  
23 JA, Petrovice, Setechov  
24 JA, Petrovice, Benková 2  
25 JA, Petrovice, Prielohy  
26 JA, Petrovice, Petrovská  
27 JA, Petrovice, Magále  
28 JA, Kolárovice, under the Človiečik hill  
29 JA, Kolárovice, Čerenka

30 JA, Makov, Kasárne  
31 JA, Makov, Butorky  
32 JA, Makov, Kopanice  
33 JA, Makov, Marček  
34 JA, Makov, Holákovci + Makov, Čierne  
35 JA, Veľké Rovné, Melocík  
36 JA, Veľké Rovné, Kýčery  
37 JA, Veľké Rovné, Mlynné + Veľké Rovné, Ličková  
38 JA, Vysoká nad Kysucou, Vrchrieka  
39 JA, Dlhé Pole, Stolečné  
40 JA, Zákopčie + Ochodnica, Petránky  
41 JA, Zákopčie, Červenkovci  
42 JA, Ochodnica, Macáškovci  
43 JA, Rudina, Janušovo  
44 KV, Brodno, Brodnianka + Brodno, Kosteliská  
45 KV, Brodno, Brodnianka/Brodenec  
46 KV, Snežnica, Brodenec  
47 KV, Snežnica, over the football pitch  
48 KV, Snežnica, between Malý and Veľký Vreť  
49 KV, Snežnica, Veľký Vreť  
50 KV, Snežnica, over the village  
51 KV, Kysucké Nové Mesto, Budatínska Lehota  
52 KV, Radoľa, meadow in fruit grove  
53 KV, Radoľa, Dráhy + Radoľa, Pod Mliečové  
54 KV, Radoľa, Prašivá  
55 KV, Radoľa, Veľké Ostré  
56 KV, Dolný Vadičov, Diely  
57 KV, Horný Vadičov, Bizov vrch  
58 KV, Horný Vadičov, L'adonhora  
59 KV, Povina, Tatarovci  
60 KV, Krásno nad Kysucou, Nižné Vane  
61 KV, Krásno nad Kysucou, Vyšné Vane  
62 KV, Krásno nad Kysucou, Hájnica  
63 KV, Stará Bystrica, Hančinovci + Stará Bystrica, Sobol'ovci  
64 KV, Nová Bystrica, Riečnica-Michalcovci  
65 KV, Nová Bystrica, Riečnica-Kováčka  
66 KV, Nová Bystrica, Riečnica-Kýčerka  
67 KV, Nová Bystrica, Vychylovka-Chmúrovci  
68 KV, Nová Bystrica, Harvelka

- 69 KB, Nová Bystrica, Sajdov vrch  
 70 KB, Nová Bystrica, Vychylovka  
 71 KB, Nová Bystrica, Vychylovka-Svitková  
 72 KB, Nová Bystrica, Veľký Potok  
 73 KB, Oščadnica, Beskydok  
 74 KB, Oščadnica, Príslop  
 75 KB, Čadca, over the Drahošanka  
 76 KB, Čierne, Chovancovci  
 77 KB, Skalité, Poddrobiška  
 78 JM, Skalité, Za Riekami  
 79 JM, Skalité, Poľana  
 80 TV, Vysoká n. Kys., Vyšný Kelčov + Vysoká n. Kys., Vyšný Kelčov, Hluchanka  
 81 TV, Korňa, Kormaníková  
 82 TV, Korňa, Mlicherovci  
 83 TV, Korňa, Chylovci  
 84 TV, Korňa, Študentovci  
 85 TV, Korňa, Zelienkovci  
 86 TV, Korňa, Žilovci  
 87 TV, Korňa, Nižní Slezákovci  
 88 TV, Korňa, Boháčovci  
 89 TV, Korňa, u Staníka + Korňa, u Škorníka  
 90 TV, Korňa, u Šporíkov  
 91 TV, Klokočov, u Hrušky + Korňa, u Hrušky  
 92 TV, Klokočov, Sučíkovci  
 93 MB, Klokočov, Marejkovci  
 94 TV, Klokočov, Hlavice  
 95 TV, Klokočov, Žiakovci  
 96 TV, Raková, Korcháň-Kukolanka + Raková, Korcháň-Dolina + Raková, Korcháň-Kopčisko  
 97 TV, Čadca, Siheľník

## Results

### *Hygrocybe acutoconica* agg.

A medium-sized species with characteristic yellow, orange-yellow or fully orange dry cap and stem. Cap is conical, gills are free or adnexed. Flesh and surface are non-blackening and stem is fibrillose. It belongs to very rare species in the studied area (but the species grew earlier, when we did not provide our research). It is rather common species in most of European countries (Boertmann 2010). Taxon should be complex of undescribed species, which are differentiated by surfaces of caps and stems, size of specimens, shape and size of spores.

**Javorníky Mts.**, Krásno nad Kysucou, Zákysučie, edge of the mesic mowed meadow, alt. 507 m, 49°22'46.55"N 18°49'23.29"E, 13. IX. 2018, FF, PHFF10302. **Kysucká vrchovina Mts.**, Brodno, Brodnianka, overgrown meadow, alt. 385 m, 49°15'41.6"N 18°45'32.9"E, 20. X. 2017, MZ, PMZ330. **Turzovská vrchovina Mts.**, Korňa, Chylovci, mowed lawn near the house, alt. 633 m, 49°24'21.36"N 18°32'38.17"E, 17. IX. 2018, FF, PHFF10309.

### *Porpolomopsis calyptriformis* (Berk.) Bresinsky

A medium-sized to large-sized species with typical pinkish cap, white gills and white stem. Cap is dry with characteristic conical shape. Although this species is included among 33 threatened fungi in Europe (Dahlberg & Croneborg 2003) and in the Red list of fungi of Slovakia (Lizoň 2001), it is quite common in Kysuce region and Javorníky Mts., but on the other hand it is rare to very rare species in Europe (Boertmann 2010).

**Jablunkovské medzihorie Mts.**, Skalité, Poľana, sheep-grazed meadow, alt. 762 m, 49°30'25.37"N 18°55'48.28"E, 30. X. 2018, FF, PHFF10403. **Javorníky Mts.**, Rudina, Janušovo, cow-grazed meadow, alt. 409 m, 49°17'0.42"N 18°44'12.89"E, 19. X. 2014, FF, PHFF10004. – Zákopčie, Petránky, mesic mowed meadow, alt. 826 m, 49°22'40.8"N 18°43'52.7"E, 6. IX. 2017, MZ, PMZ470. – Zákopčie, Červenkovci, mesic mowed meadow, alt. 738 m, 49°23'19.8"N 18°44'16.3"E, 5. X. 2017, MZ, PMZ248. – Vysoká nad Kysucou, Vrchrieka, mesic mowed meadow, alt. 803 m, 49°21'44.83"N 18°33'6.20"E, 8. X. 2017, FF, PHFF10044. – Veľké Rovné, Kýčery, mesic mowed meadow, alt. 715 m, 49°21'4.70"N 18°34'7.24"E, 27. X. 2017, FF, PHFF10125. – Štiavnik, Baránkovci, cow-grazed meadow, alt. 639 m, 49°17'4.96"N 18°25'45.87"E, 28. X. 2017, FF, PHFF10143. – Štiavnik, u Rogov, cow-grazed meadow, alt.



*Porpolomopsis calyptriformis*, Veľké Rovné – Kýčery,  
29 October 2018, F. Fuljer (PHFF10125). Photo F. Fuljer.

643 m, 49°16'54.48"N 18°25'21.02"E, 8. XI. 2018, FF, PHFF10418. **Kysucká vrchovina Mts.**, Povina, Tatarovci, mesic mowed meadow, alt. 625 m, 49°18'10.2"N 18°51'22.6"E, 26. IX. 2017, MZ, PMZ133. – Nová Bystrica, Harvelka, mesic mowed and grazed meadow, alt. 789 m, 49°21'25.4"N 19°08'39.3"E, 13. X. 2017, MZ, PMZ220. – Nová Bystrica, Riečnica-Michalčovci, mesic mowed meadow, alt. 840 m, 49°18'38.8"N 18°59'29.9"E, 26. X. 2017, MZ, PMZ369. – Nová Bystrica, Riečnica-Kováčka, mesic mowed meadow, alt. 829 m, 49°18'13.0"N 19°04'42.1"E, 26. X. 2017, MZ, ZV, PMZ382. **Kysucké Beskydy Mts.**, Oščadnica, Beskydok, mesic mowed meadow, alt. 701 m, 49°27'49.0"N 18°52'43.4"E, 2. X. 2017, MZ, ZV, PMZ158. – Nová Bystrica, Vychylovka, mesic mowed meadow, alt. 763 m, 49°22'50.6"N 19°02'56.5"E, 13. X. 2017, MZ, PMZ223. – Nová Bystrica, Veľký Potok, mesic mowed meadow, alt. 675 m, 49°22'53.6"N 18°59'20.5"E, 13. X. 2017, MZ, PMZ238. – Skalité, Poddrobiška, edge of the mesic overgrown meadow, alt. 583 m, 49°28'41.84"N 18°54'56.81"E, 30. X. 2018, FF, PHFF10405. **Turzovská vrchovina Mts.**, Korňa, Boháčovci, mesic mowed meadow,



*Porpolomopsis calyptriformis*, Kysucká vrchovina,  
Povina – Tatarovci, 26 September 2017, M. Zajac (PMZ133).  
Photo M. Zajac.

alt. 722 m, 49°26'35.39"N 18°31'51.81"E, 19. X. 2018, FF, PHFF10356. – Korňa, u Staníka, mesic mowed meadow, sometimes cow-grazed, alt. 832 m, 49°26'50.34"N 18°31'24.07"E, 29. X. 2018, FF, PHFF10382.

***Hygrocybe cantharellus* (Fr.) Murrill**

A species with small, reddish or orange basidiomata, dry cap with concolours squamules and decurrent gills. It is a common species in European countries (Boertmann 2010). It belongs to very common species in Kysuce region and Javorníky Mts.

**Javorníky Mts.**, Makov, Holákovci, mesic mowed meadow, alt. 717 m, 49°20'35.90"N 18°27'30.73"E, 23. IX. 2017, FF, PHFF10029. – Krásno nad Kysucou, Zákysučie, extensive pasture, heathland, alt. 533 m, 49°22'45.5"N 18°49'18.7"E, 28. IX. 2017, MZ, PMZ131. – Zákopčie, Červenkovci, mesic meadow with *Nardus stricta*, alt. 659 m, 49°23'26.7"N 18°44'11.9"E, 5. X. 2017, MZ, PMZ247. – Štiavnik, Baránkovci, cow-grazed meadow, alt. 640 m, 49°16'54.77"N 18°25'22.26"E, 28. X. 2017, FF, PHFF10133. – Petrovice, under the Medvedie hill, mesic overgrown meadow near to the cottage, alt. 410 m, 49°15'47.78"N 18°31'3.60"E, 14. X. 2018, FF, PHFF10351. **Kysucká vrchovina Mts.**, Povina, Tatarovci, mesic mowed meadow, alt. 643 m, 49°18'06.4"N 18°51'27.2"E, 26. IX. 2017, MZ, PMZ447. – Nová Bystrica, Harvelka, mesic mowed and grazed meadow, alt. 807 m, 49°21'28.0"N 19°08'49.4"E, 13. X. 2017, MZ, PMZ211. – Horný Vadičov, L'adonhora, horse-grazed meadow with *Nardus stricta* and *Juniperus communis*, alt. 635 m, 49°17'18.34"N 18°53'19.09"E, 14. X. 2017, FF, PHFF10065. **Kysucké Beskydy Mts.**, Oščadnica, Príslop, mesic mowed meadow, alt. 825 m, 49°25'18.3"N 18°55'45.1"E, 22. IX. 2017, MZ, PMZ460. – Čierne, Chovancovci, mesic mowed meadow, alt. 623 m, 49°29'20.0"N 18°50'59.2"E, 18. X. 2017, MZ, PMZ287. **Moravsko-sliezske Beskydy Mts.**, Klokočov, Biely Kríž, mowed peat bog, alt. 915 m, 49°29'54.87"N 18°32'47.61"E, 31. VIII. 2017, FF, PHFF10264. – Olešná, Žubrinovci 1, peat bog, alt. 585 m, 49°28'20.99"N 18°38'44.15"E, 16. VIII. 2018, FF, PHFF10280. – Raková, Repčákovci 2, slightly overgrown peat bog, alt. 600 m, 49°29'6.85"N 18°41'9.29"E, 16. VIII. 2018, FF, PHFF10281. – Klokočov, Zajacovci 1, peat bog, alt. 717 m, 49°28'53.90"N 18°36'57.47"E, 21. VIII. 2018, PHFF10283. – Olešná, Škulovská ráztoka, peat bog, alt. 640 m, 49°28'33.07"N 18°38'17.58"E, 22. IX. 2018, FF, PHFF10312. **Turzovská vrchovina Mts.**, Korňa, Nižní Slezákovci, mesic mowed meadow, alt. 763 m, 49°26'0.87"N 18°30'45.25"E, 7. X. 2018, FF, PHFF10327.

***Hygrocybe ceracea* (Sowerby) P. Kumm.**

A small, yellow species with lubricous cap, adnate to decurrent gills, dry stem and narrow constricted spores. It is very common in Kysuce region and Javorníky Mts. Common species in Scandinavia, but rarer in southern countries (Boertmann 2010).

**Jablunkovské medzihorie Mts.**, Skalité, Poľana, mesic mowed meadow, alt. 724 m, 49°30'32.7"N 18°56'23.6"E, 28. IX. 2017, MZ, PMZ143. **Javorníky Mts.**, Bytča – Pšurnovice, Tomborov Salaš, cow-grazed meadow, alt. 391 m, 49°14'6.27"N 18°31'48.37"E, 15. X. 2017, FF, PHFF10092. – Petrovice, Škápová, mesic mowed meadow, alt. 404 m, 49°15'6.80"N 18°31'51.82"E, 26. X. 2017, FF, PHFF10110. – Veľké Rovné, Kýčery, mesic mowed meadow, alt. 682 m, 49°20'54.35"N 18°33'47.08"E, 27. X. 2017, FF, PHFF10124. – Štiavnik, Baránkovci, cow-grazed meadow, alt. 640 m, 49°16'54.88"N 18°25'21.98"E, 28. X. 2017, FF, PHFF10134. – Petrovice, Setechov, sheep-grazed meadow, alt. 464 m, 49°16'5.06"N 18°30'12.91"E, 30. X. 2017, FF, PHFF10166. – Petrovice, under the hill Medvedie, mesic overgrown meadow near to the cottage, alt. 427 m, 49°15'46.04"N 18°31'1.09"E, 3. XI. 2017, FF, PHFF10214. – Zákopčie, Petránky, mesic mowed meadow, sometimes cow-grazed, alt. 829 m, 49°22'40.15"N 18°43'53.16"E, 4. X. 2018, FF, PHFF10319. – Petrovice, Škápová 2, mesic mowed meadow, alt. 469 m, 49°14'55.60"N 18°31'33.98"E, 22. X. 2018, FF, PHFF10372. – Petrovice, Benková, mesic mowed meadow, alt. 489 m, 49°15'58.94"N 18°30'46.05"E, 3. XI. 2018, FF, PHFF10414. – Makov, Butorky, overgrown meadow, alt. 1003 m, 49°19'31.26"N 18°23'26.16"E, 8. XI. 2018, FF, PHFF10423. **Kysucká vrchovina Mts.**, Povina, Tatarovci, mesic mowed meadow, alt. 633 m, 49°18'08.7"N 18°51'25.9"E, 26. IX. 2017, MZ, PMZ445. – Krásno nad Kysucou, Vyšné Vane, mesic mowed and grazed meadow, alt. 706 m, 49°21'53.0"N 18°51'50.7"E, 6. X. 2017, MZ, PMZ183. – Nová Bystrica, Harvelka, mesic mowed and grazed meadow, alt. 807 m, 49°21'28.0"N 19°08'49.4"E, 13. X. 2017, MZ, PMZ218. – Kysucké Nové Mesto, Budatínska Lehota, mesic mowed meadow, alt. 407 m, 49°17'46.1"N 18°47'43.2"E, 14. X. 2017, MZ, PMZ274. – Radoľa, Pod Mliečové, overgrown meadow over the village, alt. 435 m, 49°17'31.0"N 18°48'04.0"E, 14. X. 2017, MZ, PMZ317. – Radoľa, Prašivá, mesic mowed meadow, alt. 485 m, 49°17'17.1"N 18°49'01.0"E, 14. X. 2017, MZ, PMZ298. – Horný Vadičov, L'adonhora, overgrown mesic meadow with *Juniperus communis* and thermophilic plants, alt. 573 m, 49°17'00.0"N 18°53'34.2"E, 14. X. 2017, MZ, PMZ309. – Radoľa,

Veľké Ostré, ski slope, alt. 587 m, 49°16'23.2"N 18°48'53.1"E, 20. X. 2017, MZ, PMZ321. – Brodno, strongly overgrown meadow over the railway, overgrown meadow, alt. 336 m, 49°15'58.5"N 18°45'12.5"E, 20. X. 2017, MZ, PMZ347. **Kysucké Beskydy Mts.**, Oščadnica, Príslop, mesic mowed meadow, alt. 815 m, 49°25'20.24"N 18°55'35.80"E, 15. X. 2017, FF, PHFF10083. **Turzovská vrchovina Mts.**, Korňa, u Šporikov, sheep-grazed meadow, alt. 684 m, 49°25'22.10"N 18°34'27.04"E, 8. X. 2017, FF, PHFF10051. – Klokočov, Žiakovci, cow-grazed meadow, alt. 653 m, 49°27'29.25"N 18°38'58.35"E, 13. X. 2018, FF, PHFF10336.

***Hygrocybe citrinovirens*** (J. E. Lange) Jul. Schöff.

A species with medium to large-sized, lemon yellow to greenish-yellow, non-blackening and dry basidiomata; radially fibrillose and conical cap and a smooth or finely fibrillose stem. It is listed in the IUCN Red List of Threatened Species (Kautmanová et al. 2015a). Although, Boertmann (2010) presented this species as a rare or very rare in Europe, it is very common species in Javorníky Mts. and Kysuce region.

