

26.8.99 *With best wishes*
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Diptera of the Pálava Biosphere Reserve of UNESCO, I
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Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae, Macroceridae, Mycetophilidae

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According to a recent check list of Diptera recorded in the Czech Republic and Slovakia, 410 species of the families treated here have been ascertained in the Czech Republic (KOŠEL et al. 1997). In the Pálava Biosphere Reserve, 118 species have been found. The number of species for individual families is as follows: Bolitophilidae: 16 spp. in the Czech Republic (3 in the Pálava B.R.), Diadocidiidae: 3 (1), Ditomyiidae: 3 (2), Keroplatidae: 21 (10), Macroceridae: 19 (4), Mycetophilidae: 348 (98).

A basic systematic orientation in the group of six families treated here is facilitated by studies of LANDROCK (1927, 1940) and EDWARDS (1925). In any case, some further papers of a revisional character or those embracing diagnoses of subsequently described species must be taken into consideration. Modern keys to the identification of British species including the family Manotidae and the subfamily Sciophilinae (Mycetophilidae) are given by HUTSON et al. (1980). ZAITZEV (1994) worked on these families in Russia. Keroplatidae are comprehensively dealt with in a monograph by MATILE (1990). The genera *Phronia* and *Trichonta* (Mycetophilidae) were revised by GAGNÉ (1975, 1983). *Sciophila*, *Acnemia*, *Allodia*, *Monoclona* and *Phthinia* as genera of Mycetophilidae were studied in the Holarctic context by ZAITZEV (1982, 1983a, 1983b, 1984a, 1984b). The most complete key to the genera of Mycetophilidae is to be found in a study by the same author (ZAITZEV 1986). Nevertheless, with regard to the identification of many species based on the species-specific characters of the male genitalia, many classical as well as recent papers by CHANDLER, DZIEDZICKI, EDWARDS, HACKMAN, JOHANNSEN, LAFFOON, LUNDSTRÖM, MATILE, STAC-KELBERG, TOLLET, TUOMIKOSKI, VÄISÄNEN, VOCKEROTH and others must be consulted.

Larvae are primarily mycetophagous. Some species prefer fungi of Aphyllophorales where larvae of Bolitophilidae and Ditomyiidae live in fruiting bodies and those of Diadocidiidae in mycelia. However, Bolitophilidae may also develop in Agaricales. Predaceous larvae of Macroceridae and Keroplatidae occur on hymenophores of Aphyllophorales, the former with a preference for Polyporaceae. Larvae of very diverse Mycetophilidae are predominantly mycetophagous (Aphyllophorales, Agaricales, rarely Gasterales), zoophagy proved in some species is apparently secondary. The system and nomenclature used in the following list is the same as that adopted in the recent check list (KOŠEL et al. 1997).

History of investigation. Research of this family group (considered originally to be a sole family Mycetophilidae) has a long tradition in the Czech Republic and particularly in Moravia. First of all, an extensive collection of papers by K. LANDROCK represents an important contribution to the knowledge of this biologically very interesting group of Diptera, many of them being valid to the present day. The first record from the Pálava B.R. was *A. silvatica*, the syntype of which originated from the Pavlovské vrchy Hills (LANDROCK 1912a). *Ezechia confinis* from the same area was included in another study by the same author (LANDROCK 1912b). This species and *Phronia tenuis*, again from the Pavlovské vrchy Hills, are mentioned by FRANZ (1989). The latter record is based on a specimen preserved in the Natural History Museum of Vienna, which provides evidence that LANDROCK visited the Pavlovské vrchy Hills in May 1908. Two species of *Allodia* are also noted from the Pavlovské vrchy Hills by LANDROCK (1914). Some further species are mentioned by the same author from Strachotín, a locality lying in close proximity but outside the area under study. After World War II some modern taxonomic studies and papers on immature stages of some Mycetophilinae produced by P. LAŠTOVKA are worthy of mentioning. Nevertheless, the faunistic research is still incomplete, not only in southern Moravia but in many parts of the Czech Republic as well.

