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... : , 2009. - ... - 306 .

... ,
... 2183 (-
- 159 , - 88, - 498, - 356,
- 164, - 918).

... 51. ... 306.

(... 9 19 2008 .)

I.O. Dudka, V.P. Heluta, T.V. Andrianova, V.P. Hayova, Yu.Ya. Tykhonenko, M.P. Prydiuk, Yu.I. Holubtsova, T.I. Krivomaz, V.V. Dzhagan, D.V. Leontyev, O.Yu. Akulov, O.V. Syvokon. Fungi of the nature reserves and national nature parks of Eastern Ukraine. – Kyiv: Aristey, 2009. – Vol. I. – 306 p.

The book deals with fungal diversity of the nature reserves and national nature parks of the part of Ukraine situated to the east of the Dniepro river . In total 2183 species of fungi were recorded for the investigated region (Myxomycetes – 159, Erysiphales – 88, other Ascomycetes – 498, Mitosporic fungi – 356, Uredinales – 164, other basidiomycetes – 918). Substrata and associated plants of the recorded fungi are indicated and discussed. Distribution of the main fungal groups in vegetation zones of the region is also studied.

A list of fungal species and their associated organisms is presented.

Fig. 51. Bibl. 306.

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© ... , 2009

	6
1.	(. . .).....	10
2.	- (. . . , . . . , . . . , . . . , . . .).....	21
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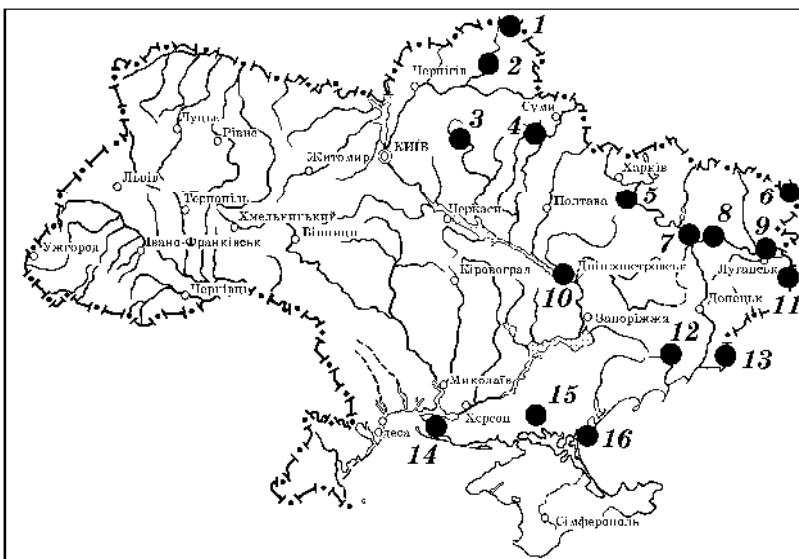
1954

Leveillula Erysiphe cruciferarum.

Crambe pontica –

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. 1.1.
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..., 2006; , , 2006).

796,
- 1024, - 1135

1:3 1:6 (, ,
1992; Hawksworth, 1991), ' -
2,5-3,5 .

2.

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764

(745)

Fungi (Ascomycota

Basidiomycota), 19

Myxomycetes.

Myxomycetes, ,

2001 . ,

(, 2001),

1996 .

Populus nigra, *P. tremula*, *Pinus sylvestris*.

19 , 14 , 7

5 Myxomycetes.

Myxomycetes :

*Ceratiomyxa*¹ (*C. fruticulosa*); *Tubulifera* (*T. arachnoidea*, syn. *T. ferruginosa*); *Lycogala* (*L. epidendrum*); *Reticularia* (*R. lycoperdon*); *Cribraria* (*C. cancellata*, *C. vulgaris*); *Arcyria* (*A. obvelata*, *A. pomiformis*); *Metatrichia* (*M. vesparia*); *Trichia* (*T. varia*); *Stemonitis* (*S. axifera*, *S. fusca*, *S. splendens*); *Comatrichia* (*C. tenerrima*, *C. typhoides*); *Fuligo* (*F. septica*); *Badhamia* (*B. versicolor*); *Physarum* (*Ph. globuliferum*); *Didymium* (*D. clavus*).

Lycogala epidendrum, , -

, (« »),

1

, , ; *Stemonitis axifera* *Arcyria obvelata* –
(« »), ; *Trichia varia*
(« »), ; *Stemonitis*
splendens (« »), ;
Fuligo septica – , , ; *Tubifera ferruginosa* –
(« »), .

, *Reticularia lycoperdon*, *Cribraria*
vulgaris, *Metatrachia vesparia* *Didymium clavus*,
; *Comatracha typhoides*,
(« »). , *Comatracha tenerrima*
Badhamia versicolor.

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1996–1999 .
, , 34 8
, 69 - (, 2000).
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Erysiphales
, . . . ,

Erysiphe s.l. (21), *Golovinomyces*,
Podosphaera s.l., (8 4,).
Leveillula,
Erysiphe adunca, *E. berberidis*, *E. buhrii*,
E. clandestina, *E. divaricata*, *E. friesii*, *E. limonii*, *E. lycii*, *E. mayorii*, *E. pal-*
czewskii, *E. prunastri*, *E. thesii*, *E. urticae*, *Golovinomyces moroczkovskii*
G. riedlianus.
Erysiphales 68
Salix acutifolia *Erysiphe adunca*, *Thalictrum flavum* *E. aquilegiae*,
Sisymbrium loeselii *E. cruciferarum*, *Limonium hypanicum* *E. limonii*,
Vicia tenuifolia *E. pisi*, *Mentha aquatica* *Golovinomyces biocellatus*,
Tragopogon ucrainicus *G. cichoraceorum*, *Cirsium arvense* *Serratula*
coronata *G. depressus*, *Galatella linosyris* *G. moroczkovskii*,
Verbascum banaticum *V. thapsus* *G. verbasci* *Pilosella echioides*
Oidium sp.
Ascomycota –
166
(, 2000 , 2001, 2002), 80 , 33 , 13
5 Ascomycetes (,

2001).

Sordariomycetidae (44), Leotiomycetidae (38),
 Dothideomycetidae (37) Erysiphomycetidae (36)
). (11) Pezizomycetidae.

Helotiales (31), Pleosporales (30), Diaporthales Xylariales (15), Pezizales
 (11), Hypocreales (8), Rhytismatales (7) (. 2.1,).
 Erysiphaceae (36

), :
 Helotiaceae Valsaceae (14), Leptosphaeriaceae (13), Dermateaceae
 (8), Diatripaceae, Nectriaceae, Rhytismataceae Xylariaceae (7),
 Hyaloscyphaceae Pleosporaceae (5) (. 2.1,).

, : *Erysiphe*
 (21), *Leptosphaeria* (10), *Golovinomyces* (8), *Hymenoscyphus* (6), *Diaporthe*
Nectria (5), *Hypoxylon* *Podosphaera* (4).
Cryptodiaporthe salicina,
Erysiphe alphitoides, *E. polygoni*, *E. trifolii*, *Golovinomyces cichoraceorum*,
Leptosphaeria gloeospora, *Pleospora herbarum* .

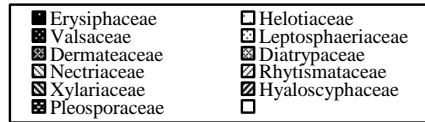
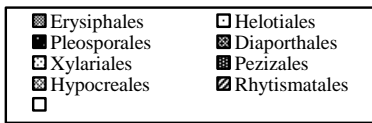
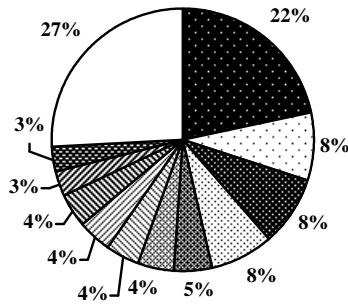
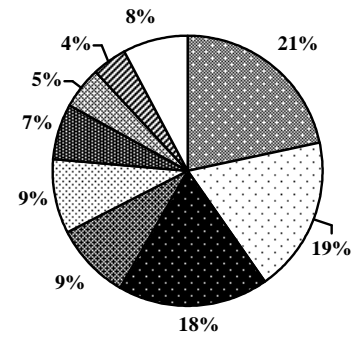
– *Diapleella coniothyrium* (*Coniothyrium fuckelii* Sacc.),
Diaporthe oncostoma (*Phomopsis oncostoma* (Thüm.) Höhn.), *D. syngenesia*
 (*Phomopsis syngenesia* (Brunaud.) Traverso), *Leucostoma auerswaldii*
 (*Cytospora personata* Fr.), *L. niveum* (*Cytospora nivea* (Hoffm.) Sacc.),
Lophodermium pinastri (*Leptostroma pinastri* Desm.), *Nectria cinnabarina*
 (*Tubercularia vulgaris* Tode), *Valsa ambiens* (*Cytospora leucosperma* Fr.)
V. sordida (*Cytospora chrysosperma* (Pers.) Fr.).