**Javorníky Mts.**, Ochodnica, Petránky, mesic mowed meadow, alt. 816 m, 49°22'39.4"N 18°44'03.1"E, 6. IX. 2017, MZ, FF, PMZ469. – Makov, Holákovci, mesic mowed meadow, alt. 618 m, 49°20'35.23"N 18°27'32.34"E, 23 IX 2017, FF, PHFF10027. – Veľké Rovné, Melocík, edge of the cow-grazed meadow, alt. 808 m, 49°20'23.66"N 18°30'50.00"E, 24. VII. 2018, FF, PHFF10268. **Kysucká vrchovina Mts.**, Stará Bystrica, Soboľovci, mesic mowed meadow behind the cottage, alt. 600 m, 49°21'37.7"N 18°58'21.7"E, 21. IX. 2017, Povina, Tatarovci, mesic mowed meadow, alt. 559 m, 49°18'09.7"N 18°51'43.8"E, 26. IX. 2017, MZ, PMZ431. – Dolný Vadičov, Diely, mesic mowed meadow, alt. 544 m, 49°16'22.3"N 18°51'37.7"E, 27. IX. 2017, MZ, PMZ171. – Nová Bystrica, Vychylovka-Chmúrovci, mesic mowed meadow, alt. 678 m, 49°22'16.5"N 19°04'06.7"E, 13. X. 2017, MZ, PMZ235. **Kysucké Beskydy Mts.**, Oščadnica, Príslop, mesic mowed meadow, alt. 825 m, 49°25'18.3"N 18°55'45.1"E, 23. VIII. 2017, MZ, PMZ457. **Turzovská vrchovina Mts.**, Korňa, Kormaníková, cow-grazed pasture, alt. 651 m, 49°24'15.97"N 18°31'57.17"E, 18. IX. 2017, FF, PHFF10011. – Korňa, Mlicherovci, mesic mowed meadow, alt. 682 m, 49°24'1.43"N 18°32'22.45"E, 18. IX. 2017, FF, PHFF10015. – Vysoká nad Kysucou, Vyšný Kelčov, mesic mowed meadow, alt. 720 m, 49°24'42.7"N 18°29'11.2"E, 18. X. 2017, MZ, ZV, PMZ284. – Klokočov, Hlavice, mesic mowed meadow, alt. 577 m, 49°27'49.0"N 18°35'17.9"E, 31. X. 2017, MZ, PMZ358.



***Hygrocybe citrinovirens***, Javorníky, Veľké Rovné – Melocík, 24 July 2018, F. Fuljer (PHFF10268). Photo F. Fuljer.

***Hygrocybe coccinea*** (Schaeff.) P. Kumm.

A medium-sized species characterised by a lubricous, scarlet, convex cap and broadly adnate gills, having sometimes decurrent tooth. It is a very common species in Kysuce region and Javorníky Mts. Common species in northern Europe, but rare in southern parts of Europe (Boertmann 2010).

**Jablunkovské medzihorie Mts.**, Skalité, Poľana, mesic mowed meadow, alt. 734 m, 49°30'29.0"N 18°56'08.2"E, 28. IX. 2017, MZ, PMZ140. – Čierne, Polesie, peat bog, margin of the bog, in *Nardus stricta*, alt. 487 m, 49°30'36.2"N 18°51'56.4"E, 27. IX. 2017, MZ, PMZ150. **Javorníky Mts.**, Veľké Rovné, Melocík, cow-grazed meadow, alt. 789 m, 49°20'29.92"N 18°30'41.09"E, 4. XI. 2014, FF, PHFF10005. – Krásno nad Kysucou, Zákysučie, extensive pasture, heathland, alt. 533 m, 49°22'45.5"N 18°49'18.7"E, 28. IX. 2017, MZ, PMZ129. – Zákopčie, Petránky, mesic mowed meadow, alt. 848 m, 49°22'38.5"N 18°43'53.6"E, 5. X. 2017, MZ, PMZ155. – Zákopčie, Červenkovci, mesic mowed meadow, alt. 738

m, 49°23'19.8"N 18°44'16.3"E, 5. X. 2017, MZ, PMZ252. – Vysoká nad Kysucou, Vrchrieka, mesic mowed meadow, alt. 805 m, 49°21'45.45"N 18°33'1.77"E, 8. X. 2017, FF, PHFF10046. – Petrovice, Škápová, mesic mowed meadow, alt. 435 m, 49°14'59.48"N 18°31'52.30"E, 23. X. 2017, FF, PHFF10107. – Veľké Rovné, Kýčery, mesic mowed meadow, alt. 679 m, 49°20'51.25"N 18°33'42.17"E, 27. X. 2017, FF, PHFF10121. – Štiavnik, u Rogov, cow-grazed meadow, alt. 640 m, 49°16'54.72"N 18°25'22.83"E, 28. X. 2017, FF, PHFF10130. – Štiavnik, Baránkovci, cow-grazed meadow, alt. 628 m, 49°17'4.61"N 18°25'47.34"E, 28. X. 2017, FF, PHFF10148. – Petrovice, Setechov, sheep-grazed meadow, alt. 493 m, 49°16'3.22"N 18°30'0.86"E, 30. X. 2017, FF, PHFF10162. – Petrovice, under the hill Medvedie, mesic mowed meadow near cottage, alt. 414 m, 49°15'47.55"N 18°31'2.97"E, 3. XI. 2017, FF, PHFF10210. – Veľké Rovné, Mlynné, cow-grazed meadow, alt. 497 m, 49°16'55.72"N 18°33'50.71"E, 12. XI. 2017, FF, PHFF10254. – Petrovice, Benková, mesic mowed meadow, alt. 498 m, 49°15'59.38"N 18°30'43.86"E, 3. XI. 2018, FF, PHFF10413. – Makov, Butorky, overgrown meadow, alt. 996 m, 49°19'29.71"N 18°23'23.72"E, 8. XI. 2018, FF, PHFF10427. – Kolárovice, Čerenka, old overgrown ski slope, nowadays mesic mowed meadow, which is mildly sheep-grazed, alt. 815 m, 49°19'49.83"N 18°29'25.98"E, 8. XI. 2018, FF, PHFF10431.

**Kysucká vrchovina Mts.**, Povina, Tatarovci, mesic mowed meadow, alt. 625 m, 49°18'10.2"N 18°51'22.6"E, 26. IX. 2017, MZ, PMZ443. – Krásno nad Kysucou, Nižné Vane, mesic mowed and grazed meadow, alt. 539 m, 49°21'43.6"N 18°50'49.7"E, 6. X. 2017, MZ, PMZ178. – Krásno nad Kysucou, Vyšné Vane, mesic mowed meadow, alt. 706 m, 49°21'53.0"N 18°51'50.7"E, 6. X. 2017, MZ, PMZ190. – Nová Bystrica, Harvelka, mesic mowed and grazed meadow, alt. 807 m, 49°21'28.0"N 19°08'49.4"E, 13. X. 2017, MZ, PMZ208. – Radoľa, Dráhy, mesic overgrown meadow, alt. 425 m, 49°17'39.7"N 18°47'58.8"E, 14. X. 2017, MZ, PMZ267. – Horný Vadičov, Ľadonhora, overgrown meadow with *Juniperus communis* and thermophilic plants, alt. 573 m, 49°17'00.0"N 18°53'34.2"E, 14. X. 2017, MZ, PMZ301, PHFF10059. – Radoľa, Pod Mliečové, overgrown meadow over the village, alt. 435 m, 49°17'31.0"N 18°48'04.0"E, 14. X. 2017, MZ, PMZ313. – Nová Bystrica, Riečnica-Michalovci, mesic mowed meadow, alt. 840 m, 49°18'38.8"N 18°59'29.9"E, 26. X. 2017, MZ, ZV, PMZ366.

**Turzovská vrchovina Mts.**, Korňa, u Šporikov, sheep-grazed pasture, alt. 682 m, 49°25'22.40"N 18°34'27.80"E, 8. X. 2017, FF, PHFF10049. – Čadca, Siheľník, mesic mowed fertilised meadow, alt. 417 m, 49°26'26.89"N 18°45'55.24"E, 14. X. 2017, FF, PHFF10073. – Vysoká nad Kysucou, Vyšný Kelčov-Hluchanka, mesic mowed meadow,



*Hygrocybe coccinea*, Javorníky, Štiavnik – Baránkovci, 28 October 2018, F. Fuljer (PHFF10148). Photo F. Fuljer.



*Hygrocybe coccineocrenata*, Moravsko-sliezske Beskydy, Klokočov – u Plechov, 21 August 2018, F. Fuljer (PHFF10284). Photo F. Fuljer.

alt. 771 m, 49°24'46.4"N 18°28'46.0"E, 10. XI. 2017, MZ, PMZ416. – Korňa, u Škorníka, mesic mowed meadow, sometimes cow-grazed, alt. 826 m, 49°26'43.01"N 18°30'54.83"E, 29. X. 2018, FF, PHFF10378.

***Hygrocybe coccineocrenata*** (P. D. Orton) M. M. Moser

The small orange reddish species, characterised by a dry cap with black squamules and decurrent gills. The species could be found in moist places (peat bogs, moorlands or wet calcareous meadows (Boertmann 2010). This species is common in peat bogs in Kysuce region, but have not been recorded in Javorníky Mts. Rare species in whole Europe (Boertmann 2010).

**Moravsko-sliezske Beskydy Mts.**, Klokočov-Biely Kríž, mowed peat bog, alt. 912 m, 49°29'54.4"N 18°32'47.3"E, 17. VIII. 2017, MZ, PMZ465. – Klokočov, Zajacovci 2, bog with *Carex lasiocarpa*, alt. 664 m, 49°28'40.0"N 18°37'00.5"E, 7. IX. 2017, MZ, PMZ466. – Olešná, Žubrinovci 2, peat bog, alt. 607 m, 49°28'31.25"N 18°38'49.94"E, 14. VIII. 2018, FF, PHFF10275. – Klokočov, u Plechov, peat bog near the cottage, alt. 700 m, 49°28'43.23"N 18°36'49.58"E, 21. VIII. 2018, FF, PHFF10284. – Klokočov, Vojtkovci, mowed bog, alt. 650 m, 49°28'18.27"N 18°35'25.83"E, 8. IX. 2018, FF, PHFF10287. – Klokočov, Marejkovci 1, peat bog, alt. 659 m, 49°29'19.23"N 18°33'56.34"E, 17. IX. 2018, FF, PHFF10305. – Olešná, Škulovská ráztoka, bog, alt. 642 m, 49°28'33.39"N 18°38'17.48"E, 22. IX. 2018, FF, PHFF10311.

***Hygrocybe conica*** agg.

A species with variable-sized, yellow, orange to red basidiomata; ± conical cap with yellowish fibrillose stem that always becomes black when handled or with age. In our opinion, it should be complex of species, which are still not specifically named and distinguished. Very common species in Europe (Boertmann 2010) and also in the study area. It generally grows individually, or in the small groups, often in the fertilised meadows. It is very common species in Kysuce area and Javorníky mountains.

**Javorníky Mts.**, Veľké Rovné, Melocík, cow-grazed pasture, alt. 793 m, 49°20'25.65"N 18°30'50.27"E, 13. IX. 2017, FF, PHFF10017. – Krásno nad Kysucou, Zákysučie, extensive pasture, heathland, alt. 533 m, 49°22'45.5"N 18°49'18.7"E, 28. IX. 2017, MZ, PMZ128. – Štiavnik, u Rogov, cow-grazed meadow, alt. 685 m, 49°16'51.73"N 18°25'13.72"E, 28. X. 2017, FF, PHFF10141. – Štiavnik, Baránkovci, cow-grazed meadow,

alt. 636 m, 49°17'5.09"N 18°25'46.57"E, 28. X. 2017, FF, PHFF10142. – Petrovice, nearski slope, mesic mowed meadow, alt. 428 m, 49°15'14.25"N 18°31'22.24"E, 29. X. 2017, FF, PHFF10156. – Petrovice, under the hill Medvedie, mesic mowed meadow near cottage, alt. 409 m, 49°15'48.07"N 18°31'3.72"E, 3. XI. 2017, FF, PHFF10205. – Makov, Kasárne, ski slope, alt. 995 m, 49°19'32.26"N 18°22'38.27"E, 14. VIII. 2018, FF, PHFF10276. – Kolárovice, Čerenka, old overgrown ski slope, nowadays mowed or sheep-grazed meadow, alt. 799 m, 49°19'52.21"N 18°29'23.78"E, 7. X. 2018, FF, PHFF10333. – Makov, Kopanice, cow-grazed meadow, alt. 722 m, 49°21'14.78"N 18°25'10.15"E, 21. X. 2018, FF, PHFF10367. – Makov, Butorky, overgrown mesic meadow, alt. 1004 m, 49°19'30.91"N 18°23'26.65"E, 8. XI. 2018, FF, PHFF10424. **Kysucká vrchovina Mts.**, Stará Bystrica, Soboľovci, mesic mowed meadow near the cottage, alt. 567 m, 49°21'36.5"N 18°58'25.4"E, 21. IX. 2017, MZ, PMZ453. – Povina, Tatarovci, mesic mowed meadow, alt. 539 m, 49°18'08.4"N 18°51'52.5"E, 26. IX. 2017, MZ, PMZ423. – Horný Vadičov, Bizov vrch, mesic mowed meadow, alt. 630 m, 49°16'19.6"N 18°53'20.1"E, 27. IX. 2017, MZ, PMZ170. – Snežnica, over the village, mesic mowed meadow, alt. 457 m, 49°15'59.1"N 18°47'42.1"E, 11. X. 2017, MZ, PMZ295. – Nová Bystrica, Harvelka, mesic mowed and grazed meadow, alt. 807 m, 49°21'28.0"N 19°08'49.4"E, 13. X. 2017, MZ, PMZ210. – Horný Vadičov, Ľadonhora, overgrown mesic meadow with *Juniperus communis* and thermophilic plants, alt. 573 m, 49°17'00.0"N 18°53'34.2"E, 14. X. 2017, MZ, PMZ308. – Kysucké Nové Mesto, Budatínska Lehota, sheep grazed meadow, alt. 379 m, 49°17'41.2"N 18°47'46.1"E, 14. X. 2017, MZ, PMZ279. – Radoľa, Prašivá, mesic pasture, alt. 485 m, 49°17'17.1"N 18°49'01.0"E, 14. X. 2017, MZ, PMZ299. – Radoľa, Pod Mliečové, overgrown meadow over the village, alt. 435 m, 49°17'31.00"N 18°48'04.00"E, 14. X. 2017, MZ, PMZ318. – Snežnica, over the football pitch, overgrown meadow with *Juniperus communis*, alt. 456 m, 49°16'03.9"N 18°47'15.2"E, 20. X. 2017, MZ, PMZ335. **Kysucké Beskydy Mts.**, Oščadnica, Prislup, mesic mowed meadow, alt. 825 m, 49°25'18.3"N 18°55'45.1"E, 22. IX. 2017, MZ, PMZ459. **Moravsko-sliezske Beskydy Mts.**, Klokočov, Zajacovci 1, mowed bog, alt. 717 m, 49°28'53.31"N 18°36'56.06"E, 21. VIII. 2018, FF, PHFF10282. – Klokočov, Vojtkovci, peat bog, alt. 650 m, 49°28'18.27"N 18°35'25.83"E, 8. IX. 2018, FF, PHFF10288. – Klokočov, Marejkovci, grassy place near the road and bog, alt. 658 m, 49°29'18.26"N 18°33'56.43"E, 17. IX. 2018, FF, PHFF10307. **Turzovská vrchovina Mts.**, Korňa, Kormaníková, cow-grazed pasture, alt. 649 m, 49°24'15.81"N 18°31'56.80"E, 18. IX. 2017, FF, PHFF10010.



***Hygrocybe constrictospora***, Kysucká vrchovina, Snežnica – over the football pitch, 20 October 2017, M. Zajac (PMZ337).  
Photo M. Zajac.

***Hygrocybe constrictospora*** Arnolds

A small, reddish species with a dry cap and broadly adnate to decurrent gills. Species is characterised by shape of spores, which are oblong to cylindrical with median constriction, usually more than 75% spores are constricted (Boertmann 2010). We collected this species only at two localities; it is a very rare species in surveyed area. Rare or very rare species in Europe, but it should be also overlooked (Boertmann 2010).

**Kysucká vrchovina Mts.**, Snežnica, over the football pitch, overgrown meadow with *Juniperus communis*, alt. 456 m, 49°16'03.9"N 18°47'15.2"E, 20. X. 2017, MZ, PMZ337. – Snežnica, Veľký Vreť, overgrown meadow, alt. 511 m, 49°16'06"N 18°47'29.9"E, 20. X. 2017, MZ, PMZ339.

***Cuphophyllus flavipes*** (Britzelm.) Bon

A medium-sized species with greyish to greyish-brown cap, whitish stem with yellowish base and decurrent gills. It is a rare or very rare species in Europe and it grows only in well-preserved, *Hygrocybe* species-rich grasslands (Boertmann 2010). It is a rare species in the research area, and also in Slovakia was collected only rarely (Zajac et al. 2016).

**Javorníky Mts.**, Veľké Rovné, Kýčery, mesic mowed meadow near the cottage, alt. 632 m, 49°20'55.4"N 18°34'00.2"E, 27. X. 2017, MZ, FF, PMZ354, PHFF10203. **Turzovská vrchovina Mts.**, Korňa, Boháčovci, mesic mowed meadow, alt. 710 m, 49°26'33.97"N 18°31'47.92"E, 19. X. 2018, FF, PHFF10358.