Noteworthy records. In all, 20 species new to the fauna of the Czech Republic have been found among the examined specimens (for precise data see ŠEVČÍK & MARTINOVSKÝ 1999) and the actual number of species known to occur in this republic increased to 430. However, such is the fragmentary knowlege of the species assemblage living in the Pálava B.R., any of the species recorded cannot be considered characteristic or specific for this area, at least for the time being. The new species for the Czech Republic are as follows: from Mycetophilidae, *Greenomyia mongolica* described from Mongolia, *Sciophila jakutica* described from Yakutia (Russia) and *Mycetophila sigmoides* known only from Kamchatka are recorded in Europe for the first time. A record of the rare *Mycetophila tridentata* at Rendezvous represents the northernmost discovery in Europe and that of *Pseudexechia tristriata* from Soutok is the westernmost. *Boletina digitata*, *Sceptonia costata* (all P. LAŠTOVKA det.), *Exechiopsis membranacea* (P.J. CHANDLER det.), *Brevicornu serenum* (J. ŠEVČÍK det.), *Macrobrachius kowarzii*, *Mycetophila lubomirskii*, *Phronia conformis*, *P. notata* and *Sceptonia tenuis* (all J. MARTINOVSKÝ det.) are recorded in the Czech Republic for the first time though all of them seem to be fairly frequent in Europe. From other families, the rare hygrophilous *Macrocerata fascipennis* (Macroceridae), *Orfelia basalis*, *O. pallida* and *O. tristis* (Keroplatidae) represent very interesting faunistic novelties.

Monitoring. The appended list includes all the species recorded within the monitoring programme organized by J. VAŇHARA in the Horní les Forest at Lednice. Suitably placed yellow pan traps are considered to be a very successful method and long exposed emergent and Malaise traps produce, as a rule, very acceptable monitoring results.

Conservation. None of the species belonging to the treated families is included in the official Red List of the Czech Republic. As in the other groups of insects, the rare species may be protected by suitable habitat conservation, especially by the conservation of old mixed forest stands with rich mycoflora.

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3. LANDROCK K., 1914: Die Pilzmücken Mährens III. Teil. Zeitschr. Mähr. Landesmus., 14: 14-93.
4. FRANZ H., 1989: Die Nordost-Alpen im Spiegel ihrer Landtierwelt. Vol. 6 (1). Wagner, Innsbruck, 413 pp.
5. ŠEVČÍK J. & MARTINOVSKÝ J., 1999: Faunistic records from the Czech Republic and Slovakia: Keroplatidae, Macroceridae, Mycetophilidae. In: JEDLIČKA L. (ed.), Dipterologica bohemoslovaca. Vol. 9. Slov. Entom. Soc., Bratislava. In press.

COLLECTIONS EXAMINED

6. Coll. Institute of Forest Ecology, Mendel University of Agriculture and Forestry, Brno, J. VAŇHARA leg., P. LAŠTOVKA det.
7. Coll. Moravian Museum, Brno, P. LAUTERER leg..
8. Coll. J. MARTINOVSKÝ (incl. specimens collected by M. BARTÁK, J. OLEJNÍČEK and J. VAŇHARA).
9. Coll. J. ŠEVČÍK (incl. specimens collected by H. HIRŠOVÁ, M. KOHOUTOVÁ and J. SCHLAGHAMERSKÝ).

ABBREVIATIONS

General abbreviations: see comments on abbreviations (pp. 13-19) and a separate Appendix. Abundance and frequency values are derived from the total number of specimens examined (A) and the number of locality records (F) from the study area.

Example: **Orfelia basalis* (Winnertz, 1863): HL¹(6)², me³, pr⁴, A2⁵, F2⁶, EUR⁷, VI⁸.