, (62), (50)
 (44). , 6 , 5 –
 , (*Nectria magnusiana*)

(. 2.2).

Diatrypella sp.
Diaporthales (15),

Xylariales (15) Helotiales (12).



. 2.1.

() ()

Amphisphaeria umbrina, *Colpoma quercinum*, *Diaporthe inequalis*, *Diatrype stigma*, *Patellaria proxima* .

(Erysiphales) – 35

Rhytismatales (4), Phyllachorales (2), Hypocreales Helotiales (1) .

Pleosporales (28) Helotiales (16),

, *Leptosphaeria euphorbiae*, *L. gloeospora*, *Hymenoscyphus scutula*, *Pleospora herbarum* .

Claviceps purpurea, *Erysiphe adunca*,
E. alphitoides, *E. polygoni*, *E. trifolii*, *Golovinomyces cichoraceorum*, *G. ga-*
leopsidis, *Lophodermium arundinaceum*, *L. pinastri*, *Phyllachora graminis*

Pezizales (*Humaria hemisphaerica*, *Morchella conica*,
Neotiella rutilans, *Peziza ammophila*, *P. badia* *Verpa conica*),
– Helotiales (*Hymenoscyphus epiphyllus*,
H. immutabilis, *H. phyllogenus*, *Rutstroemia sydowiana*),
Acetabula sp. Pezizales.

(131 , 79%),
: – 27, – 21, – 20 .
, 12 .

Helotiales (21), Diaporthales (15) Xylariales (13).
(57), (43) (38). (14)
(. 2.3).

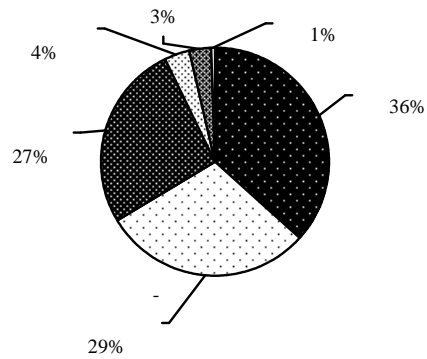
Erysiphe adunca,
E. alphitoides, *Colpoma quercinum*, *Diaporthe inequalis*, *Diatrype stigma*,
Diatrypella favacea, *D. quercina*, *Lophodermium pinastri*, .

Erysiphales (14),
Erysiphe polygoni, *E. trifolii*,
Golovinomyces cichoraceorum, *Claviceps purpurea*,
Lophodermium arundinaceum, *Phyllachora graminis* .

Pleosporales
(12),
Leptosphaeria euphorbiae, *L. helmintospora*, *Lewia scrophulariae* *Pleospora*
herbarum.

Erysiphales (4), Diaporthales (3) Helotiales (3),
Phyllachora graminis *Mollisia arundinacea*.

36 . Asteraceae (19),
 Fagaceae (18), Salicaceae (17), Ulmaceae (13), Rosaceae (12) Poaceae (11),



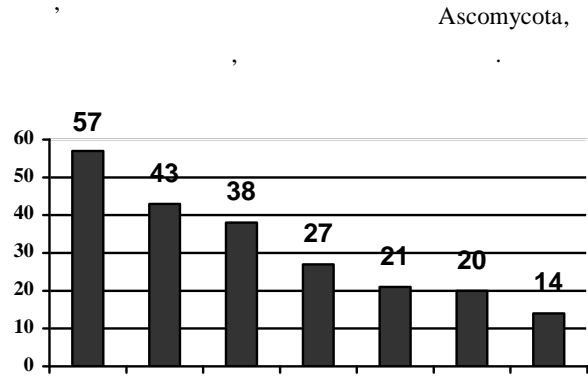
. 2.2. -

Quercus
robur 18 , *Ulmus laevis* – 12, *Acer*
tataricum, *Frangula alnus*, *Pinus sylvestris*, *Populus nigra* – 6 .

Urtica dioica (9).

Colpoma quercina , *Quercus robur*
Erysiphe alphitoides, *Pinus*

sylvestris – *Lophodermium pinastri*, *Populus nigra* – *Leucostoma niveum* ().



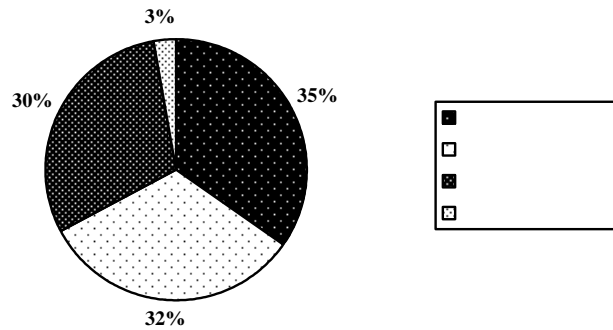
.2.3.

216
 66 , 7 4
 Deuteromycetes. Sphaeropsidales (155),
 Hyphomycetales (56),
 Tuberculariales Melanconiales 10 6
 Sphaerioidaceae (146),
 Moniliaceae (24), Dematiaceae (22) Tuberculariaceae (10).
 : Excipulaceae
 Leptostromataceae (4), Nectrioidaceae (1).
 : *Ramularia* (19), *Phomopsis* (17),

Septoria (16), *Phoma* (15), *Diplodia* (13), *Camarasporium* (12), *Cytospora*
Phyllosticta (10), *Ascochyta* (9), *Cercospora* (7), *Microdiplodia*
Tubercularia (6).

Alternaria alternata, *Colletotrichum dematium*, *Cytospora personata*, *Dinema-*
sporium graminum, *Leptothyrium caspicum*, *Microsphaeropsis olivacea*, *Phoma*
herbarum, *Septoria chelidonii*, *Sphaerellopsis filum* .

(75),
(65)
(6) (. 2.4). - (*Ampelomyces*
quisqualis *Erysiphe euonymi*, *Cladosporium aecidicola*
Puccinia graminis, *Sphaerellopsis filum* -),
(*Amblyosporium botrytis*
Scleroderma sp., *Cladosporium fuligineum* *Lycoperdon sp.*
Sepedonium chrysospermum *Boletus sp.*).



. 2.4. -
- 126, - 34, - 31
19 . , (49 ,),

(47),

(43)

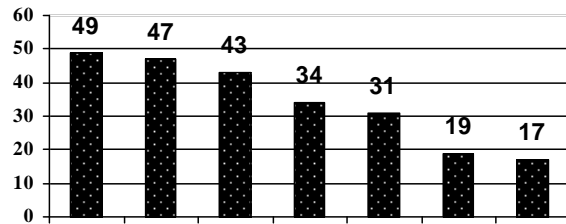
(17) (. 2.5).

Sphaeropsidales.

Camarosporium karstenii, *Coniothyrium fuckelii*, *Cytospora epileuca*, *Diplodia amorphae*, *Fusarium sambucinum*, *Microdiplodia microsporella*, *Phoma urticae*, *Phomopsis sambucella*, *Phyllosticta osteospora*, *Septoria chelidonii*, *Tubercularia vulgaris* .

Cristulariella depraedens *Acer tataricum*, *Oncopodiella trigonella* , *Pyrenochaeta rubidaei* *Rubus caesius* . *Heterosporium ornitogali*,

Ornithogalum boucheanum.



. 2.5.

Alternaria

alternata *Colletotrichum dematium* , *Dinemasporium graminum* , *Ramularia cirsii* *Cirsium arvense*, *Ramularia pratensis* *Rumex acetosa*

R. confertus, *Septoria oenotherae* *Oenothera biennis* .
Cercospora helvola *Trifolium ambiguum*, *Pestalotia staticis*
Limonium hypanicum, *Phyllosticta plantaginella* *Plantago cornuti*,
Ramularia taraxaci *Taraxacum officinale* .