***Cuphophyllus fornicatus*** (Fr.) Lodge, Padamsee & Vizzini

A medium-sized to large-sized tricholomatoid species with a whitish, greyish or greyish brown cap, white, usually emarginate gills and a white stem, which sometimes has rusty spots at the base (Boertmann 2010). It is very rare species in Kysuce region and Javorníky mountains, recorded only at a few localities. Rare species in Europe, but locally common in British Isles (Boertmann 2010).

**Javorníky Mts.**, Zákopčie, Petránky, mesic mowed meadow, sometimes cow-grazed, alt. 832 m, 49°22'39.78"N 18°43'53.72"E, 4. X 2018, FF, PHFF10322. – Vysoká nad Kysucou, Vrchrieka, mesic mowed meadow, alt. 810 m, 49°21'50.43"N 18°33'4.86"E, 30. X. 2018, FF, PHFF10404. – **Kysucká vrchovina Mts.**, Dolný Vadičov, Diely, mesic mowed meadow,



***Cuphophyllus flavipes***, Turzovská vrchovina, Korňa – Boháčovci, 19 October 2018, F. Fuljer (PHFF10358). Photo F. Fuljer.



***Cuphophyllus fornicatus***, Kysucká vrchovina, Krásno nad Kysucou – Nižné Vane, 6 October 2017, M. Zajac (PMZ181). Photo M. Zajac.

alt. 519 m, 49°16'18.2"N 18°51'24.8"E, 27. IX. 2017, MZ, PMZ172. – Krásno nad Kysucou, Nižné Vane, mesic mowed and grazed meadow, alt. 567 m, 49°21'44.7"N 18°50'55.5"E, 6. X. 2017, MZ, PMZ181.

***Hygrocybe glutinipes*** (J. E. Lange) R. Haller Aar.

A species with small, yellow to yellow-orange basidiomata, viscid cap and stem and adnate to subdecurrent gills. It is a rare species in Europe, but relatively common in the study area. It could be often undistinguished or probably often neglected because of its small sized basidiomata. Although, it was collected only 4 times in our surveyed area, it belongs to common species, because it has been found 8 times in the past by Zajac et al. (2016). Rare species in European countries (Boertmann 2010).

**Javorníky Mts.**, Krásno nad Kysucou, Zákysučie, extensive pasture, heathland, alt. 533 m, 49°22'45.5"N 18°49'18.7"E, 28. IX. 2017, MZ, PMZ130. **Kysucká vrchovina Mts.**, Povina, Tatarovci, mesic mowed meadow, alt. 539 m, 49°18'08.4"N 18°51'52.5"E, 26. IX. 2017, MZ, PMZ425. – Nová Bystrica, Harvelka, mesic mowed and grazed meadow, alt. 807 m, 49°21'28.0"N 19°08'49.4"E, 13. X. 2017, MZ, PMZ216. **Turzovská vrchovina Mts.**, Korňa, Zelenkovci, mesic mowed meadow, alt. 737 m, 49°24'4.29"N 18°33'39.80"E, 21. IX. 2017, FF, PHFF10025.

***Hygrocybe chlorophana*** (Fr.) Wünsche

A species with medium-sized, yellow to orange-yellow basidiomata, viscid, smooth cap, sometimes finely squamulose on top, dry or moist stem and adnexed gills. . Common species in Scandinavia and British Isles, but rare in southern European countries (Boertmann 2010). Very common species in our surveyed area.

**Jablunkovské medzihorie Mts.**, Skalité, Poľana, mesic mowed meadow, alt. 726 m, 49°30'33.6"N 18°56'24.4"E, 28. IX. 2017, MZ, PMZ139. – Skalité, Za Riekami, mesic mowed meadow, alt. 686 m, 49°30'53.7"N 18°54'32.4"E, 28. IX. 2017, MZ, PMZ148. **Javorníky Mts.**, Zákopčie, Petránky, mesic mowed meadow, alt. 824 m, 49°22'41.18"N 18°43'52.5"E, 6. IX. 2017, MZ, PMZ471. – Veľké Rovné, Melocík, cow-grazed pasture, alt. 798 m, 49°20'24.75"N 18°30'51.81"E, 13. IX. 2017, PHFF10016. – Makov, Holákovci, mesic mowed meadow, alt. 719 m, 49°20'34.98"N 18°27'29.60"E, 23. IX. 2017, FF, PHFF10028. – Krásno nad Kysucou, Zákysučie, extensive pasture, heathland, alt. 533 m, 49°22'45.5"N 18°49'18.7"E, 28. IX. 2017, MZ, PMZ127. –

Zákopčie, Červenkovci, mesic mowed meadow, alt. 738 m, 49°23'19.8"N 18°44'16.3"E, 5. X. 2017, MZ, PMZ255. – Vysoká nad Kysucou, Vrchrieka, mesic mowed meadow, alt. 793 m, 49°21'42.23"N 18°33'2.07"E, 8. X. 2017, FF, PHFF10043. – Kolárovice, under the Človiečik hill, mesic mowed meadow, sometimes cow-grazed, alt. 493 m, 49°16'44.51"N 18°31'13.69"E, 23. X. 2017, FF, PHFF10103. – Veľké Rovné, Kýčery, mesic mowed meadow, alt. 682 m, 49°20'54.93"N 18°33'47.98"E, 27. X. 2017, FF, PHFF10127. – Štiavnik, Baránkovci, cow-grazed meadow, alt. 644 m, 49°16'54.88"N 18°25'20.83"E, 28. X. 2017, FF, PHFF10135. – Petrovice, near ski slope, mesic mowed meadow, alt. 395 m, 49°15'16.51"N 18°31'27.58"E, 29. X. 2017, FF, PHFF10149. – Petrovice, Setechov, sheep-grazed meadow, alt. 482 m, 49°16'1.08"N 18°30'3.55"E, 30. X. 2017, FF, PHFF10168. – Petrovice, Škápová, mesic mowed meadow, alt. 470 m, 49°14'55.08"N 18°31'33.11"E, 31. X. 2017, FF, PHFF10185. – Petrovice, under the hill Medvedie, mesic mowed meadow near cottage, alt. 414 m, 49°15'47.67"N 18°31'3.07"E, 3. XI. 2017, FF, PHFF10209. – Petrovice, Benková, mesic mowed meadow, alt. 475 m, 49°15'58.28"N 18°30'49.27"E, 4. XI. 2017, FF, PHFF10225. – Kolárovice, Čeremka, old overgrown ski slope, nowadays mowed or sheep-grazed meadow, alt. 800 m, 49°19'51.56"N 18°29'23.97"E, 28. IX. 2018, FF, PHFF10314. – Petrovice, Škápová 2, mesic mowed meadow, alt. 410 m, 49°15'5.38"N 18°31'56.89"E, 28. IX. 2018, FF, PHFF10315. **Kysucká vrchovina Mts.**, Povina, Tatarovci, mesic mowed meadow, alt. 625 m, 49°18'10.2"N 18°51'22.6"E, 26. IX. 2017, MZ, PMZ444. – Horný Vadičov, Ladonhora, extensive pasture with *Juniperus communis* and *Nardus stricta*, alt. 539 m, 49°17'18.6"N 18°53'23.6"E, 27. IX. 2017, MZ, PMZ165, PHFF10063. – Krásno nad Kysucou, Vyšné Vane, mesic mowed and grazed meadow, alt. 706 m, 49°21'53.0"N 18°51'50.7"E, 6. X. 2017, MZ, PMZ189. – Krásno nad Kysucou, Nižné Vane, mesic mowed and grazed meadow, alt. 539 m, 49°21'43.6"N 18°50'49.7"E, 6. X. 2017, MZ, PMZ176. – Krásno nad Kysucou, Hájnica, mesic mowed meadow, alt. 625 m, 49°22'59.7"N 18°51'17.7"E, 6. X. 2017, MZ, PMZ192. – Snežnica, over the village, mesic mowed meadow, alt. 457 m, 49°15'59.1"N 18°47'42.1"E, 11. X. 2017, MZ, PMZ292. – Nová Bystrica, Vychylovka-Chmúrovci, mesic mowed meadow, alt. 678 m, 49°22'16.5"N 19°04'06.7"E, 13. X. 2017, MZ, PMZ231. – Nová Bystrica, Harvelka, mesic mowed and grazed meadow, alt. 807 m, 49°21'28.0"N 19°08'49.4"E, 13. X. 2017, MZ, PMZ213. – Radoľa, Dráhy, mesic mowed meadow, alt. 425 m, 49°17'39.7"N 18°47'58.8"E, 14. X. 2017, MZ, PMZ268. – Radoľa, Pod Mliečové, overgrown meadow over the village, alt. 435 m,

49°17'31.00"N 18°48'04.00"E, 14. X. 2017, MZ, PMZ320. – Kysucké Nové Mesto, Budatínska Lehota, mesic mowed meadow, alt. 396 m, 49°17'48.8"N 18°47'35.7"E, 14. X. 2017, MZ, PMZ276. – Nová Bystrica, Riečnica-Michalcovci, mesic mowed meadow, alt. 840 m, 49°18'38.8"N 18°59'29.9"E, 26. X. 2017, MZ, ZV, PMZ370. – Nová Bystrica, Riečnica-Kýčerka, mesic mowed meadow, alt. 887 m, 49°18'18.6"N 19°05'14.1"E, 26. X. 2017, MZ, ZV, PMZ372. – Nová Bystrica, Riečnica-Kováčka, mesic mowed meadow, alt. 827 m, 49°18'13.0"N 19°04'42.1"E, 26. X. 2017, MZ, ZV, PMZ381. **Kysucké Beskydy Mts.**, Oščadnica, Príslop, mesic mowed meadow, alt. 825 m, 49°25'18.3"N 18°55'45.1"E, 22. IX. 2017, MZ, PMZ463. – Oščadnica, Beskydok, mesic mowed meadow, alt. 701 m, 49°27'49.0"N 18°52'43.4"E, 2. X. 2017, MZ, ZV, PMZ160. – Čadca, over the Drahošanka, mesic mowed meadow, alt. 647 m, 49°27'15.7"N 18°49'47.5"E, 2. X. 2017, MZ, ZV, PMZ157. – Nová Bystrica, Vychylovka, mesic mowed meadow, alt. 763 m, 49°22'49.2"N 19°02'57.3"N, 13. X. 2017, MZ, PMZ230. – Čierne, Chovancovci, mesic mowed meadow, alt. 623 m, 49°29'20.0"N 18°50'59.3"E, 18. X. 2017, MZ, PMZ289. **Turzovská vrchovina Mts.**, Korňa, Mlicherovci, mesic mowed meadow, alt. 681 m, 49°24'1.47"N 18°32'20.83"E, 18. IX. 2017, FF, PHFF 10012. – Korňa, Študentovci, mesic mowed meadow, alt. 659 m, 49°24'12.25"N 18°33'4.40"E, 20. IX. 2017, FF, PHFF10021. – Klokočov, Sučíkovci, mesic mowed meadow, alt. 700 m, 49°28'30.63"N 18°32'40.01"E, 7. X. 2017, FF, PHFF10038. – Korňa, u Šporíkov, sheep-grazed meadow, alt. 663m, 49°25'23.11"N 18°34'39.12"E, 8. X. 2017, FF, PHFF10053. – Vysoká nad Kysucou, Vyšný Kelčov, mesic mowed meadow, alt. 720 m, 49°24'42.7"N 18°29'11.2"E, 18. X. 2017, MZ, ZV, PMZ283. – Klokočov, Hlavice, mesic mowed meadow, alt. 577 m, 49°27'49.0"N 18°35'17.9"E, 31. X. 2017, MZ, PMZ359. – Raková, Korchán-Kukolanka, mesic mowed meadow, alt. 597 m, 49°29'08.9"N 18°41'53.7"E, 2. XI. 2017, MZ, PMZ406. – Vysoká nad Kysucou, Vyšný Kelčov-Hluchanka, mesic mowed meadow, alt. 771 m, 49°24'46.4"N 18°28'46.0"E, 10. XI. 2017, MZ, PMZ417. – Korňa, Nižní Slezákovci, mesic mowed meadow, alt. 728 m, 49°26'2.63"N 18°31'2.28"E, 7. X. 2018, FF, PHFF10325. – Korňa, Boháčovci, mesic mowed meadow, alt. 707 m, 49°26'32.26"N 18°31'47.59"E, 19. X. 2018, FF, PHFF10354.

### ***Hygrocybe ingrata* J.P. Jensen & F.H.Møller**

A medium-sized species with reddish-brown to orange-brown cap, cream coloured stem and gills. It smells nitrous and the flesh is reddening after cut. It is a rare species in Europe, listed in the IUCN Red List of Threatened

Species (Boertmann 2010, Kautmanová et al. 2015b). Although, we found this species at several localities it belongs to the common species in the Kysuce region, because it has been found 8 times in our studied area in the past (Zajac et al. 2016). Rare or very rare species in Europe (Boertmann 2010).

**Javorníky Mts.**, Bytča-Pšurnovice, Tomborov Salaš, cow-grazed meadow, alt. 384 m, 49°14'2.28"N 18°31'59.97"E, 4. X. 2014, FF, PHFF10000. **Kysucká vrchovina Mts.**, Povina, Tatarovci, mesic mowed meadow, alt. 539 m, 49°18'08.4"N 18°51'52.5"E, 26. IX. 2017, MZ, PMZ222. **Turzovská vrchovina Mts.**, Korňa, Mlicherovci, mesic mowed meadow, alt. 681 m, 49°24'1.60"N 18°32'20.74"E, 18. IX. 2017, FF, Adam Polhorský, PHFF10057. – Korňa, Kormaníková, cow-grazed meadow, alt. 653 m, 49°24'16.91"N 18°31'58.35"E, 18. IX. 2017, FF, PHFF10058.

***Hygrocybe insipida*** (J. E. Lange) M. M. Moser

A small-sized species, with yellowish, orangish lubricous cap, slightly decurrent gills coloured concolours like a cap and a moist stem when fresh. Stem top is more reddish like a rest of the stem (Boertmann 2010). It is a very common species in Kysuce region and Javorníky Mts., and we collected many basidiomata at various localities. Common in northern European countries, but rarer in southern Europe (Boertmann 2010).

**Jablunkovské medzihorie Mts.**, Skalité, Poľana, sheep-grazed meadow, alt. 761 m, 49°30'25.36"N 18°55'49.92"E, 30. X. 2018, FF, PHFF10401.

**Javorníky Mts.**, Makov, Holákovci, mesic mowed meadow, alt. 710 m, 49°20'36.92"N 18°27'43.38"E, 30. IX. 2017, FF, PHFF10032. – Makov, Čierne, mesic mowed meadow, alt. 713 m, 49°20'37.6"N 18°27'51.3"E, 2. X. 2017, MZ, FF, PMZ173. – Zákopčie, Petránky, mesic mowed meadow, alt. 848 m, 49°22'38.5"N 18°43'53.6"E, 5. X. 2017, MZ, PMZ152. – Zákopčie, Červenkovci, mesic mowed meadow, alt. 738 m, 49°23'19.8"N 18°44'16.3"E, 5. X. 2017, MZ, PMZ249. – Makov, Kasárne, ski slope, alt. 995 m, 49°19'32.26"N 18°22'38.27"E, 14. VIII. 2018, FF, PHFF10277. – Petrovice, under the Medvedie hill, mesic meadow near the cottage, alt. 409 m, 49°15'47.93"N 18°31'3.82"E, 14. X. 2018, FF, PHFF10348. – Veľké Rovné, Kýčery, mesic mowed meadow, alt. 684 m, 49°20'53.72"N 18°33'44.70"E, 29. X. 2018, FF, PHFF10390. – Petrovice, Benková, mesic mowed meadow, alt. 464 m, 49°15'57.00"N 18°30'53.42"E, 3. XI. 2018, FF, PHFF10415. – Štiavnik, Baránkovci, cow-grazed meadow, alt. 696 m, 49°16'51.91"N 18°25'12.55"E, 8. XI. 2018, FF, PHFF10419.



***Hygrocybe insipida***, Javorníky, Petrovice – Medvedie, 3 November 2018, F. Fuljer (PHFF10415). Photo F. Fuljer.

**Kysucká vrchovina Mts.**, Povina, Tatarovci, mesic mowed meadow, alt. 539 m, 49°18'08.4"N 18°51'52.5"E, 26. IX. 2017, MZ, PMZ430. – Horný Vadičov, Ľadonhora, extensive pasture with *Nardus stricta*, *Juniperus communis*, alt. 518 m, 49°17'14.0"N 18°53'29.8"E, 27. IX. 2017, MZ, PMZ166. – Krásno nad Kysucou, Nižné Vane, mesic mowed and sometimes grazed meadow, alt. 539 m, 49°21'43.6"N 18°50'49.7"E, 6. X. 2017, MZ, PMZ184. – Krásno nad Kysucou, Vyšné Vane, mesic mowed and grazed meadow, alt. 706 m, 49°21'53.0"N 18°51'50.7"E, 6. X. 2017, MZ, PMZ185. – Krásno nad Kysucou, Hájnica, mesic mowed meadow, alt. 625 m, 49°22'59.7"N 18°51'17.7"E, 6. X. 2017, MZ, PMZ191. – Nová Bystrica, Harvelka, mesic mowed and grazed meadow, alt. 807 m, 49°21'28.0"N 19°08'49.4"E, 13. X. 2017, MZ, PMZ214. – Nová Bystrica, Vychylovka-Chmúrovci, mesic mowed meadow, alt. 678 m, 49°22'16.5"N 19°04'06.7"E, 13. X. 2017, MZ, PMZ236. – Snežnica, over the village, mesic mowed meadow, alt. 457 m, 49°15'59.1"N 18°47'42.1"E, 11. X. 2017, MZ, PMZ293. – Snežnica, over the football pitch, overgrown meadow, alt. 456 m, 49°16'03.9"N 18°47'15.2"E, 20. X.