Explanation: * species occurring only in the Pálava B.R. (within the Czech Republic), ¹locality, ²number of source, ³ecological characteristics, ⁴trophic relations, ⁵abundance, ⁶frequency, ⁷distribution, ⁸time of occurrence.

LIST OF SPECIES

BOLITOPHILIDAE

- Bolitophila* (*Bolitophila*) *cinerea* (Meigen, 1818): HL (6, 8, 9), RE (9), me, my, A4, F4, PAL, V-XI.
B. (Ciopisa) modesta (Lackschewitz, 1937): HL (6), me, my, A2, F2, PAL, X.
B. (C.) pseudohybrida (Landrock, 1912): HL (8), me, my, A2, F2, PAL, IX.

DIADOCIDIIDAE

- Diadocidia* (*Diadocidia*) *ferruginosa* (Meigen, 1830): NE (8), PO (9), me, my, A3, F3, HOL, IX.

DITOMYIIDAE

- Ditomyia fasciata* (Meigen, 1818): KP (9), me, my, A2, F2, PAL, VI.

Symmerus annulatus (Meigen, 1830): KJ, NE (8), me, my, A2, F2, PAL, VI-VII.

KEROPLATIDAE

Keroplatys testaceus (Dalman, 1818): HL, ML (5), me, my, A2, F3, PAL, VI-VIII.

Macrorrhyncha flava (Winnertz, 1846): HL (6), me, pr, A2, F2, EUR, VI.

Neoplatyura flava (Macquart, 1826): HL (6), me, pr, A2, F2, EUR, IX.

**N. modesta* (Winnertz, 1863): HL (5), me, pr, A3, F2, EUR, VIII.

**N. nigricauda* (Strobl, 1893): HL, KO, LA, NE (8), me, pr, A3, F4, EUR, VI-X.

**Orfelia basalis* (Winnertz, 1863): HL (6), me, pr, A2, F2, EUR, VI.

O. discoloria (Meigen, 1818): HL, JH, NE (8), me, pr, A3, F3, EUR, V-VI.

O. nemoralis (Meigen, 1818): KL, SK (7, 9), HL, LE (8), me, pr, A4, F4, EUR, V-VII.

**O. pallida* (Staeger, 1840): HL (5), me, pr, A2, F2, EUR, VI.

O. tristis (Lundström, 1911): MT (5), A1, F1, EUR, VI.

MACROCERIDAE

Macrocerata angulata Meigen, 1818: NM (7), RA (8), me, pr, A2, F3, EUS, V-VII.

**M. fascipennis* Staeger, 1840: KJ, SN (5, 8), hg, pr, A2, F2, EUR, V.

M. stigmoides Edwards, 1925: HL, JH, NE (8), PO (9), me, pr, A2, F3, PAL, VI-IX.

M. vittata Meigen, 1830: NE (8), me, pr, A2, F2, HOL, IX.

MYCETOPHILIDAE

SCIOPHILINAE

MYCOMYINI

Mycomya (Cymomya) circumdata (Staeger, 1840): HL (8), RE (9), me, pr,

A3, F3, PAL, V-VIII.

M. (Mycomya) griseovittata (Zetterstedt, 1852): HL (6), me, pr, A2, F2, HOL, IX.

M. (M.) marginata (Meigen, 1818): DV, RE (9), me, pr, A3, F3, PAL, IV, V.

M. (M.) tenuis (Walker, 1856): RE (9), me, pr, A2, F2, EUR, IV.

M. (M.) tumida (Winnertz, 1863): RE (9), me, pr, A2, F2, PAL, V.

M. (M.) winnertzi (Dziedzicki, 1885): JH (8), me, pr, A2, F2, HOL, VI.

M. (Mycomyopsis) affinis (Staeger, 1840): SO (9), me, pr, A3, F2, HOL, IX-X.

SCIOPHILINI

Acnemia nitidicollis (Meigen, 1818): HL (6, 8), NT (8), me, my, A3, F3, PAL, V-VIII.