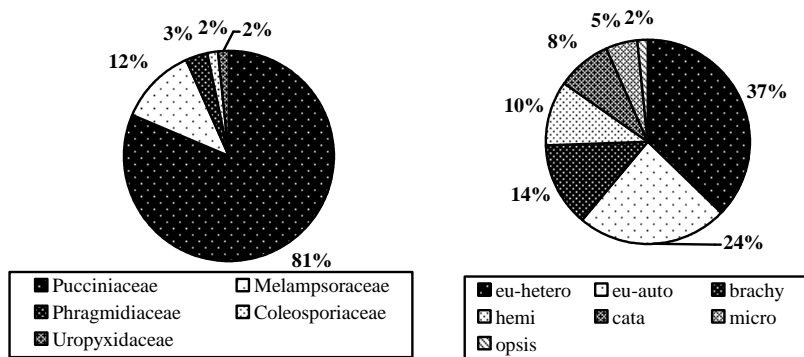
Camarosporium aequivocum *Artemisia dniproica*
A. marschalliana, *C. laburnicum* *Chamaecytisus borysthenicus*, *Hendersonia*
agropyri-repentis *Koeleria sabuletorum*, *Leptothyrium caspicum*
Euphorbia seguierana, *Phoma artemisiae* *Artemisia marschalliana* .
Amerosporium atrum *Gypsophila paniculata*, *Morinia*
pestalozzioides *Artemisia dniproica* *A. marschalliana*, *Tiarosporella*
graminis *Festuca beckeri* *Koeleria sabuletorum*

Colletotrichum dematium
Hendersonia phragmitis *Phragmites australis*,
Pseudoseptoria donacis *Phragmites australis* *Ramularia farinosa*
Symphytum officinale. *Neottiospora caricina* *Carex hirta* *Phoma acervalis*
Salix cinerea

56

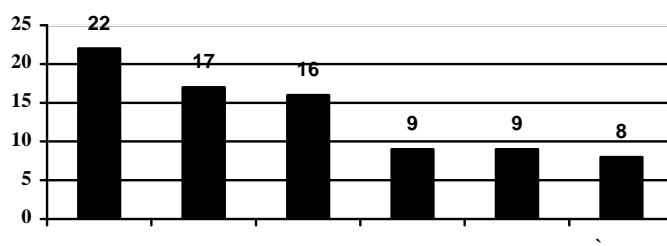
Uredinales Urediniomycetes (
9 Ainsworth & Bisby's Dictionary of the
fungi, 2001). Pucciniaceae (48),
Melampsoraceae – 7, Phragmidiaceae – 2, Coleosporiaceae
Uropyxidaceae – 1 (. 2.6,).
Puccinia (36), *Uromyces* (12)
Melampsora (7), *Phragmidium* ,
Coleosporium *Tranzschelia* – .
eu-hetero- eu-auto- (22 14

), brachy- (8), hemi- (6), cata- (5), micro- (3)
 opsis- (1) (. 2.6,).
 : eu-
 hetero-, eu-auto-, micro-, brachy-, hemi-, cata-, opsis- (, ,
 ., 1987). micro-
 brachy- , - hemi- , hemi-
 - cata- .
 (, , , 1997 ,).



. 2.6. ()
 ()
 (30), (22), (16)
 (9) . , 17 ,
 :
Melampsora allii-populina *Populus nigra*, *M. salicina* *Salix acutifolia*

Puccinia graminis *Berberis vulgaris*.
Phragmidium potentillae *Potentilla argentea*, *Puccinia behenii*
Melandrium album, *P. violae* *Viola odorata*, *Uromyces fulgens* *Cha-*
maecytisus ruthenicus.
– 9 (*Coleosporium*
tussilaginis *Petasites spurius*, *Melampsora larici-populina* *Populus nigra*,
Phragmidium bulbosum *Rubus caesius*, *Puccinia coronata* *Frangula*
alnus, *P. glechomatis* *Glechoma hederacea* .),
– 8 (*Puccinia lapsanae* *Lapsana communis*, *P. petroselini* *Aethusa*
cynapium, *Tranzschelia pruni-spinosae* *Prunus stepposa* .) (.2.7).



. 2.7.

3%

Coleosporium tussilaginis *Sonchus arvensis*, *Puccinia coronata*
Calamagrostis epigeios, *P. graminis* *Calamagrostis epigeios* *Elytrigia*
repens, *P. punctata* *Galium verum*, *Uromyces limonii* *Limonium*
hypanicum, *U. viciae-craccae* *Vicia tenuifolia* .

16 , *Melampsora euphorbiae* *Euphorbia seguierana*, *Puccinia conferta* *Artemisia marschalliana*, *P. fuckelii* *Jurinea charcoviensis*, *P. scirpi* *Scirpoides holoschoenus*, *P. montana* *Centaurea borysthena*

9 ,
Puccinia magnusiana *P. phragmitis*
Phragmites australis *P. caricina* *Carex acutiformis*.
Coleosporium tussilaginis *Petasites spurius*, *Melampsora salicina*
Salix cinerea, *Puccinia cirsii* *Cirsium arvense* .

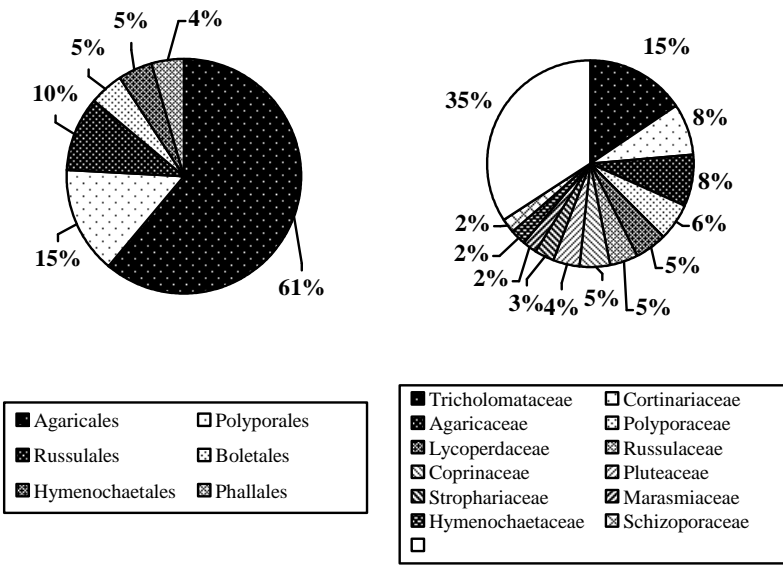
85
19 20 . -
Asteraceae (14), Poaceae (7),
Salicaceae (6), Fabaceae (6) Cyperaceae (4); 15
1-3 . ,
Salicaceae Cyperaceae
(, , , , 1987; ,
, , 1992).

, (*Agaricus altipes*, *Lepiota pallida*, *Leucopaxillus paradoxus*) (*Suillus luteus* f. *alba*),
. . (1974 , 1975 , 1980) ,

1996–1997 ., 301
Basidiomycetes (, 1999, 2000 , 2003, 2004 , 2005). ,
304 , 127 , 52 , 12
(Agaricomycetidae Tremellomycetidae)
Basidiomycetes (, 9
Ainsworth & Bisby's Dictionary of the fungi, 2001).

(*Clitocybe martiorum*, *Hebeloma leucosarx*, *H. populinum*, *Lepiota eriophora*,
Psathyrella vernalis *Russula minutula*) (*Suillus luteus* f. *alba*)

Agaricales (179), Polyporales (43), Russulales (30), Boletales Hymenochaetales (14), Phallales (13) (. 2.8,).



A

. 2.8. () ()
(Auriculariales, Botryobasidiales, Dacrymycetales, Thelephorales, Tremellales) 1
(Cantharellales)
Tricholomataceae (47), Cortinariaceae (25), Agaricaceae (24), Polyporaceae (18), Lycoperdaceae (15), Russulaceae Coprinaceae (14), Pluteaceae (13) (. 2.8,).

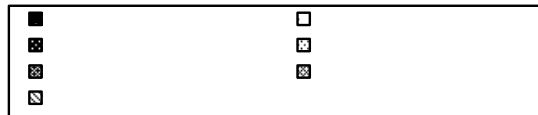
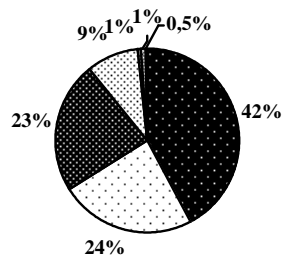
Agaricus (14), *Mycena* (10), *Coprinus* *Russula* (9), *Clitocybe* *Cortinarius* (8), *Lycoperdon*, *Pluteus* *Tricholoma* (7),

Collybia (6).

Agaricus haemorrhoidarius, *Bovista dermoxantha*, *Calvatia exipuliformis*,
Coprinus micaceus, *Lepiota alba*, *Lepista inversa*, *Lycoperdon perlatum*,
Mycena galericulata, *Phellinus igniarius*, *Pluteus cervinus* .

128 , -73, -70,
 -28 . ,

(*Crinipellis stipitarius* *Lachnella villosa*) (*Pholiota*
carbonaria *Tephroclype antracophila*),
 (*Arrhenia spathulata*) (. 2.9). ()



. 2.9. -

(277

, 91%) , 27

, (21) (8).

(117), (94), - (69) (55) ,

(48).

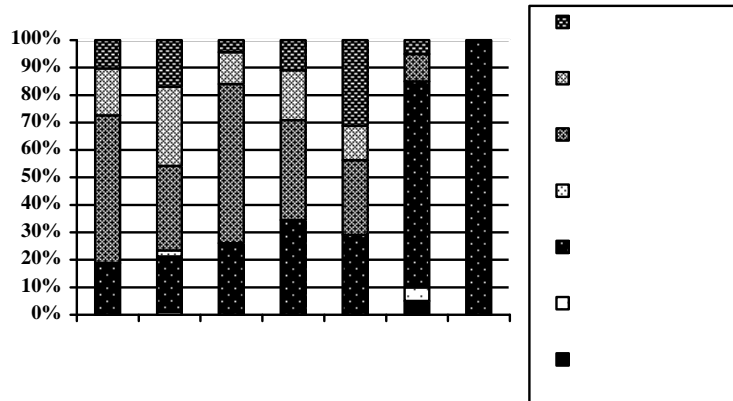
: - 20, - 11,

- 8, - 7 .