2017, MZ, PMZ338. – Nová Bystrica, Riečnica-Michalovci, mesic mowed meadow, alt. 840 m, 49°18'38.8"N 18°59'29.9"E, 26. X. 2017, MZ, ZV, PMZ371. **Kysucké Beskydy Mts.**, Oščadnica, Príslop, mesic mowed meadow, alt. 825 m, 49°25'18.3"N 18°55'45.1"E, 22. IX. 2017, MZ, PMZ462. – Nová Bystrica, Sajdov vrch, mesic mowed meadow, alt. 763 m, 49°22'49.2"N 19°02'57.3"E, 13. X. 2017, MZ, PMZ228. **Turzovská vrchovina Mts.**, Korňa, Žilovci, mesic irregularly mowed meadow, alt. 595 m, 49°24'22.59"N 18°34'0.46"E, 8. X. 2017, FF, PHFF10055. – Vysoká nad Kysucou, Vyšný Kelčov-Hluchanka, mesic mowed meadow, alt. 720 m, 49°24'42.7"N 18°29'11.2"E, 18. X. 2017, MZ, ZV, PMZ280. – Klokočov, Hlavice, mesic mowed meadow, alt. 623 m, 49°27'45.5"N 18°35'40.8"E, 31. X. 2017, MZ, PMZ360. – Korňa, Mlicherovci, mesic mowed meadow, alt. 679 m, 49°24'1.79"N 18°32'21.54"E, 13. X. 2018, FF, PHFF10341. – Klokočov, u Hrušky, cow-grazed meadow, alt. 813 m, 49°26'49.31"N 18°31'54.23"E, 29. X. 2018, FF, PHFF10376.

***Hygrocybe intermedia* (Pass.) Fayod**

A medium-sized to large species, characterised by orange to reddish cap, which is dry, fibrillose and squamulose, stem is fibrillose, too. Very rare species in Kysuce region and Javorníky Mts. Very rare species in whole Europe (Boertmann 2010).

**Kysucká vrchovina Mts.**, Stará Bystrica, Sobol'ovci, mesic mowed meadow behind the cottage, alt. 567 m, 49°21'36.5"N 18°58'25.4"E, 21. IX. 2017, MZ, PMZ452.

***Gliophorus irrigatus* (Pers.) A.M. Ainsw. & P.M. Kirk**

A species with brownish or greyish coloured basidiomata, viscid on both cap and stem. It was found at many localities during our research, we consider it a very common species in the Kysuce region. Occasional to rare species in European countries (Boertmann 2010).

**Jablunkovské medzihorie Mts.**, Skalité, Poľana, sheep-grazed meadow, alt. 761 m, 49°30'27.20"N 18°55'57.64"E, 30. X. 2018, FF, PHFF10395. **Javorníky Mts.**, Makov, Holákovci, mesic mowed meadow, alt. 720 m, 49°20'34.40"N 18°27'27.78"E, 23. IX. 2017, FF, PHFF10026. – Zákopčie, Petránky, mesic mowed meadow, alt. 848m, 49°22'38.5"N 18°43'53.6"E, 5. X. 2017, MZ, PMZ153. – Zákopčie, Červenkovci, mesic mowed meadow, alt. 738 m, 49°23'19.8"N 18°44'16.3"E, 5. X. 2017, MZ, PMZ253. – Vysoká nad Kysucou, Vrchrieka, mesic mowed meadow,

alt. 785 m, 49°21'40.34"N 18°33'5.45"E, 8. X. 2017, FF, PHFF10048. – Petrovice, Škápová, mesic mowed meadow, alt. 407 m, 49°15'6.16"N 18°31'51.05"E, 26. X. 2017, FF, PHFF10109. – Veľké Rovné, Kýčery, mesic mowed meadow near the cottage, alt. 632 m, 49°20'55.4"N 18°34'00.2"E, 27. X. 2017, MZ, FF, PMZ353, PHFF10122. – Štiavnik, Baránkovci, cow-grazed meadow, alt. 631 m, 49°17'7.09"N 18°25'48.33"E, 28. X. 2017, FF, PHFF10144. – Petrovice, near ski slope, mesic mowed meadow, alt. 398 m, 49°15'20.10"N 18°31'23.24"E, 29. X. 2017, FF, PHFF10160. – Petrovice, Setechov, sheep-grazed meadow, alt. 484 m, 49°16'3.52"N 18°30'4.21"E, 30. X. 2017, FF, PHFF10164. – Petrovice, Benková, mesic mowed meadow, alt. 456 m, 49°16'4.96"N 18°30'50.80"E, 4. XI. 2017, FF, PHFF10220. **Kysucká vrchovina Mts.**, Povina, Tatarovci, mesic mowed meadow, alt. 643m, 49°18'06.4"N 18°51'27.2"E, 26. IX. 2017, MZ, PMZ472. – Krásno nad Kysucou, Nižné Vane, mesic mowed and grazed meadow, alt. 595 m, 49°21'45.3"N 18°51'02.7"E, 6. X. 2017, MZ, PMZ182. – Snežnica, over the village, mesic mowed meadow, alt. 457m, 49°15'59.1"N 18°47'42.1"E, 11. X. 2017, MZ, PMZ296. – Nová Bystrica, Harvelka, mesic mowed and grazed meadow, alt. 807 m, 49°21'32.7"N 19°08'10.9"E, 13. X. 2017, MZ, PMZ217. – Horný Vadičov, Ľadonhora, mesic meadow with *Nardus stricta*, alt. 634 m, 49°17'18.2"N 18°53'18.8"E, 14. X. 2017, MZ, FF, PMZ266, PHFF10234. – Kysucké Nové Mesto, Budatínska Lehota, mesic mowed meadow, alt. 379 m, 49°17'41.2"N 18°47'46.1"E, 14. X. 2017, MZ, PMZ312. – Snežnica, Veľký Vreť, mesic mowed meadow, alt. 606 m, 49°16'16.2"N 18°48'04.8"E, 20. X. 2017, MZ, PMZ322. – Brodno, Kosteliská, mesic mowed meadow, alt. 388 m, 49°15'58.9"N 18°45'16.8"E, 20. X. 2017, MZ, PMZ340. – Nová Bystrica, Riečnica – Michalovci, mesic mowed meadow, alt. 840 m, 49°18'38.8"N 18°59'29.9"E, 26. X. 2017, MZ, ZV, PMZ364. **Kysucké Beskydy Mts.**, Oščadnica, Príslop, mesic mowed meadow, alt. 825 m, 49°25'18.3"N 18°55'45.1"E, 23. VIII. 2017, MZ, PMZ450. – Nová Bystrica, Vychylovka, mesic mowed meadow, alt. 780 m, 49°22'47.1"N 19°03'08.9"E, 13. X. 2017, MZ, PMZ225. **Turzovská vrchovina Mts.**, Korňa, Mlicherovci, mesic mowed meadow, alt. 681 m, 49°24'1.53"N 18°32'20.54"E, 18. IX. 2017, FF, PHFF10013. – Klokočov, Hlavice, mesic mowed meadow, alt. 623 m, 49°27'45.5"N 18°35'40.8"E, 31. X. 2017, MZ, PMZ361. – Raková, Korcháň-Kopčisko, mesic mowed meadow, alt. 604 m, 49°29'15.3"N 18°41'33.7"E, 2. XI. 2017, MZ, PMZ402. – Vysoká nad Kysucou, Vyšný Kelčov – Hluchanka, mesic mowed meadow, alt. 764 m, 49°24'37.0"N 18°28'39.5"E, 10. XI. 2017, MZ, PMZ413. – Korňa, Nižní Slezákovci, mesic mowed meadow, alt. 728 m, 49°26'2.70"N 18°31'2.39"E, 7. X.

2018, FF, PHFF10324. – Klokočov, Žiakovci, cow-grazed meadow, alt. 660 m, 49°27'29.40"N 18°38'56.72"E, 13. X. 2018, FF, PHFF10338. – Korňa, Boháčovci, mesic mowed meadow, alt. 721 m, 49°26'34.97"N 18°31'50.87"E, 19. X. 2018, FF, PHFF10355. – Korňa, u Staníka, mesic mowed meadow, alt. 830 m, 49°26'49.99"N 18°31'23.12"E, 29. X. 2018, FF, PHFF10380.

***Gliophorus laetus*** (Pers.) Herink

A small-sized species characterised by very lubricous and viscid cap, stem and gill edge. Basidiomata have typical whitish decurrent gills, yellowish or orangish stem and dull orange or slightly brownish cap. It is common species in our area. Common species in Europe (Boertmann 2010).

**Jablunkovské medzihorie Mts.**, Skalité, Poľana, sheep-grazed meadow, alt. 792 m, 49°30'32.29"N 18°56'21.72"E, 30. X. 2018, FF, PHFF10393. **Javorníky Mts.**, Krásno nad Kysucou, Zákysučie, extensive



***Gliophorus laetus***, Javorníky, Krásno nad Kysucou – Záriečie, 8 October 2017, M. Zajac (PMZ126). Photo M. Zajac.

pasture, heathland, alt. 533 m, 49°22'45.5"N 18°49'18.7"E, 28. IX. 2017, MZ, PMZ126. – Zákopčie, Červenkovci, mesic meadow with *Nardus stricta*, without management, alt. 695 m, 49°23'26.7"N 18°44'11.9"E, 5. X. 2017, MZ, PMZ244. – Makov, Butorky, overgrown meadow, alt. 1000 m, 49°19'30.90"N 18°23'25.14"E, 8. XI. 2018, FF, PHFF10422. **Kysucká vrchovina Mts.**, Horný Vadičov, L'adonhora, mesic mowed and grazed meadow with *Nardus stricta* and *Juniperus communis*, alt. 634 m, 49°17'18.2"N 18°53'18.8"E, 14. X. 2017, MZ, PMZ243, PHFF10069. – Nová Bystrica, Riečnica-Michalčovci, mesic mowed meadow, alt. 840 m, 49°18'38.8"N 18°59'29.9"E, 26. X. 2017, MZ, ZV, PMZ368. **Kysucké Beskydy Mts.**, Nová Bystrica, Vychylovka-Svitková, mesic mowed meadow with *Nardus stricta*, alt. 924 m, 49°24'20.2"N 19°06'10.1"E, 4. X. 2017, MZ, ZV, PMZ164. – Nová Bystrica, Veľký Potok, mesic mowed meadow, alt. 675 m, 49°22'53.6"N 18°59'20.5"E, 13. X. 2017, MZ, PMZ239. – Oščadnica, Prislöp, cow-grazed meadow, alt. 828 m, 49°25'31.42"N 18°55'32.01"E, 15. X. 2017, FF, PHFF10087. **Turzovská vrchovina Mts.**, Vysoká nad Kysucou, Vyšný Kelčov-Hluchanka, mesic mowed meadow, alt. 764 m, 49°24'37.0"N 18°28'39.5"E, 10. XI. 2017, MZ, PMZ414.

***Hygrocybe miniata*** (Fr.) P. Kumm.

A small to medium-sized species with reddish basidiomata, dry and finely squamulose cap and broadly adnate gills. Rare species in our surveyed area. Common in northern Europe, but rare in southern European countries (Boertmann 2010).

**Javorníky Mts.**, Makov, Butorky, overgrown meadow, alt. 997 m, 49°19'31.31"N 18°23'24.59"E, 9. XI. 2018, FF, PHFF10434. **Moravsko-sliezske Beskydy Mts.**, Klokočov, Biely Kríž, mowed peat bog, alt. 914 m, 49°29'54.90"N 18°32'48.22"E, 16. VIII. 2018, FF, PHFF10279. **Turzovská vrchovina Mts.**, Vysoká nad Kysucou, Vyšný Kelčov, mesic mowed meadow, alt. 720 m, 49°24'42.7"N 18°29'11.2"E, 18. X. 2017, MZ, ZV, PMZ282. – Vysoká nad Kysucou, Vyšný Kelčov-Hluchanka, mesic mowed meadow, alt. 764 m, 49°24'37.0"N 18°28'39.5"E, 10. XI. 2017, MZ, PMZ412.

***Hygrocybe mucronella*** (Fr.) P. Karst.

A small-sized *Hygrocybe* species characterised by bitter taste. Whole basidiomata is usually reddish to orange coloured. Gills are deep orange with paler edge. Cap is viscid, lubricous, orange or red coloured. It

belongs to very rare species in our area. Rare species in whole Europe (Boertmann 2010).

**Javorníky Mts.**, Hvozdnica, Višňové, mesic mowed meadow, alt. 473 m, 49°12'42.81"N 18°27'48.85"E, 17. XI. 2018, FF, PHFF10447. **Kysucká vrchovina Mts.**, Radol'a, meadow in fruit grove, alt. 382 m, 49°17'41.8"N 18°47'38.4"E, 14. X. 2017, MZ, PMZ270. – Horný Vadičov, L'adonhora, overgrown mesic meadow with *Juniperus communis* and thermophilic plants, alt. 573 m, 49°17'00.0"N 18°53'34.2"E, 14. X. 2017, MZ, PMZ306.

***Hygrocybe ovina*** (Bull.) Kühner

A medium-sized dark greyish or brownish species, characterised by reddish flash when bruised. It is very rare species in Kysuce region and Javorníky Mts., which has been found only on one locality. Very rare species in Europe (Boertmann 2010).



***Hygrocybe ovina***, Javorníky, Krásno nad Kysucou – Zárčie, 6 October 2017, M. Zajac (PMZ124). Photo M. Zajac.

**Javorníky Mts.**, Krásno nad Kysucou, Zákysučie, extensive pasture, heathland, alt. 533 m, 49°22'45.3"N 18°49'18.3"E, 28. IX. 2017, MZ, PMZ124.

***Hygrocybe pratensis* var. *pallida*** (Berk. & Broome) Arnolds

≡ *Cuphophyllus pratensis* var. *pallidus* (Berk. & Broome) Bon

Basidiomata are similar to *Cuphophyllus pratensis* var. *pratensis*, except for the white colours. It is a medium-sized to large species with decurrent gills. This species grew earlier than *Cuphophyllus pratensis* var. *pratensis*, which is very common species, but this variety is rather rare, recorded only at a few localities in surveyed area. Rare or very rare species in Europe (Boertmann 2010).

**Javorníky Mts.**, Makov, Holákovci, mesic mowed meadow, alt. 720 m, 49°20'35.03"N 18°27'30.16"E, 23. IX. 2017, FF, PHFF10034. – Zákopčie, Petránky, mesic mowed meadow, sometimes cow-grazed, alt. 820 m, 49°22'41.25"N 18°43'50.84"E, 4. X. 2018, FF, PHFF10323. **Kysucké Beskydy Mts.**, Oščadnica, Príslop, cow-grazed meadow, alt. 824 m, 49°25'16.97"N 18°55'37.63"E, 7. X. 2018, FF, PHFF10330. **Turzovská vrchovina Mts.**, Korňa, Mlicherovci, mesic mowed meadow, alt. 680 m, 49°24'1.75"N 18°32'19.77"E, 18. IX. 2017, FF, PHFF10056. – Korňa, Nižní Slezákovci, mesic mowed meadow, alt. 768 m, 49°26'0.05"N 18°30'43.57"E, 7. X. 2018, FF, PHFF10328. – Korňa, Boháčovci, mesic mowed meadow, alt. 703 m, 49°26'32.95"N 18°31'46.41"E, 19. X. 2018, FF, PHFF10362.

***Cuphophyllus pratensis*** (Fr.) Bon

≡ *Hygrocybe pratensis* (Fr.) Murrill

A species with medium or large basidiomata, pale to dull orange cap and decurrent gills. Very common species in our surveyed area and also in Europe (Boertmann 2010). Common species in Scandinavia, almost worldwide distributed species, rare in Benelux countries and in central Europe (Boertmann 2010).