Azana anomala (Staeger, 1840): DV (9), me, my, A1, F1, EUR, V.

Megalopelma nigroclavatus (Strobl, 1909): HL, SO (5), me, my, A2, F2, EUR, VIII.

Monocloena rufilatera (Walker, 1837): DV, LE (8, 9), MI (9), me, my, A2, F3, HOL, V.

Paratinia sciarina Mik, 1874: HL (8), me, my, A2, F2, EUR, V.

Sciophila jakutica Blagoderov, 1992: JH (5), me, my, A1, F1, PAL, VI.

S. lutea Macquart, 1826: RE (9), me, my, A2, F2, PAL, V.

S. quadriflora Hutson, 1979: RE (9), me, my, A3, F2, PAL, V.

GNORISTINI

**Boletina digitata* Lundström, 1914: HL (5), me, my, A1, F1, EUR, IV.

B. gripha Dziedzicki, 1885: HL (8), RE (9), me, my, A5, F3, PAL, III-V.

B. lundstroemi Landrock, 1912: RE (9), me, my, A2, F2, EUR, V.

B. nigricoxa Staeger, 1840: DV (7), me, my, A3, F2, PAL, IV.

B. nitida Grzegorzek, 1885: DV, HL (9), me, my, A2, F2, PAL, XI.

- B. plana* Walker, 1856: HL (6), me, my, A2, F2, PAL, X.
- B. sciarina* Staeger, 1840: HL (6), DV (9), me, my, A2, F3, HOL, V.
- Coelosia flava* (Staeger, 1840): SA (7), HL (8), me, my, A2, F2, EUR, VI.
- LEIINI
- Clastobasis alternans* (Winnertz, 1863): LA, SO (8), me, my, A2, F2, PAL, VI-VIII.
- Docosia gilvipes* (Walker, 1856): RE, SO (5), me, my, A2, F2, PAL, IV.
- D. moravica* Landrock, 1916: DV, RE (9), SE (7), me, my, A3, F3, EUR, V.
- D. nigra* Landrock, 1928: RE (9), A2, F2, EUR, V.
- D. sciarina* (Meigen, 1830): RE (9), me, my, A3, F2, EUR, V.
- Ectrepesthoneura hirta* (Winnertz, 1846): RE (9), me, my, A1, F1, EUR, V.
- **Greenomyia mongolica* Laštovka & Matile, 1974: HL, NT (5), me, my, A2, F2, PAL, VIII-X.
- Leia bilineata* (Winnertz, 1863): SO (9), me, pr, A3, F2, EUR, X.
- L. bimaculata* (Meigen, 1804): KJ, SN (8), me, pr, A2, F3, PAL, V.
- L. winthemi* Lehmann, 1822: HL (9), me, pr, A2, F2, HOL, XI.
- Rondaniella dimidiata* (Meigen, 1804): SO (8, 9), me, my, A4, F2, HOL, VI.
- Tetragoneura sylvatica* (Curtis, 1837): RE (9), me, my, A2, F2, EUR, V.
- MYCETOPHILINAE
- MYCETOPHILINI
- Dynatosoma fuscicorne* (Meigen, 1818): HL, JH (8), me, my, A3, F3, PAL, V.
- **Macrobrachius kowarzii* Dziedzicki, 1889: RE (5), me, my, A2, F1, EUR, IV.
- Mycetophila alea* Laffon, 1965: HL (6, 8, 9), KO (7), me, my, A2, F4, HOL, VI-XI.
- M. caudata* Staeger, 1840: RE (9), me, my, A2, F2, HOL, IV.
- M. cingulum* (Meigen, 1830): HL, SO (9), me, my, A2, F2, HOL, X-XI.
- M. fungorum* (De Geer, 1776): HL, JH (8, 9), me, my, A4, F3, HOL, III-X.
- M. ichneumonea* Say, 1823: HL (6), me, my, A2, F2, HOL, X.
- **M. lubomirskii* Dziedzicki, 1884: JH (5), me, my, A3, F2, EUR, VI.
- M. luctuosa* Meigen, 1830: HL (9), me, my, A3, F2, HOL, III., VII.
- M. ocellus* (Walker, 1848): HL (6), DV (9), me, my, A2, F3, HOL, V, X.
- M. occultans* Lundström, 1913: SO (8), me, my, A2, F2, EUR, VIII.
- M. ornata* Stephens, 1829: HL (6), me, my, A2, F2, EUR, X.
- M. pumila* Winnertz, 1863: HL (8), me, my, A2, F2, PAL, IX.
- M. sigmoides* Loew, 1869: HL (5), me, my, A2, F2, HOL, XI.
- M. spectabilis* Winnertz, 1863: DV (9), me, my, A2, F2, EUR, V.
- M. stolida* Walker, 1856: HL (6), me, my, A2, F2, HOL, X.
- M. strobli* Laštovka, 1972: HL (6), SK (7), me, my, A2, F3, PAL, VIII-X.
- **M. tridentata* Lundström, 1911: RE (5), me, my, A2, F1, EUR, IV.
- M. uninotata* (Zetterstedt, 1852): HL (8), RE (9), me, my, A3, F3, EUR, III-V.
- Phronia conformis* (Walker, 1865): HL (5), me, my, A2, F2, HOL, VII.
- P. forcipata* (Winnertz, 1863): DV (8), me, my, A2, F2, PAL, V.
- P. notata* Dziedzicki, 1889: HL (5), me, my, A2, F2, PAL, VI.
- P. tenuis* Winnertz, 1863: PV (4), me, my, A3, F3, HOL, V.
- Platurocypta punctum* (Stannius, 1831): HL (6), SK (7), me, my, A2, F3, HOL, VIII.
- P. testata* (Edwards, 1925): NE (8), me, my, A2, F2, HOL, IX.
- **Sceptonia costata* (van der Wulp, 1858):