- :

(63), (22), (20)

(12) (. 2.10).



. 2.10.

Armillaria mellea, *Auricularia auricula*, *Hymenochaete rubiginosa*, *Irpex lacteus* .

Agaricus arvensis, *Lepiota cristata*, *Macrolepiota rhacodes*, *Stropharia aeruginosa*, *Xerula longipes* ., , *Coprinus impatiens*, *Lepiota eriophora* *Tomentella coerulea* . -

Amanita phalloides, *Boletus chrysenteron*, *Entoloma sordidulum*, *Inocybe rimosa*, *Laccaria laccata*, *Paxillus involutus*, *Scleroderma verrucosum* *Tricholoma scalpturatum*.

, *Collybia butyracea*, *C. dryophila*, *Lepista nebularis*, *Marasmius bulliardii* *Mycena pura*.

(29) . (27),
(19)
(16) , (2) (1)
(. 2.10).

Dacrymyces stillatus, *Heterobasidion annosum*, *Pluteus cervinus*, *Sphaerobolus stellatus* *Trichaptum fuscoviolaceum*.

Amanita muscaria, *Gyroporus castaneus*, *Lactarius rufus*, *Suillus granulatus*, *Thelephora terrestris*, *Tricholoma flavovirens* *T. imbricatum*.

Agaricus silvaticus, *Coltricia perennis*, *Lycoperdon andidum*, *L. perlatum* *Macrolepiota rhacodes*.

Auriscalpium vulgare, *Clitocybe candicans*, *Collybia butyracea*, *Cyathus olla*, *Lepista nebularis* *Mycena pura*.

– ,
Pholiota carbonaria *Tephroclybe antracophila*,
Lachnella villosa.

(– 18,

- 8, - 3) (. 2.10).

Armillaria mellea, Auricularia mesenterica, Coprinus disseminatus, Coriopsis trogii, Mycena galericulata, Pleurotus ostreatus, Polyporus squamosus Ramaria stricta.

Agaricus arvensis, Geastrum fimbriatum, Lycoperdon molle Psathyrella candolleana, Lycoperdon norvegicum Psathyrella vernalis

Tricholoma scalpturatum,

Collybia dryophila

Lentaria soluta.

(20),

(19),

(10)

(6)

(. 2.10).

Auricularia

mesenterica, Coprinus micaceus, Coriopsis trogii, Hohenbuehelia atrocaerulea Pluteus cervinus, Lentinellus vulpinus, Lycoperdon caudatum Pluteus romellii

Agaricus haemorrhoidarius, Geastrum fimbriatum, Lycoperdon perlatum Phallus hadriani.

Lepiota eriophora Melanoleuca schumacheri.

Amanita pantherina, Boletus chrysenteron, Entoloma nidorosum Tricholoma scalpturatum.

, *Lepista inversa*

(15),

(14)

(13),

(. 2.10).

Collybia dryophila, *Crucibulum laeve*, *Lentaria soluta* *Lepista inversa*.
Agaricus
haemorrhoidarius, *Calvatia excipuliformis*, *Lycoperdon perlatum*
Macrolepota procera. *Floccularia rickenii*,

Coprinus xanthothrix, *Dacrymyces deliquescens*, *Hypholoma fasciculare*,
Schizophyllum commune *Stereum hirsutum*.
(*Entoloma sordidulum*, *Hebeloma hiemale*, *Lactarius*
subdulcis, *Russula foetens*, *Scleroderma aurantium* *Thelephora terrestris*)

(
).
(21),

(8),

(15),

(. 2.10).

Bovista dermoxantha, *Disciseda compacta*, *Geastrum floriforme*,
G. nanum, *Macrolepiota excoriata* *Tulostoma brumale*.
(*Coniophora puteana*, *Coprinus domesticus* *Polyporus*
arcularius)

Artemisia dniproica,

.
Cyathus olla. ,
 , *Crinipellis stipitarius*
 , *Arrhenia spathulata* - .
 , (. 2.10).
 - *Agaricus arvensis, Bovista plumbea,*
Marasmius oreades Vascellum pratense.
 , -
 , , ,
 , , (),
 (, ,).
 , .

3.

», : « », « » (), « » « » ().

»,

«

». *Adonis wolgensis*, 1952 .

», , ,

»,

“*Sphaerotheca fuliginea* f. *adonidis* Morocz. f. nova”.

S. savulescui Sandu (= *Podosphaera savulescui*) (Sandu-Ville, Mititiuc, Iacob, 1968).

»,

1952 1953 .,

1954 . 1955 .,

« » (- , 1956). 22 ,

Erysiphales. , 70-

»,

1974

», 1975–1976, 1978,

1986, 1993, 1997 2001–2004 .

– 220 . ,

– . . . , . . .

»,

« ... » (... ,
 , ... , 1987) « ... », (... , 1989),
 (... , 1979 , , 1980, 1987; ... , 2004, 2005;
 , ... , 2006), « ... » (... ,
 .., 1998).

Erysiphales (Braun, 1999; Braun, Takamatsu, 2000; Braun, Shishkoff, Takamatsu, 2001), 48 7

. 3.1,
Erysiphe s.l. (21), *Golovinomyces* *Podosphaera*
 s.l. 10 9 , « ... ».

Erysiphe

« ... » , – *Erysiphe adunca*, *E. buhrii*,
E. cruchetiana, *E. friesii*, *E. limonii*, *E. lonicerae*, *E. lycopsidis*, *E. prunastri*,
E. thesii, *E. urticae*, *Golovinomyces hyoscyami*, *Leveillula helichrysi*, *L. lactu-*
carum, *Neoerysiphe galii* *Podosphaera dipsacearum*. *Golovinomyces morozkovskii*

(... , 1980). *Erysiphe flexuosa* – (... , 2004).

Erysiphales 108

Crambe aspera, *C. tataria* *Adonis wolgensis*

Elytrigia maeotica *Blumeria graminis*,
Populus italica *Salix purpurea* *Erysiphe adunca*, *Clematis lathyrifolia*
Consolida ajacis *E. aquilegiae*, *Otites densiflorus* *E. buhrii*, *Crambe*
aspera *E. cruciferarum*, *Lycopsis arvensis* *L. orientalis* *E. lycopsidis*,
Vitis labrusca *E. necator*, *Ligustrum vulgare* *E. syringae-japonicae*,
Centaurea trinervia *Cirsium ukranicum* *Golovinomyces depressus*,
Galatella biflora *G. morozkovskii*, *Plantago media* *Podosphaera*
plantaginis, *Senecio jacobaea* *Xanthium spinosum* *P. xanthii*
Filipendula vulgaris *Oidium* sp.

« » . . . -
 1953 .
 . -
 . . , -
 (, 1957), 22 -
 Erysiphales .

. . . ()
 - 1975, 1977, 1978, 1980, 1986, 1997
 2003–2004. 150 ,
 (, 1979 , 1989, 1998; ,
 , 1987; , , 1989; ,
 , 1998; , , 2005; , , 2006).
 43 7 . ,
Erysiphe s.l., *Podosphaera* s.l. *Golovinomyces* (14, 11 10, -
),
 : *Erysiphe friesii*, *E. lycopsidis*,
E. thesii, *E. tortilis*, *E. urticae*, *Golovinomyces valerianae*, *Leveillula helichrysi*,
Neoerysiphe galii, *Podosphaera dipsacearum*, *P. ferruginea* .

Erysiphe betae *Podosphaera*
morsuvae (—). 101 -
Adonis vernalis ,
: *Bromus*
japonicus *Blumeria graminis*, *Ranunculus sceleratus* *Erysiphe*
aquilegiae, *Beta vulgaris* *E. betae*, *Glaucium corniculatum* *E. ruci-*
ferarum, *Persicaria amphibia* *E. polygoni*, *Ajuga chia* *Thymus* sp.
Golovinomyces biocellatus, *Hieracium robustum* *H. virosum* *G. cicho-*
raceorum, *Teucrium polium* *Leveillula duriaei*, *Galatella villosa*
L. lactucarum, *Hieracium* sp. *L. scolymi*, *Dipsacus laciniatus*, *D. sativus*
D. sylvestris *Podosphaera dipsacearum*, *Grossularia uva-crispa* *Ribes*
nigrum *P. morsuvae* *Rosa klukii* *P. pannosa*.
« »,
. . .
, - 1954 .
(-
, 1958),
(10 4).
Adonis vernalis,
(),
Sphaerotheca
fuliginea. ()
1973 .), . . . (1979 .),
1985 .
- 44 («
», *Erysiphales* (, 1989),
(, ,
., 1998)).