**Jablunkovské medzihorie Mts.**, Skalité, Poľana, sheep-grazed meadow, alt. 761 m, 49°30'27.72"N 18°55'57.76"E, 30. X. 2018, FF, PHFF10396. **Javorníky Mts.**, Petrovice, Magále, mesic mowed meadow, alt. 850 m, 49°19'25.81"N 18°26'12.28"E, 22. X. 2016, FF, PHFF10009. – Vysoká nad Kysucou, Vrchrieka, mesic mowed meadow, alt. 805 m, 49°21'48.38"N 18°32'55.23"E, 8. X. 2017, FF, PHFF10042. – Bytča-Pšurnovice, Tomborov Salaš, mesic meadow without management,



***Cuphophyllus pratensis***, Javorníky, Zákopčie – Petránky,  
4 October 2018, F. Fuljer (PHFF10317). Photo F. Fuljer.

alt. 401 m, 49°14'5.53"N 18°32'0.91"E, 15. X. 2017, FF, PHFF10093 .  
– Petrovice, Škápová, mesic mowed meadow with thermophilic plants,  
alt. 436 m, 49°14'59.11"N 18°31'51.99"E, 23. X. 2017, FF, PHFF10104. –  
Veľké Rovné, Kýčery, mesic mowed meadow, alt. 656 m, 49°20'45.69"N  
18°33'40.75"E, 27. X. 2017, FF, PHFF10118. – Štiavnik, u Rogov, cow-  
grazed meadow, alt. 640 m, 49°16'54.70"N 18°25'22.38"E, 28. X. 2017,  
FF, PHFF10132. – Štiavnik, Baránkovci, cow-grazed meadow, alt. 627 m,  
49°17'5.97"N 18°25'48.23"E, 28. X. 2017, FF, PHFF10145. – Petrovice,  
near ski slope, mesic mowed meadow, alt. 400 m, 49°15'18.83"N  
18°31'24.12"E, 29. X. 2017, FF, PHFF10159. – Petrovice, Setechov,  
sheep-grazed meadow, alt. 480 m, 49°16'1.09"N 18°30'4.34"E, 30.  
X. 2017, FF, PHFF10169. – Petrovice, Škápová 2, mesic mowed  
meadow, alt. 477 m, 49°14'53.60"N 18°31'31.47"E, 31. X. 2017, FF,  
PHFF10187. – Petrovice, under the hill Medvedie, mesic overgrown  
meadow near cottage, alt. 409 m, 49°15'47.88"N 18°31'3.74"E, 3. XI.  
2017, FF, PHFF10204. – Petrovice, Petrovská, mesic mowed meadow,  
which is partly fertilised, alt. 432 m, 49°16'49.42"N 18°30'36.18"E, 3. XI.  
2018, FF, PHFF10417. – Petrovice, Benková 2, mesic mowed meadow,

alt. 408 m, 49°16'4.79"N 18°31'3.02"E, 4. XI. 2017, FF, PHFF10216. –  
Petrovice, Benková, mesic mowed meadow, alt. 453 m, 49°16'4.41"N  
18°30'52.37"E, 4. XI. 2017, FF, PHFF10219. – Veľké Rovné, Mlynné,  
cow-grazed meadow, alt. 498 m, 49°16'54.81"N 18°33'46.80"E, 12. XI.  
2017, FF, PHFF10256. – Zákopčie, Petránky, mesic mowed meadow,  
sometimes cow-grazed, alt. 826 m, 49°22'40.72"N 18°43'52.41"E, 4. X.  
2018, FF, PHFF10317. – Makov, Butorky, overgrown meadow, alt. 997 m,  
49°19'30.62"N 18°23'24.20"E, 8. XI. 2018, FF, PHFF10426. – Kolárovice,  
Čerenka, old overgrown ski slope, nowadays mesic mowed meadow,  
sometimes sheep-grazed, alt. 845 m, 49°19'47.74"N 18°29'19.70"E, 8.  
XI. 2018, PHFF10432. – Hvozdnica, Višňové, mesic mowed meadow,  
alt. 481 m, 49°12'47.12"N 18°27'18.27"E, 17. XI. 2018, FF, PHFF10448.  
**Kysucká vrchovina Mts.**, Povina, Tatarovci, mesic mowed meadow,  
alt. 624 m, 49°18'13.9"N 18°51'26.3"E, 26. IX. 2017, MZ, PMZ441. –  
Krásno nad Kysucou, Nižné Vane, mesic mowed and grazed meadow,  
alt. 567 m, 49°21'44.4"N 18°50'55.5"E, 6. X. 2017, MZ, PMZ180. –  
Krásno nad Kysucou, Vyšné Vane, mesic mowed and grazed meadow,  
alt. 706 m, 49°21'53.0"N 18°51'50.7"E, 6. X. 2017, MZ, PMZ188. – Nová  
Bystrica, Vychylovka-Chmúrovci, mesic mowed meadow, alt. 678 m,  
49°22'16.5"N 19°04'06.7"E, 13. X. 2017, MZ, PMZ234. – Nová Bystrica,  
Harvelka, mesic mowed and grazed meadow, alt. 807 m, 49°21'28.0"N  
19°08'49.4"E, 13. X. 2017, MZ, PMZ212. – Horný Vadičov, Ľadonhora,  
overgrown meadow with *Nardus stricta* and thermophilic plants, alt. 573  
m, 49°17'00.0"N 18°53'34.2"E, 14. X. 2017, MZ, PMZ307, PHFF10066.  
– Radol'a, Pod Mliečové, overgrown meadow over the village, alt.  
435 m, 49°17'31.00"N 18°48'04.00"E, 14. X. 2017, MZ, PMZ319. –  
Snežnica, between Malý and Veľký Vreť, overgrown meadow, alt. 558  
m, 49°16'18.1"N 18°47'02.2"E, 20. X. 2017, MZ, PMZ331. – Snežnica,  
over the football pitch, overgrown meadow with *Juniperus communis*,  
alt. 456 m, 49°16'03.9"N 18°47'15.2"E, 20. X. 2017, MZ, PMZ336. –  
Nová Bystrica, Riečnica-Michalcovci, mesic mowed meadow, alt. 840  
m, 49°18'38.8"N 18°59'29.9"E, 26. X. 2017, MZ, PMZ365. – Stará  
Bystrica, Sobol'ovci, mesic mowed meadow near the cottage, alt.  
575 m, 49°21'36.3"N 18°58'25.4"E, 31. X. 2017, MZ, FF, PMZ362.  
**Kysucké Beskydy Mts.**, Oščadnica, Príslop, mesic mowed meadow,  
alt. 825 m, 49°25'18.3"N 18°55'45.1"E, 22. IX. 2017, MZ, PMZ458. –  
Oščadnica, Beskydok, mesic mowed meadow, alt. 701 m, 49°27'49.0"N  
18°52'43.4"E, 2. X. 2017, MZ, ZV, PMZ159. – Nová Bystrica, Vychylovka,  
mesic mowed meadow, alt. 763 m, 49°22'49.2"N 19°02'57.3"E, 13. X.  
2017, MZ, PMZ227. – Čierne, Chovancovci, mesic mowed meadow,

alt. 623 m, 49°29'20.0"N 18°50'59.2"E, 18. X. 2017, MZ, PMZ288. **Turzovská vrchovina Mts.**, Korňa, Mlicherovci, mesic mowed meadow, alt. 679 m, 49°24'1.82"N 18°32'19.97"E, 20. IX. 2017, FF, PHFF10023. – Korňa, Študentovci, mesic mowed meadow, alt. 653 m, 49°24'14.66"N 18°33'8.08"E, 20. IX. 2017, FF, PHFF10024. – Klokočov, Sučikovci, mesic mowed meadow, alt. 707 m, 49°28'29.72"N 18°32'38.61"E, 7. X. 2017, FF, PHFF10039. – Korňa, Žilovci, mesic irregularly mowed meadow, alt. 586 m, 49°24'20.40"N 18°34'3.80"E, 8. X. 2017, FF, PHFF10041. – Raková, Korcháň-Dolina, mesic mowed meadow, alt. 644 m, 49°29'20.4"N 18°41'35.1"E, 2. XI. 2017, MZ, PMZ398. – Raková, Korcháň-Kopčisko, mesic mowed meadow, alt. 604 m, 49°29'15.3"N 18°41'33.7"E, 2. XI. 2017, MZ, PMZ403. – Raková, Korcháň-Kúkoľanka, mesic mowed meadow, alt. 597 m, 49°29'08.9"N 18°41'53.7"E, 2. XI. 2017, MZ, PMZ407. – Vysoká nad Kysucou, Vyšný Kelčov-Hluchanka, mesic mowed meadow, alt. 771 m, 49°24'46.4"N 18°28'46.0"E, 10. XI. 2017, MZ, PMZ451. – Korňa, Boháčovci, mesic mowed meadow, alt. 723 m, 49°26'35.46"N 18°31'52.00"E, 19. X. 2018, FF, PHFF10357. – Korňa, u Škorníka, mesic mowed meadow, sometimes cow-grazed, alt. 853 m, 49°26'47.91"N 18°30'59.83"E, 29. X. 2018, FF, PHFF10379. – Korňa, u Staníka, mesic mowed meadow, sometimes cow-grazed, alt. 829 m, 49°26'49.84"N 18°31'23.31"E, 29. X. 2018, FF, PHFF10381. – Korňa, u Hrušky, mesic mowed meadow, sometimes cow-grazed, alt. 828 m, 49°26'54.35"N 18°31'30.70"E, 29. X. 2018, FF, PHFF10383.

### ***Gliophorus psittacinus*** (Schaeff.) Herink

A species with small to medium-sized basidiomata; green, orange, yellow or pinkish, viscid cap and stem. Generally, it is a widely distributed species in Europe. Common in Europe, except central Europe and Netherlands (Boertmann 2010) and also very common in our study area.

**Jablunkovské medzihorie Mts.**, Skalité, Za Riekami, mesic mowed meadow, alt. 686 m, 49°30'53.7"N 18°54'32.4"E, 28. IX. 2017, MZ, PMZ149. – Skalité, Poľana, sheep-grazed meadow, alt. 756 m, 49°30'26.96"N 18°55'52.47"E, 30. X. 2018, FF, PHFF10399. **Javorníky Mts.**, Makov, Holákovci, mesic mowed meadow, alt. 722 m, 49°20'34.34"N 18°27'29.12"E, 23. IX. 2017, FF, PHFF10030. – Krásno nad Kysucou, Zákysučie, extensive pasture, heathland, alt. 533 m, 49°22'45.5"N 18°49'18.7"E, 28. IX. 2017, MZ, PMZ220. – Štiavnik, Tancová, mesic mowed meadow, alt. 480 m, 49°13'57.04"N 18°29'7.49"E, 1. X. 2017, FF, PHFF10035. – Bytča-Pšurnovice, Tomborov Salaš, cow-grazed pasture,

alt. 390 m, 49°14'3.87"N 18°31'59.63"E, 1. X. 2017, FF, PHFF10036. – Zákopčie, Petránky, mesic mowed meadow, alt. 848 m, 49°22'38.5"N 18°43'53.6"E, 5. X. 2017, MZ, PMZ151. – Zákopčie, Červenkovci, mesic mowed meadow, alt. 738 m, 49°23'19.8"N 18°44'16.3"E, 5. X. 2017, MZ, PMZ250. – Kolárovice, under the Človiečik hill, mesic mowed meadow, sometimes cow-grazed, alt. 494 m, 49°16'44.66"N 18°31'14.52"E, 23. X. 2017, FF, PHFF10102. – Petrovice, Škápová, mesic mowed meadow, alt. 416 m, 49°15'4.51"N 18°31'52.49"E, 26. X. 2017, FF, PHFF10113. – Veľké Rovné, Kýčery, mesic mowed meadow, alt. 672 m, 49°20'49.81"N 18°33'40.62"E, 27. X. 2017, FF, PHFF10119. – Štiavnik, u Rogov, cow-grazed meadow, alt. 644 m, 49°16'54.70"N 18°25'20.80"E, 28. X. 2017, FF, PHFF10136. – Štiavnik, Baránkovci, cow-grazed meadow, alt. 633 m, 49°17'5.98"N 18°25'47.43"E, 28. X. 2017, FF, PHFF10146. – Petrovice, near ski slope, mesic mowed meadow, alt. 437 m, 49°15'12.33"N 18°31'20.74"E, 29. X. 2017, FF, PHFF10151. – Petrovice, Setechov, sheep-grazed meadow, alt. 492 m, 49°16'3.19"N 18°30'1.29"E, 30. X. 2017, FF, PHFF10163. – Petrovice, Škápová 2, mesic mowed meadow, alt. 424 m, 49°15'2.45"N 18°31'41.58"E, 31. X. 2017, FF, PHFF10189. – Petrovice, under the hill Medvedie, mesic overgrown meadow near cottage, alt. 413 m, 49°15'47.81"N 18°31'3.12"E, 3. XI. 2017, FF, PHFF10207. – Petrovice, Benková, mesic mowed meadow, alt. 495 m, 49°15'59.56"N 18°30'44.49"E, 4. XI. 2017, FF, PHFF10221. – Petrovice, Prielohy, cow-grazed meadow, alt. 424 m, 49°16'10.84"N 18°30'48.77"E, 4. XI. 2017, FF, PHFF10233. – Veľké Rovné, Mlynné, old grown orchard, alt. 491 m, 49°16'52.26"N 18°33'43.78"E, 12. XI. 2017, FF, PHFF10257. – Dlhé Pole, Stolečné, mesic mowed meadow near cottage situated in forest, alt. 523 m, 49°20'19.41"N 18°38'35.50"E, 17. XI. 2017, FF, PHFF10259. – Petrovice, Petrovská, mesic mowed meadow, alt. 478 m, 49°17'34.11"N 18°29'44.07"E, 18. XI. 2017, FF, PHFF10260. – Veľké Rovné, Melocík, cow-grazed meadow, alt. 798 m, 49°20'24.86"N 18°30'49.83"E, 21. X. 2018, FF, PHFF10369. – Makov, Butorky, overgrown meadow, alt. 1002 m, 49°19'30.41"N 18°23'25.31"E, 8. XI. 2018, FF, PHFF10425. – Kolárovice, Čerenka, old overgrown pasture, nowadays mesic mowed meadow, sometimes sheep-grazed, alt. 810 m, 49°19'50.28"N 18°29'25.47"E, 8. XI. 2018, FF, PHFF10429. – Hvozdnica, Višňové, mesic mowed meadow, alt. 473 m, 49°12'42.81"N 18°27'48.85"E, 17. XI. 2018, FF, PHFF10446. **Kysucká vrchovina Mts.**, Stará Bystrica, Sobol'ovci, mesic mowed meadow over the cottage, alt. 590 m, 49°21'35.5"N 18°58'23.2"E, 21. IX. 2017, MZ, PMZ454. – Povina, Tatarovci, mesic mowed meadow, alt. 624 m, 49°18'13.9"N 18°51'26.3"E,

26. IX. 2017, MZ, PMZ439. – Horný Vadičov, Bizov vrch, mesic mowed meadow, alt. 630 m, 49°16'19.6"N 18°53'20.1"E, 27. IX. 2017, MZ, PMZ169. – Horný Vadičov, Ladonhora, extensive pasture with *Nardus stricta* and *Juniperus communis*, alt. 518 m, 49°17'14.0"N 18°53'29.8"E, 27. IX. 2017, MZ, PMZ167, PHFF10071. – Krásno nad Kysucou, Nižné Vane, mesic mowed and grazed meadow, alt. 539 m, 49°21'43.6"N 18°50'49.7"E, 6. X. 2017, MZ, PMZ179. – Krásno nad Kysucou, Vyšné Vane, mesic mowed and grazed meadow, alt. 706 m, 49°21'53.0"N 18°51'50.7"E, 6. X. 2017, MZ, PMZ186. – Snežnica, over the village, mesic mowed meadow, alt. 457 m, 49°15'59.1"N 18°47'42.1"E, 11. X. 2017, MZ, PMZ297. – Nová Bystrica, Vychylovka-Chmúrovci, mesic mowed meadow, alt. 678 m, 49°22'16.5"N 19°04'06.7"E, 13. X. 2017, MZ, PMZ232. – Nová Bystrica, Harvelka, mesic mowed and grazed meadow, alt. 807 m, 49°21'28.0"N 19°08'49.4"E, 13. X. 2017, MZ, PMZ215. – Radoľa, Pod Mliečové, overgrown meadow over the village, alt. 435 m, 49°17'31.0"N 18°48'04.0"E, 14. X. 2017, MZ, PMZ315. – Radoľa, Prašivá, mesic pasture, alt. 485 m, 49°17'17.1"N 18°49'01.0"E, 14. X. 2017, MZ, PMZ300. – Kysucké Nové Mesto, Budatínska Lehota, sheep grazed meadow, alt. 379 m, 49°17'41.2"N 18°47'46.1"E, 14. X. 2017, MZ, PMZ277. – Radoľa, meadow in fruit grove, alt. 382 m, 49°17'41.8"N 18°47'38.4"E, 14. X. 2017, MZ, PMZ271. – Snežnica, over the football pitch, overgrown meadow, alt. 456 m, 49°16'03.9"N 18°47'15.2"E, 20. X. 2017, MZ, PMZ334. – Snežnica, between Malý and Veľký Vreť, overgrown meadow, alt. 558 m, 49°16'18.1"N 18°47'02.2"E, 20. X. 2017, MZ, PMZ325. – Brodno, Kosteliská, mesic mowed meadow, alt. 388 m, 49°15'58.9"N 18°45'16.8"E, 20. X. 2017, MZ, PMZ343. – Brodno, Brodnianka, strongly overgrown meadow over the railway, alt. 336 m, 49°15'58.5"N 18°45'12.5"E, 20. X. 2017, MZ, PMZ346. – Brodno, Brodnianka, recultivated meadow between Brodnianka and Brodenec, alt. 488 m, 49°15'41.4"N 18°46'20.2"E, 20. X. 2017, MZ, PMZ349. – Nová Bystrica, Riečnica-Michalcovci, mesic mowed meadow, alt. 840 m, 49°18'38.8"N 18°59'29.9"E, 26. X. 2017, MZ, ZV, PMZ367. – Nová Bystrica, Riečnica-Kováčka, mesic mowed meadow, alt. 827 m, 49°18'13.0"N 19°04'42.1"E, 26. X. 2017, MZ, PMZ383. **Kysucké Beskydy Mts.**, Nová Bystrica, Vychylovka, mesic mowed meadow, alt. 803 m, 49°22'45.1"N 19°03'10.0"E, 13. X. 2017, MZ, PMZ226. – Oščadnica, Príslop, mesic mowed meadow, alt. 817 m, 49°25'20.73"N 18°55'36.22"E, 15. X. 2017, FF, PHFF10084. – Čierne, Chovancovci, mesic mowed meadow, alt. 623 m, 49°29'20.0"N 18°50'59.2"E, 18. X. 2017, MZ, PMZ286. **Turzovská vrchovina Mts.**, Korňa, Mlicherovci,

mesic mowed meadow, alt. 674 m, 49°24'2.43"N 18°32'20.02"E, 20. IX. 2017, FF, PHFF10022. – Klokočov, Sučíkovci, mesic mowed meadow, alt. 700 m, 49°28'30.78"N 18°32'39.85"E, 7. X. 2017, FF, PHFF10037. – Korňa, u Šporikov, sheep-grazed meadow, alt. 664 m, 49°25'21.84"N 18°34'46.50"E, 8. X. 2017, FF, PHFF10050. – Čadca, Siheľník, mesic mowed fertilised meadow, alt. 418 m, 49°26'27.98"N 18°45'44.35"E, 14. X. 2017, FF, PHFF10074. – Vysoká nad Kysucou, Vyšný Kelčov, mesic mowed meadow, alt. 720 m, 49°24'42.7"N 18°29'11.2"E, 18. X. 2017, MZ, ZV, PMZ285. – Raková, Korcháň – Kúkoľanka, mesic mowed meadow, alt. 597 m, 49°29'08.9"N 18°41'53.7"E, 2. XI. 2017, MZ, PMZ409. – Vysoká nad Kysucou, Vyšný Kelčov-Hluchanka, mesic mowed meadow, alt. 771 m, 49°24'46.4"N 18°28'46.0"E, 10. XI. 2017, MZ, PMZ415. – Korňa, Boháčovci, mesic mowed meadow, alt. 708 m, 49°26'33.38"N 18°31'47.81"E, 19. X. 2018, FF, PHFF10361.