- HL (6), me, my, A2, F3, PAL, VIII-X.
- S. membranacea* Edwards, 1925: HL (6), me, my, A2, F3, EUR, VI, IX.
- S. nigra* (Meigen, 1804): HL (6), me, my, A3, F4, PAL, V-X.
- **S. tenuis* Edwards, 1925: HL (5), me, my, A2, F3, EUR, V-X.
- Trichonta vitta* (Meigen, 1830): MI (9), A2, F3, HOL, VIII.
- Zygomyia humeralis* (Wiedemann, 1817): DV (9), me, my, A2, F2, PAL, V.
- Z. notata* (Stannius, 1831): HL (6), me, my, A2, F2, PAL, X.
- Z. semifusca* (Meigen, 1818): PO (9), me, my, A2, F2, PAL, IX.
- Z. valida* Winnertz, 1863: HL (6), me, my, A2, F2, PAL, VI.
- EXECHIINI**
- Allodia (Allodia) lugens* (Wiedemann, 1817): HL (8), RE (9), me, my, A2, F3, HOL, III-IV.
- A. (*A.*) *ornaticollis* (Meigen, 1818): HL, RA (6, 8), me, my, A2, F3, HOL, X-XII.
- Allodia (Brachycampta) alternans* (Zetterstedt, 1838): HL (6), me, my, A2, F2, PAL, X.
- A. (*B.*) *grata* (Meigen, 1830): HL (8), me, my, A2, F2, PAL, IX.
- A. (*B.*) *silvatica* (Landrock, 1912): PV (1, 3), me, my, A2, F2, EUR, V.
- Allodiopsis (Allodiopsis) domestica* (Meigen, 1830): DV (9), me, my, A3, F3, HOL, V.
- A. (*Notolopha*) *cristata* (Staeger, 1840): PV (3), me, my, A3, F3, EUS, V.
- Brevicornu (Brevicornu) fissicauda* (Lundström, 1911): HL (6), me, my, A2, F2, HOL, V.
- B. (*B.*) *fuscipenne* (Staeger, 1840): HL (6), me, my, A2, F2, EUR, VIII.
- B. (*B.*) *griseicolle* (Staeger, 1840): HL (6), me, my, A2, F2, HOL, VIII-X.
- B. (*B.*) *proximum* (Staeger, 1840): HL (6), me, my, A2, F2, PAL, VII-VIII.
- B. (*B.*) *sericum* (Wiennertz, 1863): ML, RE (5), me, my, A2, F3, EUR, V-VIII.
- B. (*B.*) *sericomata* (Meigen, 1830): HL (6), me, my, A2, F2, HOL, V.
- B. (*Stigmatomeria*) *crassicornis* (Stannius, 1831): JH (8), RE (9), me, my, A3, F3, HOL, IV-VI.
- Cordyla crassicornis* (Meigen, 1818): KJ (8), me, my, A2, F2, EUR, VII.
- C. flaviceps* (Staeger, 1840): HL (6), me, my, A2, F2, EUR, VII.
- Ezechia bicincta* (Staeger, 1840): HL (8, 9), SO (9), me, my, A2, F3, EUR, V.
- E. confinis* Winnertz, 1863: PV (2, 4), me, my, A2, F2, EUR, V.
- E. dorsalis* (Staeger, 1840): HL (6), SO (9), me, my, A3, F3, PAL, X.
- E. fusca* (Meigen, 1804): HL (6, 8, 9), RA (8), SO (9), me, my, A4, F4, HOL, III-X.
- E. maculipennis* (Stannius, 1831): HL (9), me, my, A2, F2, EUR, XI.
- E. nigroscutellata* Landrock, 1912: HL (9), me, my, A3, F2, PAL, XI.
- E. seriata* (Meigen, 1830): HL (6), me, my, A2, F2, PAL, X.
- Exechiopsis (Xenexechia) leptura* (Meigen, 1830): SO (9), me, my, A3, F2, EUR, XI.
- **E. (X.) membranacea* (Lundström, 1912): SO (5), me, my, A1, F1, EUR, XI.
- **Pseudoezechia tristriata* (Stackelberg in Ostroverchova & Stackelberg, 1969): SO (5), me, my, A1, F1, EUS, X.
- Pseudobrachypeza helvetica* (Walker, 1856): HL (6), me, my, A2, F2, PAL, VII.
- Rynosia fasciata* (Meigen, 1804): HL, SO (9), me, my, A2, F2, EUR, XI.
- R. signatipes* (van der Wulp, 1859): SO (9), me, my, A2, F2, EUR, X.