3.1.

,

<i>BLUMERIA</i>	1	1	-	1	-	1	1	-	1	1	1	1	1	1	1	-
<i>ERYSIPHE</i>	9	13	-	13	-	21	14	9	11	14	9	18	21	7	27	1
<i>GLOVINOMYCES</i>	3	4	-	11	-	10	10	6	9	4	5	8	8	6	11	-
<i>LEVEILLULA</i>	-	-	-	1	-	3	4	2	1	-	3	4	-	-	5	3
<i>NEOERYSIPHE</i>	1	1	-	2	-	2	2	1	2	1	1	2	1	1	3	-
<i>PHYLLACTINIA</i>	-	1	-	1	-	-	-	-	-	-	-	-	-	1	2	-
<i>PODOSPHAERA</i>	5	4	-	10	-	9	11	6	9	5	8	11	4	5	10	-
<i>SAWADAEA</i>	-	1	-	2	-	2	1	-	1	2	-	1	1	2	-	-
:	19	25	-	41	-	48	43	24	34	27	27	45	36	23	59	4

24 5 . , ,

hyoscyami *Leveillula helichrysi* – *Golovinomyces* ,

48 -

(1996)

Astragalus dasyanthus *Adonis vernalis* – , *Ranunculus acris*

Erysiphe aquilegiae, *Astragalus dasyanthus* *E. astragali*, *Pastinaca*
sylvestris *E. heraclei*, *Centaurea scabiosa*, *Cirsium canum* *C. polonicum*
Golovinomyces depressus, *Cucurbita pepo*, *Prunella grandiflora*,
Rudbeckia laciniata *Veronica chamaedrys* *Oidium* spp. *Vicia cracca*
Pseudoidium spp.

« » –

80- ,

10

() 22–

24 1950 .

(

1989 .), . . . (.) . -

(123

), 33 7 *Erysiphales*

(, , ., 1994; , , ., 1998).

(. 3.1).
Erysiphe s.l. (11), *Golovinomyces* *Podosphaera*
s.l. (9).
– 5 .
, *Erysiphe aquilegiae*, *E. heraclei*, *E. trifolii*, *Golovino-*
myces biocellatus, *G. cichoraceorum*, *Neoerysiphe galeopsidis*, *Podosphaera*
fusca, *P. plantaginis*, *P. xanthii*,
, , , -
. *Erysiphe*
heraclei (), *Neoerysiphe galii* *Erysiphe*
alphitoides, – *Sawadaea tulasnei*.
Podosphaera savulescui.
. *Veronica longifolia* *P. fuliginea* –

- , *Hyssopus cretaceus*, *Adonis vernalis*
Scrophularia cretacea, (1996)

Erysiphales

- – *Blumeria graminis* *Festuca cretacea* *Poa palustris*,
Erysiphe cruciferarum *Sisymbrium volgense*, *E. thesii* *Thesium*
procumbens, *Podosphaera aphanis* *Agrimonia grandis* *Fragaria viridis*,
Pseudoidium sp. *Hedysarum grandiflorum*.
Alyssum turkestanicum *Erysiphe cruciferarum*, *Chaerophyllum*
prescottii *Seseli libanotis* *E. heraclei*, *Swida sanguinea* *E. tortilis*,
Artemisia salsoloides *Golovinomyces artemisiae*, *Salvia pratensis*
G. biocellatus, *Euphorbia kaleniczenkoi* *Podosphaera euphorbiae*
Sideritis montana *Oidium* sp.

Ascomycota s.l.,
 Dothideomycetes,
 Sordariomycetes

Ascomycota s.l.
 50- . (,
 1956, 1957, 1958). , . -

1941 . ,
 (, 1957). , -

(, , , 1998),
 (. . . , . . . , . . .),
 (KW).

	Ascomycota	50	21	.	12
9	Sordariomycetes,	35	9	-	
Dothideomycetes	3	3	-	.	
Sordariomycetes,		(12	, 9),	

(9)

Sordariomycetidae, Diaporthales – Valsa
(V. ambiens Acer platanoides, V. sordida
Populus tremula, V. salicis Salix alba,) Leucostoma
translucens Salix alba.
Diaporthe fibrosa
D. eres Rhamnus cathartica Salix alba
Diaporthopsis trinucleata Caragana frutex,
Claviceps purpurea Elytrigia repens,
Poronia punctata (Hypocreomycetidae, –
Xylariomycetidae). « »,
Valsa ambiens, V. sordida Diaporthe fibrosa,
Gnomonia tetraspora,
Euphorbia sp. –
Gibberella pulicaris Robinia pseudoacacia Sydowiella fenestrans
Vincetoxicum hirsutinaria. –
Didymella fenestrans,
Melanconidacea e
Diaporthales.
Valsa,
Leucostoma, Diaporthe Claviceps,
–
, Poronia punctata « –
», Gibberella pulicaris – , Gnomonia tetraspora –

« - ».

– *Diaporthopsis trinucleata* *Sydowiella fenestrans*.

mycetes, Dothideo-

9 . Pleosporales (31), 35
: *Leptosphaeria* (14) *Pleospora* (9).

(26), – 10, – 5 .
6 : *Cucurbitaria caraganae*, *Leptosphaeria ogilviensis*,
L. polini, *L. suffulta*, *Lewia scrophulariae* *Pleospora herbarum* ,
Leptosphaeria

Mycosphaerella, *Lophiostoma quadrinucleatum* ,
Pleospora: *P. media*,
P. phaeocomoides *P. taurica*.

Leptosphaeria disseminata *Elytrigia repens* *Pleospora*
asperulae *Galium octonarium* (. . , KW).
– *Leptosphaeria planiuscula*
Achillea pannonica, *L. taurica* *Jurinea multiflora* *Ornithogalum gussonei*,
Strickeria halimodendri *Phlomis tuberosa*.

Dothideomycetes.

Sordariomycetes Dothideomycetes,

Ascomycota.

Rhytismatales (Leotiomycetes), *Lophodermium*
arundinaceum, *Calamagrostis epigeos*
(, 1958), *Rhytisma salicinum*, *Salix*

alba ,
Aglaospora profusa, *Robinia pseudoacacia*,
 Pyrenulales (Eurotiomycetes).
 Ascomycota
 50 40 ;
 Lamiaceae, Asteraceae Fabaceae.
 (. , 1998),
 .
 Ascomycota ,
 .
 ,
 ,
 ,
 ,
 ,
 .
 50- 90-
 ,
 .
 , (1951, 1956, 1957, 1958 ,),
 , , -
 , ,
 (. , 1959 , ; , 1993; ,
 , 1994).
 ,
 ,
 ,

90 30

(24)

: *Septoria* (19), *Ramularia* (13), *Phoma* (8), *Diplodia* (6), *Cytospora* (5),
Camarosporium (4), *Passalora* (4).
Cercospora *Cylindrosporium*, – *Cladosporium*, *Colletotrichum*,
Phomopsis, *Rhabdospora*. *Pseudocercosporella*, *Spermosporina*,
Stigmina, *Tubercularia*, *Ascochyta*, *Coniothyrium*, *Colletotrichum*, *Cytosporina*,
Melasmia, *Melanconium*, *Microsphaeropsis*, *Microdiplodia*, *Phyllosticta*,
Podoplaconema, *Polystigmina*, *Sphaerellopsis*, *Truncatella*

26

8

65 21

: 28 13 , -15 9 ,
- 24 11 , - 39 20 .

Phoma exigua *Stigmina*
carpophila (), *Cladosporium iridis*, *Ramularia variabilis*
Cylindrosporium umbelliferarum (,), *Septoria ajugae* *Septoria*
salviae-pratensis (,), *Diplodia rhamni* (,).

Cercospora bizzozeriana, *Spermosporina alismatis*, *Septoria salviae*
Septoria scabiosicola

Ramularia
phlomidicola ,
Phlomis tuberosa,

(19 8).

9 5 . , Septoria (7),
Ramularia (5) Phoma (4). Cercospora, Cladosporium, Passalora,
Stigmina, Camarosporium, Colletotrichum, Cyindrosporium, Diplodia,
Phomopsis, Rhabdospora

Septoria astragalicola Astragalus asperx, Septoria calystegiae
Convolvulus lineatus Phomopsis pimpinellae Pimpinella saxifraga.

Cercospora althaeina, Ramularia phlomidicola,
Ramularia variabilis, Camarosporium aequivocum, Phoma phlomidis, Septoria
salviae-pratensis.

7 4 8 5 .

: Cercospora, Cladosporium, Cyindrosporium, Diplodia,
Marssonina, Spermoporina (1), Septoria (2), Ramularia Phoma (3).

, – Ramularia variabilis,
Phoma poolensis var. verbascicola, Septoria salviae, Septoria scabiosicola.