### ***Hygrocybe punicea* (Fr.) P. Kumm.**

A species with a medium to large basidiomata, dark red lubricous to viscid cap and coarsely fibrillose stem. It grows only in the meadows with highly conservation value (McHugh et al. 2001), often together with many other *Hygrocybe* species. It is very common species in Kysuce region. Due to rarity, it was classified as VU (vulnerable) species by IUCN (Mešič 2019). Common in Wales (UK), but rare in other European countries (Boertmann 2010).

**Javorníky Mts.**, Krásno nad Kysucou, Zákysučie, extensive pasture, heathland, alt. 533 m, 49°22'45.5"N 18°49'18.7"E, 28. IX. 2017, MZ, PMZ132. – Zákopčie, Červenkovci, mesic mowed meadow with *Nardus stricta*, alt. 695 m, 49°23'26.7"N 18°44'11.9"E, 5. X. 2017, MZ, PMZ245. – Zákopčie, Petránky, mesic meadow with *Nardus stricta*, without management, alt. 818 m, 49°22'16.4"N 18°43'53.9"E, 5. X. 2017, MZ, PMZ262. – Veľké Rovné, Kýčery, mesic mowed meadow, alt. 701 m, 49°20'59.97"N 18°33'51.47"E, 27. X. 2017, FF, PHFF10123. – Štiavnik, Baránkovci, cow-grazed meadow, alt. 645 m, 49°16'53.90"N 18°25'20.57"E, 28. X. 2017, FF, PHFF10137. – Makov, Butorky, overgrown meadow, alt. 999 m, 49°19'33.06"N 18°23'25.50"E, 8. XI. 2018, FF, PHFF10428. – Kolárovice, Čerenka, edge of the mesic mowed meadow, alt. 815 m, 49°19'49.83"N 18°29'25.98"E, 8. XI. 2018, FF, PHFF10430. – Hvozdnica, Višňové, mesic mowed meadow, alt. 491 m, 49°12'46.45"N 18°27'16.52"E, 17. XI. 2018, FF, PHFF10449. **Kysucká vrchovina Mts.**, Snežnica, over the village, mesic mowed meadow, alt. 457 m,



*Hygrocybe punicea*, Javorníky, Veľké Rovné – Kýčery, 29 October 2018, F. Fuljer (PHFF10123). Photo F. Fuljer.



*Hygrocybe quieta*, Kysucká vrchovina, Horný Vadičov – Ľadonhora, 26 September 2017, M. Zajac (PMZ310/PHFF10060). Photo M. Zajac.

49°15'59.1"N 18°47'42.1"E, 11. X. 2017, MZ, PMZ294. – Nová Bystrica, Harvelka, mesic mowed and grazed meadow, alt. 768 m, 49°21'20.6"N 19°08'07.0"E, 13. X. 2017, MZ, PMZ221. – Horný Vadičov, Ľadonhora, mesic mowed meadow with *Nardus stricta* and *Juniperus communis*, alt. 634 m, 49°17'18.2"N 18°53'18.8"E, 14. X. 2017, MZ, PMZ264, PHFF10062. **Kysucké Beskydy Mts.**, Nová Bystrica, Veľký Potok, mesic mowed meadow, alt. 675 m, 49°22'53.6"N 18°59'20.5"E, 13. X. 2017, MZ, PMZ237. – Oščadnica, Príslop, mesic mowed meadow, alt. 823 m, 49°25'19.26"N 18°55'37.61"E, 15. X. 2017, FF, PHFF10081. **Turzovská vrchovina Mts.**, Raková, Korcháň-Kopčisko, mesic mowed meadow, alt. 604 m, 49°29'15.3"N 18°41'33.7"E, 2. XI. 2017, MZ, PMZ404. – Vysoká nad Kysucou, Vyšný Kelčov-Hluchanka, mesic mowed meadow, alt. 771 m, 49°24'46.4"N 18°28'46.0"E, 10. XI. 2017, MZ, PMZ418.

***Hygrocybe quieta* (Kühner) Singer**

A medium-sized species, which is characterised by orange gills with salmon tinge, orangish or yellowish cap. The species also grew on meadows slightly fertilised in past. In Kysuce region and Javorníky Mts. it is a common species. Common in Wales and England (UK), but rare in other European countries (Boertmann 2010).

**Javorníky Mts.**, Bytča-Pšurnovice, Tomborov Salaš, cow-grazed meadow, alt. 407 m, 49°14'6.93"N 18°32'6.77"E, 4. X. 2014, FF, PHFF10001. – Petrovice, near ski slope, mesic mowed meadow, alt. 396 m, 49°15'17.30"N 18°31'26.40"E, 29. X. 2017, FF, PHFF10157. **Kysucká vrchovina Mts.**, Horný Vadičov, Bizov vrch, mesic mowed meadow, alt. 630 m, 49°16'19.6"N 18°53'20.1"E, 27. IX. 2017, MZ, PMZ168. – Nová Bystrica, Harvelka, mesic mowed and grazed meadow, alt. 807 m, 49°21'28.0"N 19°08'49.4"E, 13. X. 2017, MZ, PMZ209. – Horný Vadičov, Ľadonhora, mesic mowed meadow, alt. 586 m, 49°16'56.5"N 18°53'33.9"E, 14. X. 2017, MZ, FF, PMZ310, PHFF10060. – Kysucké Nové Mesto, Budatínska Lehota, sheep-grazed pasture, alt. 379 m, 49°17'41.2"N 18°47'46.1"E, 14. X. 2017, MZ, PMZ311. – Snežnica, between Malý and Veľký Vretn, mesic mowed meadow, alt. 540 m, 49°16'20.7"N 18°47'07.6"E, 20. X. 2017, MZ, PMZ327. – Snežnica, Brodenec, mesic mowed meadow, alt. 492 m, 49°15'44.9"N 18°46'37.3"E, 20. X. 2017, MZ, PMZ329. – Snežnica, over the football pitch, overgrown meadow, alt. 456 m, 49°16'03.9"N 18°47'15.2"E, 20. X. 2017, MZ, PMZ333. – Brodno, Kosteliská, mesic mowed meadow, alt. 388 m, 49°15'58.9"N 18°45'16.8"E, 20. X. 2017, MZ, PMZ342. – Brodno,



***Gliophorus reginae***, Javorníky, Petrovice – Škápová, 23 October 2017, F. Fuljer (PHFF10108). Photo F. Fuljer.



***Hygrocybe reidii***, Kysucká vrchovina, Horný Vadičov – Ladonhora, 14 October 2017, F. Fuljer (PHFF10070). Photo F. Fuljer.

Brodnianka, strongly overgrown meadow over the railway, alt. 336 m, 49°15'58.5"N 18°45'12.5"E, 20. X. 2017, MZ, PMZ345.

***Gliophorus reginae*** Dentinger, A. M. Ainsw. & P. F. Cannon

It is a medium-sized species, characterised by pinkish basidiomata, campanulate, later applanate cap (sometimes with umbo), smooth, lubricous. Gills are narrowly adnate, free or broadly adnate. Stipe is paler, less lubricous as a cap, sometimes decompressed. All collections from Slovakia are only from Javorníky Mts. where is rare. In Europe it has been collected in United Kingdom (Winnall 2013), Spain (Fidalgo 2017), Denmark (Boertmann 2010), Czech Republic (Ševčíková & Mička 2019), France (Lefebvre 2001) and Belgium (Lenaerts 2015).

**Javorníky Mts.**, Petrovice, Škápová, mesic mowed meadow with thermophilic plants, alt. 454 m, 49°14'55.43"N 18°31'48.18"E, 26. XII. 2015, FF, PHFF10008. – Petrovice, Setechov, sheep-grazed meadow, alt. 489 m, 49°15'48.80"N 18°29'48.68"E, 30. X. 2017, FF, PHFF10181. – Petrovice, under the hill Medvedie, mesic mowed meadow near cottage, alt. 411 m, 49°15'47.76"N 18°31'3.43"E, 3. XI. 2017, FF, PHFF10206. – Petrovice, Benková, mesic mowed meadow, alt. 452 m, 49°16'2.67"N 18°30'52.96"E, 4. XI. 2017, FF, PHFF10230. – Bytča-Pšurnovice, Čebecké dlžiny, old overgrown pasture, alt. 448 m, 49°14'45.96"N 18°30'30.68"E, 11. XI. 2017, FF, PHFF10242. – Bytča-Pšurnovice, Tomborov Salaš, border of mesic mowed, cow-grazed meadow and old grown pasture, alt. 376 m, 49°14'0.97"N 18°32'1.53"E, 19. XI. 2017, FF, PHFF10261.

***Hygrocybe reidii*** Kühner

Small to medium-sized species, with dry, orange to orange-red cap, broadly adnate gills and very characteristic honey smell (Boertmann 2010). It is a common species in Kysuce region and Javorníky Mts. Common species in British Isles and Scandinavia, but rarer in southern European countries (Boertmann 2010).

**Javorníky Mts.**, Krásno nad Kysucou, Zákysučie, extensive pasture, heathland, alt. 533 m, 49°22'45.4"N 18°49'18.7"E, 28. IX. 2017, MZ, PMZ125. – Zákopčie, Červenkovci, mesic meadow with *Nardus stricta*, alt. 695 m, 49°23'26.7"N 18°44'11.9"E, 5. X. 2017, MZ, PMZ254. – Zákopčie, Petránky, mesic mowed meadow with *Nardus stricta*, without management, alt. 818 m, 49°22'16.4"N 18°43'53.9"E, 5. X. 2017, MZ, PMZ263. – Petrovice, Škápová 2, mesic mowed meadow, alt. 462 m,



***Hygrocybe russocoriacea***, Kysucká vrchovina, Snežnica – over the football pitch, 20 October 2017, M. Zajac (PMZ328). Photo M. Zajac.



***Hygrocybe splendidissima***, Kysucká vrchovina, Horný Vadičov – L'adonhora, 14 October 2017, M. Zajac & F. Fuljer (PHFF10068). Photo F. Fuljer.

49°14'56.90"N 18°31'36.23"E, 31. X. 2017, FF, PHFF10183. – Makov, Butorky, overgrown meadow, alt. 1000 m, 49°19'30.90"N 18°23'25.14"E, 8. XI. 2018, FF, PHFF10421. – Hvozdnica, Višňové, mesic mowed meadow, alt. 491 m, 49°12'46.45"N 18°27'16.52"E, 17. XI. 2018, FF, PHFF10450. **Kysucká vrchovina Mts.**, Nová Bystrica, Harvelka, mesic mowed and grazed meadow, alt. 768 m, 49°21'20.6"N 19°08'07.0"E, 13. X. 2017, MZ, PMZ222. – Horný Vadičov, L'adonhora, horse-grazed meadow, alt. 635 m, 49°17'18.63"N 18°53'18.53"E, 1. XI. 2018, FF, PHFF10408. **Kysucké Beskydy Mts.**, Nová Bystrica, Vychylovka-Svitková, mesic meadow with *Nardus stricta*, alt. 924 m, 49°24'20.2"N 19°06'10.1"E, 4. X. 2017, MZ, ZV, PMZ163. – Oščadnica, Príslop, mesic mowed meadow, alt. 816 m, 49°25'20.01"N 18°55'35.97"E, 15. X. 2017, FF, PHFF10082.

***Hygrocybe russocoriacea*** (Berk. & T. K. Mill.) P. D. Orton & Watling  
White to cream coloured, characterised by a typical smell which reminds Russian leather or cedar wood. It is very rare species in Kysuce region and Javorníky Mts. Common species in Scandinavia and British Isles, but rare in southern European countries (Boertmann 2010).

**Javorníky Mts.**, Krásno nad Kysucou, Zákysučie, extensive pasture, heathland with *Calluna vulgaris* and *Nardus stricta*, alt. 520 m, 49°22'46.3"N 18°49'19.8"E, 6. X. 2017, MZ, PMZ195. – Makov, Butorky, overgrown pasture, alt. 997 m, 49°19'32.78"N 18°23'25.03"E, 9. XI. 2018, FF, PHFF10436.

**Kysucká vrchovina Mts.**, Snežnica, over the football pitch, overgrown meadow with *Juniperus communis*, alt. 456 m, 49°16'03.9"N 18°47'15.2"E, 20. X. 2017, MZ, PMZ328. – Horný Vadičov, L'adonhora, horse-grazed meadow, alt. 637 m, 49°17'18.30"N 18°53'18.50"E, 9. XI. 2017, FF, PHFF10236.

***Hygrocybe splendidissima*** (P. D. Orton) M. M. Moser  
Medium sized to large species, dry, bright red or scarlet cap, often conical, later applanate, stem is compressed, dry and paler as a cap. Basidiomata have honey-smell (Boertmann 2010). Very rare species in Kysuce region and Javorníky Mts. Rare species in Europe (Boertmann 2010).

**Kysucká vrchovina Mts.**, Horný Vadičov, L'adonhora, mesic mowed and grazed meadow with *Juniperus communis* and *Nardus stricta*, alt.

634 m, 49°17'18.2"N 18°53'18.8"E, 14. X. 2017, MZ, FF, PMZ242, PHFF10068. **Turzovská vrchovina Mts.**, Raková, Korcháň-Kopčisko, mesic mowed meadow, alt. 604 m, 49°29'15.3"N 18°41'33.7"E, 2. XI. 2017, MZ, PMZ405. – Vysoká nad Kysucou, Vyšný Kelčov-Hluchanka, mesic mowed meadow, alt. 771 m, 49°24'46.4"N 18°28'46.0"E, 10. XI. 2017, MZ, PMZ421.

***Hygrocybe subpapillata* Kühner**

A species with small, reddish or orange basidiomata; lubricous, often papillate cap, dry stem and broadly adnate gills. It belongs to the rare species in Europe, but sometimes it is hard to identify it and it could also be often neglected (Boertmann 2010). It is very rare also in our study area. Rare and not well known species also should be overlooked (Boertmann 2010).

**Kysucká vrchovina Mts.**, Povina, Tatarovci, mesic mowed meadow, alt. 539 m, 49°18'08.4"N 18°51'52.5"E, 26. IX. 2017, MZ, PMZ426.

***Hygrocybe virginea* var. *fuscescens* (Bres.) Arnolds**

≡ *Cuphophyllus virgineus* var. *fuscescens* (Bres.) E. Campo

This variety differs from *Cuphophyllus virgineus* by brownish central spot on cap (Boertmann 2010). It is very rare taxon in our area.

**Kysucká vrchovina Mts.**, Snežnica, between Malý and Veľký Vreť, overgrown meadow, alt. 558m, 49°16'18.1"N 18°47'02.2"E, 20. X. 2017, MZ, PMZ324.

***Cuphophyllus virgineus* (Wulfen: Fr.) Kovalenko**

≡ *Hygrocybe virginea* (Wulfen) P. D. Orton & Watling

A species with small to medium-sized, white basidiomata; slightly lubricous cap and decurrent gills. This species is relatively tolerant to the change of natural conditions in the biotopes and it belongs to the most common species in Europe and also in our study area (Boertmann 2010).

**Jablunkovské medzihorie Mts.**, Skalité, Poľana, sheep-grazed meadow, alt. 759 m, 30. X. 2018, FF, PHFF10398. **Javorníky Mts.**, Ochodnica, Macaškovci, mesic mowed meadow, alt. 815 m, 49°22'35.3"N 18°44'04.1"E, 5. X. 2017, MZ, PMZ260. – Krásno nad Kysucou, Zákysučie, mesic mowed meadow, alt. 514 m, 49°22'46.1"N 18°49'23.2"E, 6. X. 2017, MZ, PMZ196. – Vysoká nad Kysucou, Vrchrieka, mesic mowed meadow,

alt. 794 m, 49°21'42.49"N 18°33'1.69"E, 8. X. 2017, FF, PHFF10045. – Bytča-Pšunovice, Tomborov Salaš, cow-grazed meadow, alt. 404 m, 49°14'6.12"N 18°32'5.12"E, 15. X. 2017, FF, PHFF10094. – Kolárovice, under the Človiečik hill, mesic mowed meadow, sometimes cow-grazed, alt. 497 m, 49°16'45.29"N 18°31'15.60"E, 23. X. 2017, FF, PHFF10100. – Petrovice, Škápová, mesic mowed meadow, alt. 435 m, 49°14'59.65"N 18°31'51.99"E, 23. X. 2017, FF, PHFF10106. – Veľké Rovné, Kýčery, mesic mowed meadow, alt. 651 m, 49°20'43.27"N 18°33'40.19"E, 27. X. 2017, FF, PHFF10117. – Štiavnik, u Rogov, cow-grazed meadow, alt. 639 m, 49°16'54.75"N 18°25'23.09"E, 28. X. 2017, FF, PHFF10131. – Štiavnik, Baránkovci, cow-grazed meadow, alt. 637 m, 49°17'5.46"N 18°25'46.62"E, 28. X. 2017, FF, PHFF10147. – Petrovice, near ski slope, mesic mowed meadow, alt. 429 m, 49°15'14.19"N 18°31'21.90"E, 29. X. 2017, FF, PHFF10150. – Petrovice, Setechov, sheep-grazed meadow, alt. 494 m, 49°16'2.83"N 18°30'0.42"E, 30. X. 2017, FF, PHFF10161. – Petrovice, under the hill Medvedie, mesic overgrown meadow near cottage, alt. 416 m, 49°15'47.82"N 18°31'2.73"E, 3. XI. 2017, FF, PHFF10208. – Petrovice, Benková 2, mesic mowed meadow, alt. 407 m, 49°16'4.54"N 18°31'3.16"E, 4. XI. 2017, FF, PHFF10217. – Petrovice, Benková, mesic mowed meadow, alt. 451 m, 49°16'4.32"N 18°30'52.87"E, 4. XI. 2017, FF, PHFF10218. – Petrovice, Prielohy, cow-grazed meadow, alt. 426 m, 49°16'10.88"N 18°30'47.84"E, 4. XI. 2017, FF, PHFF10232. – Veľké Rovné, behind farm building, cow-grazed meadow, alt. 480 m, 49°17'2.38"N 18°34'7.65"E, 12. XI. 2017, FF, PHFF10251. – Veľké Rovné, Mlynné, cow-grazed meadow, alt. 501 m, 49°16'55.13"N 18°33'46.95"E, 12. XI. 2017, FF, PHFF10255. – Zákopčie, Petránky, mesic mowed meadow, sometimes cow-grazed, alt. 829 m, 49°22'40.10"N 18°43'53.30"E, 4. X. 2018, FF, PHFF10320. – Kolárovice, Čerenka, old overgrown ski slope, nowadays mesic mowed meadow, sometimes sheep-grazed, alt. 800 m, 49°19'51.56"N 18°29'24.41"E, 7. X. 2018, FF, PHFF10335. – Makov, Holákovci, mesic mowed meadow, alt. 721 m, 49°20'34.80"N 18°27'30.29"E, 19. X. 2018, FF, PHFF10366. – Makov, Kopanice, strongly cow-grazed meadow, alt. 724 m, 49°21'15.16"N 18°25'13.14"E, 21. X. 2018, FF, PHFF10368. – Petrovice, Škápová 2, mesic mowed meadow, alt. 462 m, 49°14'56.75"N 18°31'37.48"E, 25. X. 2018, FF, PHFF10375. – Makov, Marček, overgrown meadow, alt. 1019 m, 49°19'44.32"N 18°23'36.43"E, 9. XI. 2018, FF, PHFF10435. – Makov, Butorky, overgrown meadow, alt. 996 m, 49°19'34.88"N 18°23'24.77"E, 9. XI. 2018, FF, PHFF10437. – Hvozdnica, Višňové, mesic mowed meadow, alt. 426 m, 49°12'54.59"N 18°28'15.16"E, 17. XI. 2018, FF, PHFF10444.