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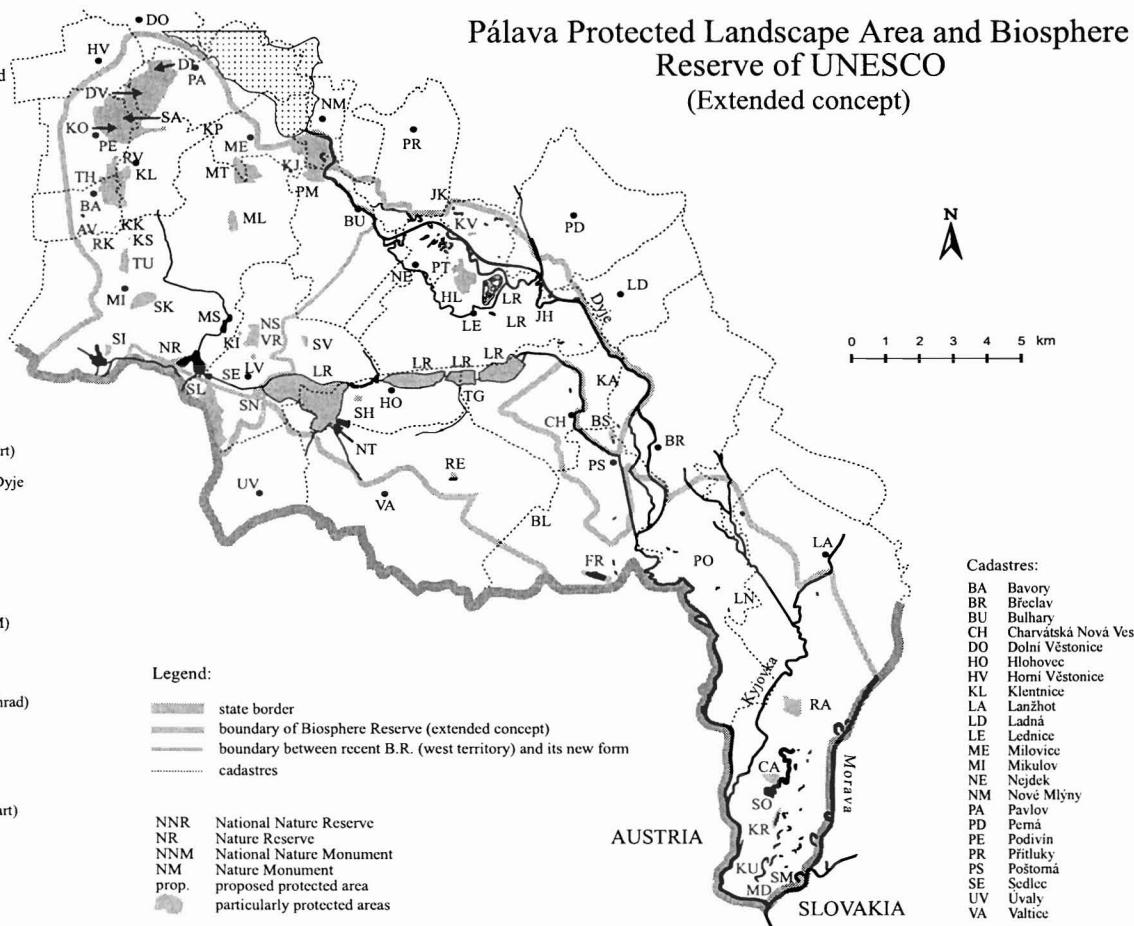
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APPENDIX: 1