Spermosporina alismatis, *Diplodia rhamni*, *Phoma euphorbiae*.

: 12 5 12 6

Ramularia *Septoria* (7). *Cercospora* ,
– *Cercospora bizzozeriana* *Cercospora radiata*.
8 : *Passalora*, *Pseudo-*
cercospora, *Spermosporina*, *Colletotrichum*, *Cylindrosporium*, *Podoplaconema*, *Rhabdospora*, *Sphaerellopsis*.

Podoplaconema melaenum *Astragalus dasyanthus*
Septoria anemones *Anemone sylvestris*.

(32

15), 7 5 .
Septoria (6),
Cytospora (5), *Diplodia* (5), *Phoma* (3). *Passalora*, *Ramularia*, *Camarosporium*
– *Cladosporium*, *Stigmina*,
Ascochyta, *Coniothyrium*, *Cytosporina*, *Melanconium*, *Melasmia*, *Microsphaeropsis*, *Microdiplodia*, *Phyllosticta*, *Polystigmina*, *Truncatella*
(8 *Cladosporium*, *Stigmina*, *Melasmia*, *Phoma*,
Phyllosticta, *Polystigmina*, *Septoria*), (29
Camarosporium, *Coniothyrium*, *Cytospora*, *Cytosporina*, *Diplodia*, *Melanconium*, *Phoma*, *Microsphaeropsis*, *Microdiplodia*, *Truncatella*).
Cytospora leucosperma, *Cytospora*
schulzeri, *Rosaceae* (,
1993).
Passalora rosicola
Rosa sp., *Stigmina carpophila* *Prunus spinosa*, *Septoria*
populi *Populus italica* (, , , 1994).
Passalora galii *Phyllosticta agrimoniae*,
–
Ramularia polygalae, *Ascochyta lamiorum*,
Phoma exigua, *Septoria ajugae*, *Septoria salviae-pratensis*, *Septoria vassiljevskii*.
(8 *Passalora*, *Ramularia*, *Ascochyta*, *Phoma*,
Septoria), –
Ramularia polygalae – *Polygala cretaceae*,
Septoria vassiljevskii *Phlomis*
tuberosa.

10 Uredinales. 101
Uromyces – (27), 5 *Puccinia* (55)
Melampsora, *Phragmidium*
: 66, – 46, – 45, – 23
6, –
Coleosporium tussilaginis, *Phragmidium potentillae*, *Puccinia coronata*,
P. hieracii, *P. recondita* *P. tanacetii*,
50
Puccinia pachyderma
Gagea maeotica *Uromyces chesneyae* *Calophaca wolgarica*,
Puccinia tulipae *Tulipa biebersteiniana*,
Uredinales.

Puccinia *Uromyces* 80%
 (3.2, 3.3).
 : 45%
Puccinia 70% *Uromyces*.
 Eu-auto- *Puccinia*. ,
 14,3%
Puccinia, 21,7%, – 32,1%, –
 33,3%. Brachy- *Puccinia* –
 41,7%, 25,7%, – 21,7%,
 14,3%. ,
 ,
Puccinia *Uromyces* -
 (3.4, 3.5). -
 ,
Puccinia (57,1%),
Uromyces , ,
 186 113 34
 Uredinales
 Asteraceae Fabaceae – 14 ,
 Poaceae Rosaceae 9 ,
 – 1-7 .
 (, ,)
 , 28
 Basidiomycetes (, 1993).

3.2.

Puccinia

			« »		« ' »		« »		« »	
	N	%	N	%	N	%	N	%	N	%
Micro-	9	16,4	6	17,1	3	13,0	4	14,3	-	-
Hemi-	4	7,3	2	5,7	1	4,3	2	7,1	1	8,3
Eu-auto-	12	21,8	5	14,3	5	21,7	9	32,1	4	33,3
Eu-hetero-	13	23,6	8	22,6	6	26,1	7	25,0	1	8,3
Brachy-	11	20,0	9	25,7	5	21,7	4	14,3	5	41,7
Cata-	3	5,5	2	5,7	2	8,7	1	3,6	1	8,3
Opsis-	3	5,5	3	8,6	1	4,3	1	3,6	-	-
	55		35		23		28		12	

3.3.

Uromyces

			« »		« ' »		« »		« »	
	N	%	N	%	N	%	N	%	N	%
Micro	5	18,5	3	15,8	2	14,3	1	11,1	1	20,0
Hemi	2	7,4	2	10,5	-	-	-	-	-	-
Eu-auto	8	29,6	6	31,6	5	35,7	1	11,1	-	-
Eu-hetero	11	40,7	8	42,1	6	42,9	6	66,6	4	80
Opsis	1	3,7	-	-	1	7,1	1	11,1	-	-
	27		19		14		9		5	

3.4.

Puccinia

			« »		« »		« »		« »	
	N	%	N	%	N	%	N	%	N	%
-	2	3,6	1	2,9	-	-	2	7,1	-	-
	8	14,5	4	11,4	3	13,0	3	10,7	2	16,7
	16	29,1	12	34,3	6	26,1	5	17,9	1	8,3
	8	14,5	5	14,3	3	13,0	2	7,1	3	25,0
	21	38,2	13	37,1	11	47,8	16	57,1	6	50,0
	55		35		23		28		12	

3.5.

Uromyces

			« »		« »		« »		« »	
	N	%	N	%	N	%	N	%	N	%
	1	3,7	-	-	-	-	1	11,1	-	-
-	6	22,2	6	31,6	3	21,4	2	22,2	1	20,0
	4	14,8	2	10,5	-	-	3	33,3	1	20,0
	8	29,6	6	31,6	4	28,6	2	22,2	2	40,0
-	8	29,6	5	26,3	7	50,0	1	11,1	1	20,0
	27		19		14		9		5	

1959; , , 1966; , 1973 , , 1974 , 1975 , 1980, 1988, 1992; , , 1977; , 1980, 1988; , 1990; , 1993; , , , 1998; Prydiuk, 2007)

191 83 , 33
8 Basidiomycetes ,
9 «Ainsworth & Bisby's Dictionary of the Fungi » (2001).

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« , ».
61
(, 1954–1956; , 1973 , 1974 , 1975 , 1980, 1992; , , 1977; , , , 1998), 33 , 13 2
Basidiomycetes. 60 Agaricales,

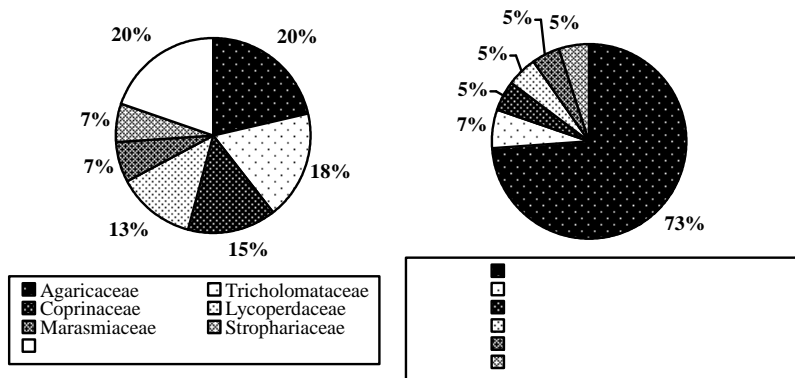
Polyporus rhizophilus – Polyporales.

Agaricaceae (13), Tricholomataceae (11), Coprinaceae (9), Lycoperdaceae (8), Marasmiaceae Strophariaceae (4) (.3.1,). 1–2 , *Agaricus* (9), *Coprinus* (7), *Marasmius* (4), *Calvatia* *Mycena* (3).

: – (45), 4

(, , -
) 3 (.3.1,).

Amanita vittadinii,
Calocybe gambosa, *Entoloma prunuloides* *Hebeloma sacchariolens*,



. 3.1. « ' » ()
()

Agaricus arvensis, *A. campestris*, *A. tabularis*, *Calvatia caelata*, *Coprinus comatus*, *Disciseda candida*, *Macrolepiota excoriata*, *Marasmius oreades*, *Stropharia coronilla*. *Agaricus macrosporus*, *Agrocybe praecox*, *Bovista nigrescens*, *Calvatia lilacina*, *Coprinus atramentarius*, *Lycoperdon candidum*, *Marasmius collinus*, *Mycenastrum corium*, *Psathyrella pygmaea*, *Stropharia melasperma*, *Tephrocybe ambusta*, *Tulostoma brumale*, *Volvariella pusilla*.