**Kysucká vrchovina Mts.**, Stará Bystrica, Hančinovci, mesic mowed meadow over the cottage, alt. 587 m, 49°21'43.0"N 18°58'30.1"E, 21. IX. 2017, MZ, PMZ456. – Povina, Tatárovci, mesic mowed meadow, alt. 603 m, 49°18'20.1"N 18°51'28.9"E, 26. IX. 2017, MZ, PMZ135. – Krásno nad Kysucou, Nižné Vane, mesic mowed and grazed meadow, alt. 539 m, 49°21'43.6"N 18°50'49.7"E, 6. X. 2017, MZ, PMZ177. – Krásno nad Kysucou, Vyšné Vane, mesic mowed and grazed meadow, alt. 706 m, 49°21'53.00"N 18°51'50.7"E, 6. X. 2017, MZ, PMZ187. – Krásno nad Kysucou, Hájnica, mesic mowed meadow, alt. 625 m, 49°22'59.7"N 18°51'17.7"E, 6. X. 2017, MZ, PMZ193. – Nová Bystrica, Vychylovka-Chmúrovci, mesic mowed meadow, alt. 678 m, 49°22'16.5"N 19°04'06.7"E, 13. X. 2017, MZ, PMZ233. – Radoľa, Dráhy, meadow over the village, alt. 425 m, 49°17'39.7"N 18°47'58.8"E, 14. X. 2017, MZ, PMZ269. – Radoľa, meadow in fruit grove, alt. 382 m, 49°17'41.8"N 18°47'38.4"E, 14. X. 2017, MZ, PMZ272. – Kysucké Nové Mesto, Budatínska Lehota, sheep-grazed meadows over the village, alt. 379 m, 49°17'41.2"N 18°47'46.1"E, 14. X. 2017, MZ, PMZ278. – Snežnica, over the village, mesic mowed meadow, alt. 457 m, 49°15'59.1"N 18°47'42.1"E, 11. X. 2017, MZ, PMZ291. – Horný Vadičov, Ladonhora, overgrown mesic meadows with *Juniperus commune* and thermophilic plants, alt. 573 m, 49°17'00.0"N 18°53'34.2"E, 14. X. 2017, MZ, PMZ302, PHFF10061. – Radoľa, Pod Mliečové, overgrown meadow over the village, alt. 435 m, 49°17'31.00"N 18°48'04.00"E, 14. X. 2017, MZ, PMZ316. – Snežnica, between Malý and Veľký Vretn, mesic mowed meadow, alt. 540 m, 49°16'20.7"N 18°47'07.6"E, 20. X. 2017, MZ, PMZ326. – Snežnica, over the football pitch, overgrown meadow, alt. 456 m, 49°16'03.9"N 18°47'15.2"E, 20. X. 2017, MZ, PMZ332. – Brodno, Kosteliská, mesic mowed meadow, alt. 388 m, 49°15'58.9"N 18°45'16.8"E, 20. X. 2017, MZ, PMZ341. – Brodno, Brodnianka, strongly overgrown meadow places over the railway, alt. 336 m, 49°15'58.5"N 18°45'12.5"E, 20. X. 2017, MZ, PMZ348. – Brodno, Brodnianka, recultivated meadow between Brodnianka and Brodenec, alt. 488 m, 49°15'41.4"N 18°46'20.2"E, 20. X. 2017, MZ, PMZ350. – Nová Bystrica, Riečnica-Kováčka, mesic mowed meadow, alt. 834 m, 49°18'08.0"N 19°04'38.1"E, 26. X. 2017, MZ, ZV, PMZ373. – Nová Bystrica, Riečnica-Michalcovci, mesic mowed meadow, alt. 847 m, 49°18'33.1"N 18°59'31.9"E, 26. X. 2017, MZ, ZV, PMZ379. – Stará Bystrica, Soboľovci, mesic mowed meadow near the cottage, alt. 575 m, 49°21'36.3"N 18°58'25.3"E, 31. X. 2017, MZ, FF, PMZ389. – Radoľa, Veľké Ostré, ski slope, alt. 572 m, 49°16'26.30"N 18°48'52.60"E, 1. XI. 2018, FF, PHFF10407. **Kysucké Beskydy Mts.**,

Nová Bystrica, Harvelka, mesic mowed and grazed meadow, alt. 807 m, 49°21'28.0"N 19°08'49.4"E, 13. X. 2017, MZ, PMZ219. – Nová Bystrica, Sajdov vrch, mesic mowed meadow, alt. 763 m, 49°22'49.2"N 19°02'57.3"E, 13. X. 2017, MZ, PMZ229. – Nová Bystrica, Veľký Potok, mesic mowed meadow, alt. 675 m, 49°22'53.6"N 18°59'20.5"E, 13. X. 2017, MZ, PMZ241. – Oščadnica, Príslop, mesic mowed meadow, alt. 820 m, 49°25'17.06"N 18°55'36.92"E, 15. X. 2017, FF, PHFF10076. – Čierne, Chovancovci, mesic mowed meadow, alt. 623 m, 49°29'20.0"N 18°50'59.2"E, 18. X. 2017, MZ, PMZ290. **Turzovská vrchovina Mts.**, Korňa, Žilovci, mesic irregularly mowed meadow, alt. 597 m, 49°24'24.27"N 18°34'0.72"E, 8. X. 2017, FF, PHFF10040. – Korňa, u Šporikov, sheep-grazed meadow, alt. 663 m, 49°25'23.02"N 18°34'39.26"E, 8. X. 2017, FF, PHFF10052. – Čadca, Siheľník, mesic mowed fertilised meadow, alt. 418 m, 49°26'27.01"N 18°45'54.71"E, 14. X. 2017, FF, PHFF10072. – Vysoká nad Kysucou, Vyšný Kelčov, mesic mowed meadow, alt. 720 m, 49°24'42.7"N 18°29'11.2"E, 18. X. 2017, MZ, ZV, PMZ281. – Klokočov, Hlavice, mesic mowed meadow, alt. 577 m, 49°27'49.0"N 18°35'17.9"E, 31. X. 2017, MZ, PMZ357. – Raková, Korcháň-Kopčisko, mesic mowed meadow, alt. 604 m, 49°29'15.3"N 18°41'33.7"E, 2. XI. 2017, MZ, PMZ401. – Raková, Korcháň-Dolina, mesic mowed meadow, alt. 644 m, 49°29'20.4"N 18°41'35.1"E, 2. XI. 2017, MZ, PMZ400. – Raková, Korcháň – Kúkoľanka, mesic mowed meadow, alt. 597 m, 49°29'08.9"N 18°41'53.7"E, 2. XI. 2017, MZ, PMZ408. – Vysoká nad Kysucou, Vyšný Kelčov-Hluchanka, mesic mowed meadow, alt. 771 m, 49°24'46.4"N 18°28'46.0"E, 10. XI. 2017, MZ, PMZ420. – Klokočov, Žiakovci, cow-grazed meadow, alt. 655 m, 49°27'29.24"N 18°38'58.06"E, 13. X. 2018, FF, PHFF10337. – Korňa, Boháčovci, mesic mowed meadow, alt. 709 m, 49°26'33.60"N 18°31'47.84"E, 19. X. 2018, FF, PHFF10360. – Korňa, u Hrušky, mesic mowed meadow, sometimes cow-grazed, alt. 827 m, 49°26'54.48"N 18°31'32.89"E, 29. X. 2018, FF, PHFF10384.

### Discussion

We collected 33 taxa of *Hygrocybe* s. lat. during this research, including 8 species (*Cuphophyllus fornicatus*, *Gliophorus reginae*, *Hygrocybe constrictospora*, *H. mucronella*, *H. ovina*, *H. quieta*, *H. russocoriacea* and *H. splendidissima*) and 2 varieties (*Hygrocybe pratensis* var. *pallida* and *H. virginea* var. *fuscescens*) not recorded in previous research (Zajac & Zajacová 2013, Zajac et al. 2016). But 8 species known from the previous research were not recollected (*Hygrocybe aurantiosplendens*, *H. glutinipes* var. *rubra*, *H. helobia*, *H. chlorophana* var. *aurantiaca*, *H.*

*nitrate*, *H. phaeococcinea*, *H. spadicea*, *H. turunda*). Totaly 40 *Hygrocybe* s. lat. species have been recorded in the study area (recent and past researches). The species richest localities (Table II.) were Skalité, Poľana (total number of 18 taxa); Horný Vadičov, Ladonhora (17); Nová Bystrica, Harvelka (15); Zákopčie, Petránky (15) and Vysoká nad Kysucou, Vrchrieka (15). These grasslands are mowed or extensively pastured for decades, without ploughing or manuring. New localities (Table III.) of very rare species (*Hygrocybe constrictospora* – 2 localities, *Hygrocybe intermedia* – 1, *Hygrocybe mucronella* – 3, *Hygrocybe ovina* – 1, *Hygrocybe russocoriacea* – 4, *Hygrocybe splendidissima* – 3, *Hygrocybe subpapillata* – 2) and rare species (*Cuphophyllus flavipes* – 2, *Cuphophyllus fornicatus* – 5, *Gliophorus reginae* – 6, *Hygrocybe miniata* – 4) were added. The most common species (*Hygrocybe virginea* – 64 localities, *Gliophorus psittacinus* – 57, *Hygrocybe chlorophana* – 47, *Cuphophyllus pratensis* – 46) occurring also on the fertilised meadows, strongly grazed meadows, slightly recultivated grasslands, etc. (associated with *Trifolium repens*, *Dactylis glomerata*, or *Leontodon autumnalis*). It is highly recommended to maintain “friendly” management of „waxcap grasslands“ to maintain the diversity of rare fungi. Such management should be focused on ecological farming, when productivity is not the primary need and is less important than the protection of biotopes (Ružicková et al. 2011).

**Table II.** The *Hygrocybe* s. lat. species at the richest localities in study area.

| Locality                      | Years of recording |           |           | Number of visits (2012-2018) |
|-------------------------------|--------------------|-----------|-----------|------------------------------|
|                               | 2012-2014          | 2014-2018 | 2012-2018 |                              |
| Skalité, Poľana               | 15                 | 10        | 18        | 3                            |
| Horný Vadičov, Ladonhora      | 0                  | 17        | 17        | 4                            |
| Nová Bystrica, Harvelka       | 0                  | 15        | 15        | 1                            |
| Zákopčie, Petránky            | 4                  | 14        | 15        | 4                            |
| Vysoká nad Kysucou, Vrchrieka | 13                 | 7         | 15        | 4                            |
| Povina, Tatarovci             | 0                  | 14        | 14        | 2                            |
| Oščadnica, Príslop            | 0                  | 14        | 14        | 4                            |
| Krásno nad Kysucou, Zákysučie | 0                  | 13        | 13        | 3                            |

Although *Hygrocybe acutoconica* belongs to very rare species and *Hygrocybe pratensis* var. *pallida* to rare species in Kysuce region and

Javorníky mountains, we must admit, that these species could be neglected and the main reason, why we found this species only a few times is, that both species fructificate much earlier than other CHEG species (from July to September). *Hygrocybe virginea* var. *fuscescens* belongs to very rare species, because almost all meadows and grassland in the researched area were acidic, only a few meadows were calcareous. The locality of *Hygrocybe spadicea* Čadca, Sihelník, total number of 16 species recorded in 2013 (Zajac et al. 2016) was completely fertilised in 2016, in 2017 only 3 species occurred on this meadow (on parts which were not so much fertilised).

**Table III.** The number of collections of *Hygrocybe* s. lat. species recorded during our recent and previous research.

| Taxon                                               | Number of localities 2014-2018 | Number of localities 2008-2012, 2013-2014 | Taxon                                            | Number of localities 2014-2018 | Number of localities 2008-2012, 2013-2014 |
|-----------------------------------------------------|--------------------------------|-------------------------------------------|--------------------------------------------------|--------------------------------|-------------------------------------------|
| <i>Hygrocybe acutoconica</i>                        | 3                              | 4                                         | <i>Gliophorus laetus</i>                         | 10                             | 11                                        |
| <i>Porpolomopsis calyptriformis</i>                 | 18                             | 26                                        | <i>Hygrocybe miniata</i>                         | 4                              | 6                                         |
| <i>Hygrocybe cantharellus</i>                       | 16                             | 33                                        | <i>Hygrocybe mucronella</i>                      | 3                              | 3                                         |
| <i>Hygrocybe ceracea</i>                            | 23                             | 33                                        | <i>Hygrocybe nitrate</i>                         | 0                              | 1                                         |
| <i>Hygrocybe citrinovirens</i>                      | 12                             | 24                                        | <i>Hygrocybe ovina</i>                           | 1                              | 1                                         |
| <i>Hygrocybe coccinea</i>                           | 29                             | 40                                        | <i>Hygrocybe phaeococcinea</i>                   | 0                              | 2                                         |
| <i>Hygrocybe coccineocrenata</i>                    | 7                              | 12                                        | <i>Hygrocybe pratensis</i> var. <i>pallida</i>   | 6                              | 6                                         |
| <i>Hygrocybe conica</i>                             | 25                             | 40                                        | <i>Cuphophyllus pratensis</i>                    | 46                             | 62                                        |
| <i>Hygrocybe constrictospora</i>                    | 2                              | 2                                         | <i>Gliophorus psittacinus</i>                    | 57                             | 69                                        |
| <i>Cuphophyllus flavipes</i>                        | 2                              | 7                                         | <i>Hygrocybe punicea</i>                         | 15                             | 21                                        |
| <i>Cuphophyllus fornicatus</i>                      | 4                              | 4                                         | <i>Hygrocybe quieta</i>                          | 11                             | 11                                        |
| <i>Hygrocybe glutinipes</i> var. <i>rubra</i>       | 0                              | 2                                         | <i>Gliophorus reginae</i>                        | 6                              | 6                                         |
| <i>Hygrocybe glutinipes</i>                         | 4                              | 12                                        | <i>Hygrocybe reidii</i>                          | 10                             | 11                                        |
| <i>Hygrocybe helobia</i>                            | 0                              | 1                                         | <i>Hygrocybe russocoriacea</i>                   | 4                              | 4                                         |
| <i>Hygrocybe chlorophana</i> var. <i>aurantiaca</i> | 0                              | 1                                         | <i>Hygrocybe spadicea</i>                        | 0                              | 1                                         |
| <i>Hygrocybe chlorophana</i>                        | 47                             | 69                                        | <i>Hygrocybe splendidissima</i>                  | 3                              | 3                                         |
| <i>Hygrocybe ingrata</i>                            | 4                              | 12                                        | <i>Hygrocybe subpapillata</i>                    | 1                              | 2                                         |
| <i>Hygrocybe insipida</i>                           | 27                             | 38                                        | <i>Hygrocybe turunda</i>                         | 0                              | 1                                         |
| <i>Hygrocybe intermedia</i>                         | 1                              | 2                                         | <i>Hygrocybe virginea</i> var. <i>fuscescens</i> | 1                              | 1                                         |
| <i>Gliophorus irrigatus</i>                         | 30                             | 41                                        | <i>Cuphophyllus virgineus</i>                    | 64                             | 81                                        |

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**PERROTIA FLAMMEA (HELOTIALES) IN SLOVAKIA**Adam Polhorský<sup>1</sup> & Ján Červenka<sup>2</sup><sup>1</sup>Pezinská 14, 903 01 Senec, Slovakia; polhorsky.adam@gmail.com<sup>2</sup>Starhradská 6, 851 05 Bratislava, Slovakia; jancervenka.mail@gmail.com

Polhorský, A. & Červenka, J. 2020. *Perrotia flammea* (Helotiales) in Slovakia. *Catathelasma* 20: 57–66.

*Perrotia flammea* is a colourful member of *Lachnaceae* (Helotiales, Ascomycetes). Despite its characteristic appearance, the last known collection from Slovakia was made at the beginning of the 20<sup>th</sup> century. In 2018–2020 several new collections have been found. Detailed description of these specimens follows the standards of vital taxonomy. Figures illustrating its typical xeric habitat, macro- and microscopic characters are presented.

Polhorský, A. & Červenka, J. 2020. *Perrotia flammea* (Helotiales) na Slovensku. *Catathelasma* 20: 57–66.