Particularly protected areas and local names:

- AV Anenský vrch (NM)
- BL Boří les
- BS Bruska (prop.)
- CA Čáhov (NNR, part)
- DI Děvícky (Divčí hrady)
- DV Děvín (NNR, part)
- FR Františkův rybník (NR)
- HIL Horní les nr. Lednice
- JH Janův hrad
- JK Jezírko Kutnar (NM)
- KA Kančí obora nr. Lednice
- KI Kinberk (NM)
- KJ Kráv jezero (NNR)
- KK Kočičí kámen (NM)
- KO Kotel (NNR, part)
- KP Klentnický potok valley
- KR Krumpava (prop.)
- KS Kočičí skála (NM)
- KU Košárecké louky
- KV Květné jezero (NM)
- LN Lány
- LR Lednické rybníky (NNR, part)
- LV Liščí vrch (NR)
- MD confluence of Morava and Dyje
- ML Milovický les (prop.)
- MS Mušlov
- MT Milovická stráň (NR)
- NR Nový rybník (prop.)
- NS Nad střelnici (prop.)
- NT Nesyt (LR part)
- PM Panenský Mlýn
- PO Pohansko
- PT Pastvisko nr. Lednice (NNM)
- PV Pavlovské vrchy (Pálava)
- RA Ranšpurk (NNR)
- RE Rendezvous (NNM)
- RK Růžový kopec (NM)
- RV Růžový vrch (NR) (Sirotčí hrad)
- SA Soutěška (NNR, part)
- SH Stará hora (prop.)
- SI Šibenčík (NR)
- SK Svatý Kopeček (NR)
- SL Skalky (prop.)
- SM Šekulká Morava (prop.)
- SN Slanisko nr. Nesyt (NNR, part)
- SO Soutok (NNR, part)
- SV Studánkový vrch (prop.)
- TG Tři grácie
- TH Tabulová (NNR) (Stolová)
- TU Turold (NR)
- VR Vysoký roh