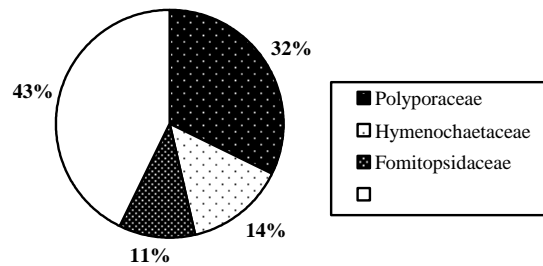
(*Calvatia candida*, *Melanoleuca striimarginata* *Mycena avenacea*), (*Agaricus tabularis*), (*Limacella steppicola*)

Coprinus niveus *C. sterquilinus*, *Psilocybe*

coprophila *P. merdaria* .
 , *Galerina hypnorum* –
 – *Gerronema postii* *Leptoglossum*
griseopallidum –
 – *Crepidotus luteolus* (), *Pleurotus eryngii* var.
ferulae (*Ferula orientalis*) *Polyporus rhizophilus* (
),
 . ,
 (*Amanita vittadinii* *Entoloma prunuloides*) ,
 (*Hebeloma sacchariolens*) ,
 ,
 ,
 (*Clitocybe cerrusata*,
Mycena flavoalba *Mycena speirea*).

« ».
 -
 , , , - .
 , .
 (1993), 28 6
 Basidiomycetes. 16 Polyporales, 5 –
 Russulales, 4 – Hymenochaetales, 1 – Agaricales,
 Auriculariales Tremellales.
 Polyporaceae (9), Hymenochaetaceae
 (4) Fomitopsidaceae (3).
Polyporus (4), *Peniophora* (3) *Stereum* (2).

Fomes fomentarius, *Fomitopsis pinicola*, *Laetiporus sulphureus*, *Peniophora cinerea*, *P. pini*, *P. quercina*, *Polyporus squamosus*, *Stereum hirsutum* *Vuilleminia comedens*.



. 3.2.

« »

(14) *Antrodia heteromorpha*, *Daedalea quercina*, *Fistulina hepatica*, *Peniophora quercina*, *Stereum gausapatum* *Vuilleminia comedens*, *Quercus robur*, *Fuscoporia contigua*, *Irpex lacteus*, *Peniophora cinerea*, *Polyporus badius*, *P. brumalis*, *Stereum hirsutum* *Tremella mesenterica* (*Cerasus vulgaris*, *Frangula alnus*, *Ulmus laevis*).

« »

« ».

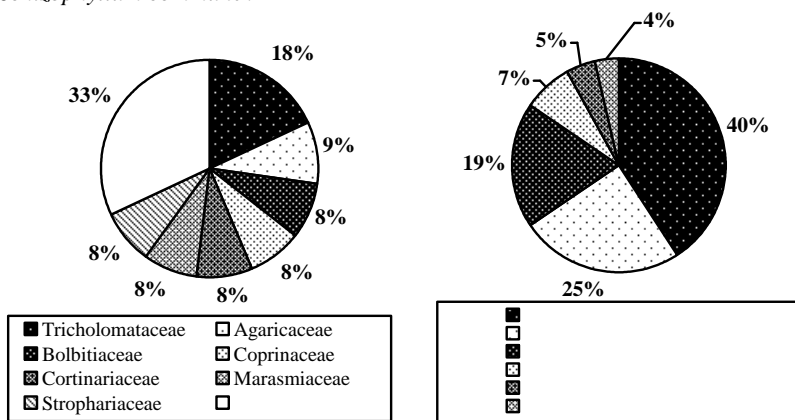
110 (, 1959; , 1980, 1992; , 1980, 1988; Prydiuk, 2007). 53 ,

21 7 Basidiomycetes.

Agaricales (94), – Russulales (6), Polyporales (5) Boletales (3). , Hymenochaetales Phallales. Tricholomataceae (20), Agaricaceae (10), Bolbitiaceae, Coprinaceae, Cortinariaceae, Marasmiaceae Strophariaceae (9) (. 3.3,). *Agaricus*, *Coprinus* *Marasmius* (6), *Entoloma* *Stropharia* (5), *Lactarius* *Mycena* (4). *Agaricus campestris*, *Laetiporus sulphureus*, *Macrolepiota excoriata*, *Marasmius oreades*, *Paxillus involutus*, *Schizophyllum commune*, *Stropharia coronilla*.

- : - 45, - 27, - 21, - 8, - 5, - 4 (. 3.3,). , , (69) (49), 13 Tricholomataceae (15), Cortinariaceae (8), Coprinaceae Marasmiaceae (7), Russulaceae (6), Agaricaceae Polyporaceae (5) (. 3.4). - (23), (20) (19).

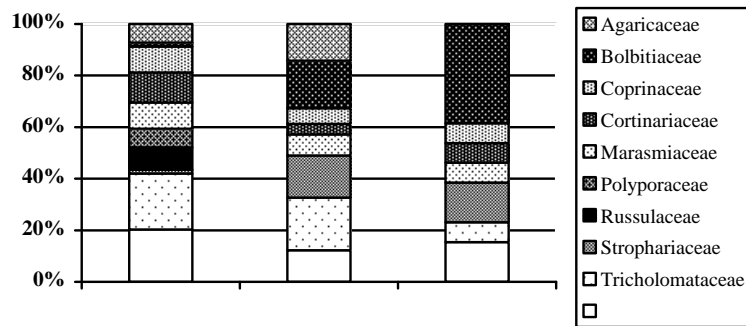
(. 3.5). *Hebeloma*
sacchariolum, *Inocybe rimosa*, *Paxillus involutus* *Scleroderma aurantium*,
 (*Amanita crocea*, *Cortinarius alboviolaceus*, *Entoloma prunuloides*,
Hebeloma crustuliniforme, *Inocybe posterula*, *Lactarius controversus*,
Leccinum scabrum, *Russula foetens*, *Tricholoma populinum* .)
Armillaria
mellea, *Coprinus micaceus*, *Mycena vitilis*, *Polyporus squamosus*
Schizophyllum commune.



. 3.3. « »
 () - ()

Agaricus arvensis, *A. xanthodermus*, *Coprinus atramentarius*, *Lycoperdon*
perlatum, *Macrolepiota procera*, *Marasmius oreades*.
Clitocybe gibba, *Collybia*
dryophila. *Mycena pura*.

Tricholomataceae (10), Bolbitiaceae (9), Strophariaceae
 (8), Agaricaceae (7) Marasmiaceae (4) (. 3.4).



. 3.4.

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(33) ,

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5

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3

(. 3.5).

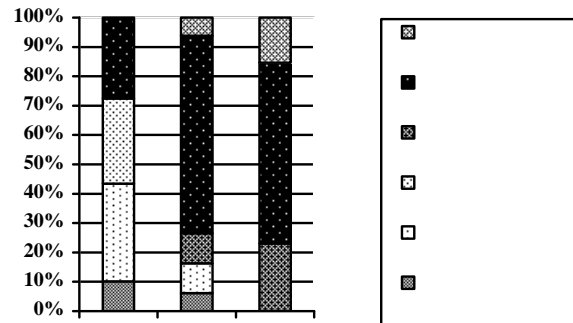
Agaricus augustus, *A. campestris*, *Agrocybe pediades*, *Agrocybe gambosa*, *Calvatia caelata*, *Macrolepiota excoriata*, *Marasmius oreades*, *Melanoleuca grammopodia*, *Stropharia coronilla*.

, – *Panaeolus campanulatus*, *P. semiovatus*, *Psilocybe coprophila*, *P. merdaria*, *Stropharia semiglobata*.

(*Entoloma clypeatum*, *E. lampropus*, *E. sericeum*, *Hebeloma sacchariolens*, *Amanita vittadinii*).

(*Marasmius graminum*, *M. limosus*, *Pholiota lutaria*).

, 13 ,



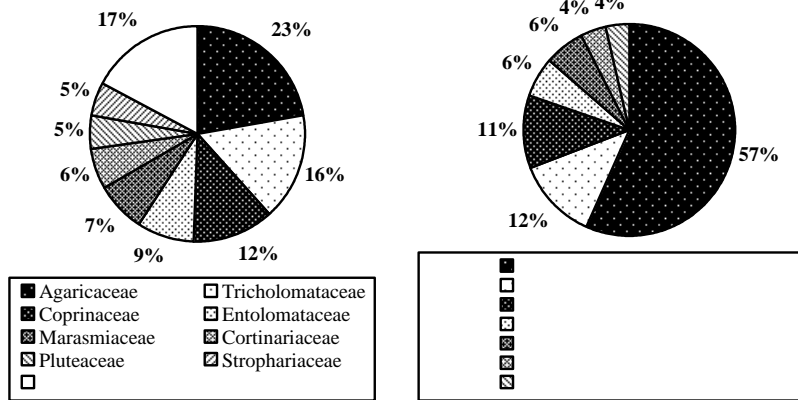
. 3.5.