*Perrotia flammea* je sýto sfarbeným zástupcom čeľade *Lachnaceae* (Helotiales, Ascomycetes). Napriek jej charakteristickému vzhľadu je posledný zber zo Slovenska známy zo začiatku 20. storočia. V rokoch 2018–2020 bola opäť nájdená na niekoľkých lokalitách. Podrobný opis týchto vzoriek bol pripravený podľa štandardov vitálnej taxonómie. Sú prezentované obrázky znázorňujúce jej typické suchomilné prostredie, makro- a mikroskopické znaky.

**Key words:** fungi, Slovakia, Kmeť, new record, Štiavnické vrchy Mts.

**Introduction**

The genus *Perrotia* was established by Boudier (1901) to house an ascomycete originally described in 1805 as *Peziza flammea* Alb. & Schwein. Its characters seemed to warrant a placement in a genus of its own (Delivorias et al. 2011). The genus contains 21 species, including the latest published *Perrotia microspora*, described from New Zealand (Verkley 2004). The family *Hyaloscyphaceae* was subdivided and the genus was included into the newly proposed family *Lachnaceae* (Raitviir 2004). *Perrotia* is characterized by sessile to short-stipitate apothecia, thick-walled hairs with incrustated to granulate walls, asci with non-amyloid apex, variously shaped, aseptate to multiseptate spores. Species of this genus occur mostly on woody substrata, very rarely on gramineous plants and leaves of dicotyledons (Zhuang & Yu 2001).

According to collections of the Museum of Natural Sciences in Bratislava (BRA) *Perrotia flammea* was first recorded in Slovakia by Andrej Kmet' who collected it thirteen times in several locations (1887–1902). In 1888 it was also collected by Viktor Greschik in the vicinity of Levoča town. As far as we know, the last known material from 20<sup>th</sup> century comes from May 1912. It was collected by Johann Andreas Bäumler on Kamzík [Gemsenberg] hill above Bratislava. The collection is deposited in the Mycological Herbarium of the Phytopathological Research Station of the Tartu University (EAA) in Estonia (Elurikkus 2020). In March 2018 this interesting discomycete was found by Mikuláš Lazor in Eastern Slovakia. Recently senior author collected this fungus at three other sites.

The species occurs in several countries in the North America, Europe, the North Africa and in the Asian part of Turkey and Russia (Uzun et al. 2015, GBIF 2020).

#### Material and methods

Nikon Eclipse Ni-U microscope applying DIC and Nikon DS-Ri2 microscope camera were used for microphotography and Nikon D7000 with Sigma 150 mm f/2.8 APO DG HSM Macro and reverse mounted Sigma 50 mm f/2.8 DG Macro EX for macrophotography. Median sections of apothecia were done free-hand. The apothecia were examined in the fresh or rehydrated, living state in tap water. The description is based on living specimens following the method of vital taxonomy (Baral 1992). Minimum 20 measurements were made for asci and ascospores and 10 for other characters. The measurements are noted as (min)avg-sd – avg+sd(max), where min (max) represents absolute minimal (maximal) value, avg – arithmetic mean, sd – standard deviation. KOH was added for measurement of dead elements. The iodine reaction was tested with Lugol's solution. Studied material is deposited in the Museum of Natural Sciences in Bratislava (BRA). Abbreviations: IKI = Lugol's solution (≈1% I<sub>2</sub>, 3% KI, aqueous), KOH = potassium hydroxide, LBs = lipid bodies, VBs = refractive vacuolar bodies, \* = living state, † = dead state, [x] = number of collections examined. OCL = oil (lipid) content index.

#### Results

*Perrotia flammea* (Alb. & Schwein.) Boud., *Bull. Soc. mycol. Fr.* 17: 24 (1901)

≡ *Peziza flammea* Alb. & Schwein., *Consp. fung.* (Leipzig): 319 (1805)

= *Lachnella rhoina* Earle, in Greene, *Pl. baker.* 2(1): 6 (1901)

= *Dasyscyphus allantospora* Earle [as *Dasyscypha*], in Greene, *Pl. baker.* 2(1): 5 (1901)

Apothecia (Figs. 1, 2a) fresh or rehydrated 0.4–1.7 mm in diam., receptacle up to 0.3 mm thick, deeply cupulate when young, finally flat, ± round to sometimes elongated by mutual pressure, non-gelatinous, scattered to densely gregarious, sessile; hymenium light yellow, ochraceous to yellow-orange, margin distinct, strongly protruding, densely covered with orange-red flexuous hairs; base black, lacking hairs, slightly pruinose. Asci (Figs. 2b, e, g) \*105–130 × 12.5–14 µm [2], †75–90 × 8.2–10.5 µm [2], cylindrical, 8-spored, spores biseriate or irregularly clumped at apex by turgor, † biseriate, basally subbiseriate, pars sporifera \*30–43 µm long; apex \*/† hemispherical, \*thin-walled [2], without dome, apical walls †0.5–0.9 µm thick, lateral walls †0.6–1.2 µm thick [1], IKI– (with or without KOH-pretreatment); base arising from croziers [2]. Ascospores (Fig. 2d) \*(12.4–)13.2–17.5(–22) × (2.4–)3.5–4(–6) µm [2], †11.4–16 × 2.2–4 µm [2], mostly homopolar, allantoid, containing few minute LBs, OCI 0–1 [2], filled with non-refractive VBs, 0–septate, without sheath, without glycogen bodies; with one nucleus of 2.2–2.9 µm per cell, nucleolus 0.7–1.2 µm in diam., postmature spores 0–1-septate, germination or formation of conidia not observed. Paraphyses (Fig. 2c) cylindric-filiform, terminal cell \*2–2.5 µm, †1–1.8 wide [1], tapering, uninflated, loosely encrusted with yellowish granules, without refractive VBs, with low amount of small LBs, not branching, sometimes basally anastomosing. Subhymenium well developed, composed of densely packed ± isodiametric cells, 3–6 µm in diam. Medullary excipulum 40–50 µm thick in median section, of somewhat loose, non-gelatinized *textura intricata*, distinctly delimited from ectal excipulum, cells \*1.5–3.2 µm thick [1]. Ectal excipulum composed of two layers, inner layer 40–110 µm thick, strongly gelatinized *textura oblita* (Fig. 2i), with oxalate crystals (Fig. 2h), gel strongly staining deeply blue in KOH+IKI (Fig. 2k); cells \*/†1–2.5 µm in diam., hyaline, basally brownish; outer layer up to 45 µm thick, slightly or non-gelatinized, dark brown *textura angularis-globulosa*, with oxalate crystals, cells \*/†3–4.5 µm in diam. [1]. Hairs up to 250 µm long, 3–8 µm broad, cylindrical,

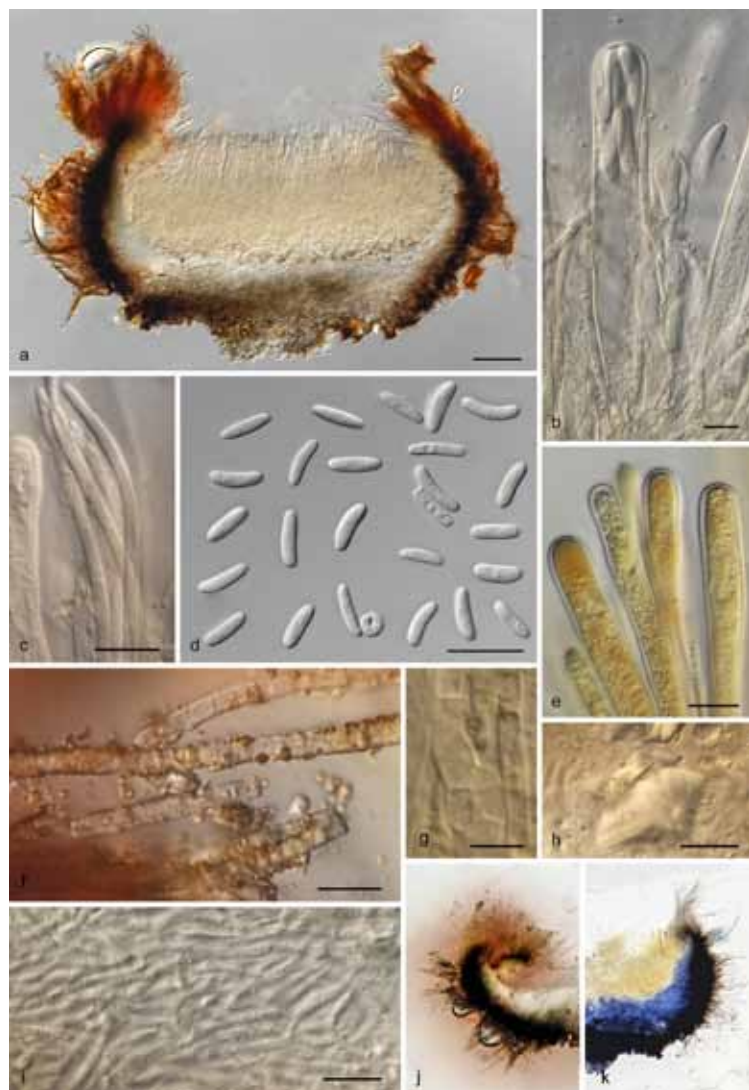


**Fig. 1** *Perrotia flammea* apothecia in vivo: a, b, c – colonies on partially decorticated branches of angiosperm shrub (BRA CR32510); d – scattered apothecia on exposed, blackened branch of *Fagus sylvatica* (BRA CR32509). Scale bars: a = 5 mm; b, c = 1 mm; d = 0.5 mm.

multiseptate, tapering, blunt; walls 0.6–1.6  $\mu\text{m}$  thick, apically hyaline, basally brown, densely covered with yellowish to reddish granules and oxalate crystals (Fig. 2f); granules dissolving in KOH, staining the medium red to purple (Fig. 2j). Anamorph not observed.

**Habitat:** collected in south-facing sites: shrub land with xerophilous vegetation (Fig. 3a), abandoned orchard (Fig. 3b), slope at the mountain ridge with relict *Pinus sylvestris* and *Fagus sylvatica* trees (Fig. 3c), in (0–)0.5–1.7 m above ground on mostly exposed (xeric), dead, completely or partially decorticated branches of *Malus* sp. [7], *Ligustrum vulgare* [3], *Fagus sylvatica* [2], *Carpinus betulus* [2], *Spiraea media* [1] and *Prunus spinosa* [1]. Assoc.: *Propolis farinosa* [1], *Hysterographium flexuosum* [1], *Cryptodiscus foveolaris* [1], *Orbilina* sp. [1], *Cordieritaceae* ined. [1]. Alt.: 150–800 m (lowland to submontane). Phenology: probably throughout the year, I. (1 coll.), III. (3 coll.), IV. (3 coll.), V. (1 coll.), VI. (1 coll.), VII. (4 coll.), X. (1 coll.), XI. (3 coll.). Geology: limestone, wetterstein limestone, dolomite, andesite.

**Specimens studied:** Slovakia, Trenčín region, Vršatské Podhradie village, NR Vršatské bradlá, attached decorticated branch of *Fagus sylvatica*, 1.7 m above the ground, N49.06923° E18.15619°, alt. 788 m, 5 Jan. 2020, R. Rutkowski, A. Polhorský (BRA CR32422); Žilina region, Folkušová village, Pekárová hill, on partially decorticated attached branch of *Fagus sylvatica*, 1.5 m above the ground, N48.95388° E18.96159°, alt. 800 m, 29 Mar. 2018, A. Polhorský (BRA CR32509); Banská Bystrica region, Sklené Teplice town, on decorticated branch of *Carpinus betulus* [in ramo decort. Carpini bet.], 10 Jul. 1899, A. Kmeť (BRA CR32496, BRA CR32497); Prenčov village, Babí potok, on dead branch of *Ligustrum vulgare* [in ram. emort. Ligustri vulg.], 1 Jul. 1887, A. Kmeť (BRA CR32505); Prenčov village, Kiepa, decorticated, on buried wood of *Malus* sp. [in lignulo decorticato putr. Pyri mali], 24 Nov. 1887, A. Kmeť (BRA CR32502); Prenčov village, Medzi vršky, on dead trunk of *Ligustrum vulgare* [in caul. emort. Ligustri vulg.], 6 Apr. 1889, A. Kmeť (BRA CR32504); Prenčov village, Stará škola, on dead branch of *Malus* sp. [in ram. emort. Pyri mali], 23 Apr. 1889, A. Kmeť (BRA CR32501); Prenčov village, „na háj.“, on decorticated twig of *Malus* sp. [in ramulo decort. Pyri mali], 15 Nov. 1889, A. Kmeť (BRA CR32499); Prenčov village, „za lúčkou“, dead branch of *Ligustrum vulgare* [ram. emort. Ligustri vulg.], 17 Mar. 1890, A. Kmeť (BRA CR32507); Prenčov village, Medzi skalky,



**Fig. 2** *Perrotia flammea* microscopical characters (BRA CR32509): a – transversal section of apothecium, b – turgescens ascus, c – paraphyses, d – ejected spores (in tap water); e – inamyloid ascus apices (in IKI); f – encrusted marginal hairs, g – ascus base with croziers, h – oxalate crystals embedded in gelatinized ectal excipulum, i – gelatinized ectal excipulum (in tap water); j – dissolving granules staining the medium (in KOH); k – amyloidity of gel in ectal excipulum (a–d,f–i. in tap water; e. in IKI; j. in KOH; k. in KOH + IKI). Scale bars: a = 100 µm, b–f, h, i = 10 µm; g = 5 µm

on dead branch of *Spiraea media* [in ram. emort. Spiraeae mediae], 28 Apr. 1890, A. Kmet' (BRA CR32503); Prenčov village, Stankov vrch [Stankojo vřšok], on *Prunus spinosa* [in Pruno spinoso], 4 Nov. 1897, A. Kmet' (BRA CR32506); Prenčov village, in the garden, on decorticated branch of *Malus* sp. [in ramo decort. Pyri mali], 18 Jul. 1898, A. Kmet' (BRA CR32500); Prenčov village, in the garden, on wood of *Malus* sp. [in ligno Pyri mali], 6 Oct. 1898, A. Kmet' (BRA CR32495); Prenčov village, Uhrínová [Uhrinojo dolinka], on decorticated branch of *Malus* sp. [in ram. decort. Pyri mali], 13 Jun. 1902, A. Kmet' (BRA CR32498); Prenčov village, Sitno, on decorticated, attached branches of *Malus* sp., 0.5–1.5 m above ground, N48.39849° E18.89482°, alt. 665 m, 4 May 2018, A. Polhorský (BRA CR32508); Prešov region, Levoča [Löcse] town, "Gr. Steingeräusch" forest, decorticated branches of *Malus* sp. [Lehámozott vadalmafa (Pirus malus (L.) ágakom, "Gr. Steingeräusch" erdőben], 1888, V. Greschik (BRA CR32494); Košice region, Ladmovce village, "Baba" hill, on dead branches and trunks of unknown shrubs, alt. 150 m, 16 Mar. 2018, M. Lazor (BRA CR32510).

**Other known material:** Slovakia, Bratislava region, Bratislava city, Kamzík [Gemsenberg], 1 May 1912, J. A. Bäumler (EAA02325).

### Discussion

The most important characters of *Perrotia flammea* are 0–1-septate ascospores and reddish-brown hairs on the outside of the apothecia (Zhuang & Yu 2001). The hairs are densely covered with the granules, which dissolve and turn violaceous in KOH (Vesterholt 2000). It is a plurivorous species with wide range of angiosperm substrates. It's been reported from *Malus*, *Carpinus*, *Liquidambar* (Fries 1821); *Crataegus rivularis*, *Rhus trilobata*, *Fendlera rupicola* (Earle 1901); *Corylus*, *Prunus*, *Salix* (Dennis 1978); *Alnus crispa* (Huhtinen 1984); *Fraxinus* sp., *Fraxinus ornus*, *Cornus sanguinea* (Krieglsteiner & Enderle 1987); *Fagus* cf. *moesiaca* (Matočec & Focht 2000); *Ligustrum vulgare*, *Pyrus communis* (Suková 2005); *Olea europaea*, *Fagus sylvatica* (Delivorias et al. 2011) and *Fagus* sp., *Quercus* sp. (Uzun et al. 2015). To this list we now add *Spiraea media*. Delivorias et al. (2011) also reports two finds on *Abies cephalonica*, occurrence on coniferous wood is exceptional in this species and in the whole genus as well. The genus *Perrotia* appears to be polyphyletic from the molecular standpoint. The type species – *P. flammea* remains isolated within the *Lachnaceae* family, whereas



**Fig. 3** *Perrotia flammea* habitats: a – view of the locality of BRA CR32510, b – decorticated *Malus* sp. branches (BRA CR32508), c – partially decorticated branch of *Fagus sylvatica* (BRA CR32509), arrows pointing to apothecia.

*P. distincta*, *P. populina*, *P. cf. succina* group with different *Lachnaceae* clades (Cantrell 1997, Baral 2014, Baral pers. comm.). As far as we know, *P. flammea* was collected 19 times in Slovakia, the historical records were restricted to Bratislava, Banská Bystrica and Prešov region, but based on our novel records the species also occurs in Trenčín, Žilina and Košice region. Despite its striking appearance and abundant apothecial growth the fungus has probably been overlooked for a long period since the most of the collections come from the late 19<sup>th</sup> and early 20<sup>th</sup> century.

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***Hygrocybe miniata***, Javorníky, Makov – Bútorky, 9 November 2017, F. Fuljer (PHFF10434). Photo F. Fuljer.



***Hygrocybe virginea* var. *fusescens***, Kysucká vrchovina, Snežnica - between Maly and Veľký Vreťň, 20 October 2017, M. Zajac (PMZ324). Photo M. Zajac.



***Hygrocybe mucronella***, Kysucká vrchovina, Horný Vadičov –  
L'adonhora, 23 October 2017, M. Zajac (PMZ306). Photo M. Zajac.



***Hygrocybe splendidissima***, Kysucká vrchovina, Horný Vadičov –  
L'adonhora, 14 October 2017, F. Fuljer (PMZ242). Photo M. Zajac.