Pálava Protected Landscape Area and Biosphere Reserve of UNESCO (Extended concept)



General Abbreviations

APPENDIX: 2

Ecosystem and habitat types

1.0	Woodland ecosystems and habitats	1.2.6	Parks
1.1	Natural and semi-natural woodlands	1.2.7	Alleys
1.1.1	Woodlands outside alluvium	2.0	Non-woodland ecosystems and habitats
1.1.1.1	Cornel oakwoods (<i>Corni-Querceta pubescens</i>)	2.1	Natural and supplementary non-woodland habitats
1.1.1.2	Maple-cornel oakwoods (<i>Corni-Querceta pubescens aceris</i>)	2.1.1	Limestone rocks and scree
1.1.1.3	Beech-oakwoods (<i>Fagi-Querceta</i>)	2.1.2	Rocky steppe
1.1.1.4	Maple-hornbeam oakwoods (<i>Carpini-Querceta aceris</i>)	2.1.3	Grassy steppe
1.1.1.5	Hornbeam oakwoods (<i>Carpini-Querceta</i>)	2.1.4	Sandy habitats
1.1.1.6	Lime maple woods (<i>Tili-Acereta</i>)	2.1.5	Littoral habitats and swamps
1.1.2	Floodplain forests and shore growths	2.1.6	Halophilous habitats
1.1.2.1	Willow alder groves (<i>Salici-Alneta</i>)	2.2	Non-woodland habitats in cultivated landscape
1.1.2.2	Oak-ash woods (<i>Querci-Fraxineta</i>)	2.2.1	Flooded (floodplain) meadows
1.1.2.3	Poplar-elm ash woods (<i>Ulmi-Fraxineta populi</i>)	2.2.2	Non-flooded meadows
1.1.2.4	Hardwood-elm ash woods (<i>Ulmi-Fraxineta carpini</i>)	2.2.3	Fields
1.2	Cultivated woodlands	2.2.4	Field balks and paths
1.2.1	Mixed forests	2.2.5	Vineyards
1.2.2	Spruce stands	2.2.6	Orchards
1.2.3	Scots pine stands	2.2.7	Gardens
1.2.4	Black locust stands	2.2.8	Ruderal and other degraded habitats
1.2.5	Windbreaks		

Ecological characteristics

eu	euryoecious
hg	hygrophilous
me	mesophilous
ps	psychrophilous
sk	skiophilous
tf	thermophilous
xt	xerothermic

Trophic relations

co	coprophagous	ph	phytophagous
mo	monophagous	po	polyphagous within ph
my	mycophagous	pp	polyphagous
ne	necrophagous	pr	predatory
ol	oligophagous	sa	saprophagous
pa	parasitic, parasitoid	xy	xylophagous

Abundance

A1	very rare
A2	rare
A3	fairly numerous
A4	numerous
A5	very numerous

Frequency

F1	very scarce
F2	scarce
F3	medium frequent
F4	frequent
F5	very frequent

Distribution

ATL	Atlantic
CEU	Central European
COS	Cosmopolitan
EUA	Eurasian
EUR	European
EUS	Euro-siberian
HOL	Holarctic
PAL	Palearctic
PON	Pontic
SBB	Subboreal
SBM	Submediterranean
TUR	Turanic

Species conservation

EX	extinct
CR	critically endangered

EN	endangered
VU	vulnerable

* species occurring only in Pálava B.R. (within the Czech Republic)