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»

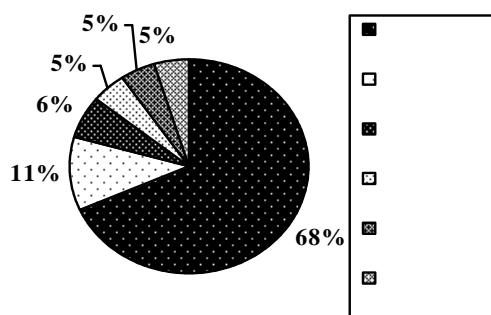
-

81 (, 1954–1956, 1959; , 1966; , 1973 , , 1974 , 1975 , 1980, 1988, 1992; , 1977; , 1990; , , 1998), 43 , 17 4 Basidiomycetes. 73 Agaricales, 5 – Polyporales, 2 – Hymenochaetales, 1 – Russulales. Agaricaceae (18), Tricholomataceae (13), Coprinaceae (10), Entolomataceae (7), Marasmiaceae (6), Cortinariaceae (5), Pluteaceae Strophariaceae (4) (. 3.6,). Agaricus (11), Coprinus Entoloma (7), Marasmius (5), Lepiota Psathyrella (3).



3.6. « »
 () - ()
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 : -46 , -10,
 -9, -5,
 - 3 (. 3.6,).
 ,
 , 14 , 3 -
 , 1 - ,
 (43), , 7 , 4

3 -
(. 3.7).



. 3.7.

« » -

Agaricus augustus, *A. campestris*, *Calvatia caelata*, *Coprinus comatus*, *Macrolepiota excoriata*, *Marasmius collinus*, *M. oreades*, *Stropharia coronilla*. (*Calocybe constricta*)

Limacella

steppicola,

Agaricus

tabularis,

Entoloma (*E. neglectum*, *E. nidorosum*, *E. parkensis*, *E. prunuloides*, *E. rhodocylix*, *E. sinuatum*),

Amanita vittadinii,

(*Clitocybe cerrusata*, *Marasmius bulliardii*, *Mycena flavoalba* *M. speirea*)

« ».

Coprinus sterquilinus,

Psilocybe coprophila *P. merdaria*.

, *Leucocoprinus bohusi*,

13

8

(*Bjerkandera adusta*, *Coprinus truncorum*, *Coriolopsis trogii*, *Flammulina velutipes*, *Irpex lacteus*, *Phellinus igniarius*, *P. tremulae* *Stereum hirsutum*),
(*Hebeloma sacchariolens* *Tricholoma album*), *Collybia acervata*.

Coprinus niveus

Flammulaster subincarnatus,

(*Agaricus xanthodermus*, *Entoloma clypeatum* *Lepiota scobinella*),

Panus

tigrinus,

4.

80-
146 36
() 52 , 29 , 13
, 6 (, , , 1988).
a.
« » 29
1925 .
(, 1932).
2005 .
2005 .
« » ()
« » (),

14, 6, 4. « »
 (), (1953-
 1956) (, 1958), 2005 .

– 18

4 (Diderma
spumarioides), (*Metatrichia vesparia*,
Craterium leucocephalum, *Mucilago crustacea*) –

: *Tubulifera* (*T. arachnoidea*, syn. *T. ferruginosa*); *Lycogala* (*L. epidendrum*); *Cribraria* (*C. cancelata*, *C. tenella*); *Arcyria* (*A. incarnata*, *A. obvelata*); *Hemitrichia* (*H. clavata*); *Metatrichia* (*M. vesparia*); *Trichia* (*T. favoginea*, *T. varia*); *Comatricha* (*C. typhoides*); *Stemonaria* (*S. longa*); *Stemonitis* (*S. axifera*, *S. splendens*); *Craterium* (*C. leucocephalum*); *Diderma* (*D. spumarioides*); *Didymium* (*D. annellus*, *D. melanospermum*); *Mucilago* (*M. crustacea*).

: *Lycogala epidendrum*, (« »),
 ; *Mucilago crustacea* –
 ; *Stemonitis axifera*
Arcyria obvelata – ; *Trichia favogi-*

nea – ; *T. varia* – ;
 ; *Stemonitis splendens* – ;
Tubulifera arachnoidea – ; *Metatrichia vesparia* –

– *Cribraria tenella*, *Diderma spumarioides*
Stemonaria longa (); *Comatricha typhoides* ();
Craterium leucocephalum ();
Didymium melanospermum ().

Didymium annellus
Hemitrichia clavata.

() 1925 . -
 (-), -
 , 1925 2005 .
 () ,
 . 27 29
 (),
 (), ,

9 : *Arcyria obvellata* (. . -
Arcyria nutans (Bull.) Grev.), *Comatricha typhoides*, *Craterium leucocephalum*, *Didymium melanospermum*, *Hemitrichia clavata*, *Metatrichia vesparia* (. . *Hemitrichia vesparium* (Batsch) Macbr.), *Mucilago crustacea* (. . *Mucilago spongiosa* (Leysser) Morgan), *Trichia varia* *Tubulifera arachnoidea* (. .

Tubifera ferruginosa). -
 20 , -
 ,
Physarum Perichaena, o-
 4 3 . ,
 10 ,
 ,
Lycogala epidendrum.
Craterium leucocephalum, Didymium melanospermum,
Metatrichia vesparia Mucilago crustacea, .
 – *Cribraria aurantiaca, Fuligo septica*
Stemonitis fusca. , , .
 ,

 , : , , ,
 , , -
 1925 .
 (KW). *Arcyria* –
A. ferruginea, ,
 , (, 1932).
 , ,
 , KW (Fungi of
 Ukraine, 1996).
 ,

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 , , -
 : 9
 , ,
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 : (-),
 (« »).
 Erysiphales
 50-
 , , , ,
 , , , ,
 ,
 1968 . *Sphaerotheca savulescui* (Sandu-
 Ville, Mititiuk, Iacob, 1968), - 1980 .
Leveillula cylindrospora (Braun, 1980).
 ,
 ,
 (1958),
 12 4 ,
 , 20 ,
 1977 . (. .)
 () .
 17 , 7
 Erysiphales, , 12 5
 (, 1979 ,).

9 3 (-) (, 1979).
S. savulescui (= *Podosphaera savulescui*) (, 1987).
« » (, , 1987).
70-80-
-
(, , 1988), 30 , -
Erysiphales.
1986 . . .
, ,
Erysiphe convolvuli, *E. euonymi*, *E. heraclei*, *E. knautiae*,
Golovinomyces artemisiae, *G. depressus*, *G. echinopis*, *Leveillula duriaei*
Podosphaera euphorbiae. , *E. astragali*,
1979 . . . , (, , 1989),
Leveillula,
« »,
(, 1989).
1989 . -
. . . .
Erysiphe heraclei, *E. trifolii*, *Golovinomyces biocellatus*, *G. cichoraceorum*,
G. cynoglossi, *Leveillula duriaei*, *L. scolymi*, *Neoerysiphe galeopsidis*, *N. galii*,
Podosphaera fusca *P. pannosa*, *N. galii* - .
- ,
2005

Erysiphe howeana, *E. lonicerae*, *E. palczewskii*, *E. prunastri*, *E. tortilis*,
E. vanbruntiana, *Leveillula helichrysi*, *L. lactucarum*, *Podosphaera clandestina*,
P. leucotricha, *P. macularis*, *P. tridactyla* Sawadaea tulasnei.

Erysiphe knautiae, *E. limonii*, *E. prunastri*, *E. thesii*, *Golovinomyces echinopis*, *G. moro-
czkovskii*, *Leveillula helichrysi*, *L. lactucarum* *Podosphaera savulescui*.
L. helichrysi.

50-

1988 .

2003

(Boyle, Braun, 2005).

2004 .

(2006)

54 10

27 6

Erysiphales.

Erysiphe s.l. (14),

Podosphaera *Golovinomyces* 3-4 .

Leveillula,

Erysiphe cruchetiana, *E. limonii*, *E. prunastri*, *E. tortilis* *Podosphaera clandestina*.

39

Festuca pratensis *Blumeria graminis*, *Peucedanum ruthenicum* *Erysiphe heraclei*, *Betula pendula* *Erysiphe ornata* *Astragalus cicer* *Erysiphe trifolii*

« » -

27 . , ,

Erysiphe s.l. (9)

Podosphaera s.l. (8), *Leveillula*

Sawadaea.

Podosphaera pannosa, . , -

– *Erysiphe*

buhrii, *E. limonii*, *Leveillula cylindrospora*, *Podosphaera dipsacearum* *P. ferruginea*.

Golovinomyces cichoraceorum , *G. cynoglossi* *Neoerysiphe galeopsidis* .

41

- . *Crambe tataria*, *Adonis vernalis* *A. wolgensis*

Bromopsis riparia *Blumeria graminis*, *Gypsophila paniculata* *Erysiphe buhrii*, *Ajuga reptans* *Golovinomyces biocellatus* *Potentilla anserina* *Podosphaera aphanis* , -

« ».

81

(45),
(. 3.1). *Erysiphe* s.l. (18),
Podosphaera s.l. (11) *Golovinomyces* (8).
(4) *Leveillula* -
()

- *Golovinomyces cichoraceorum*
, *Erysiphe aquilegiae* *Thalictrum minus*,
E. heraclei , *E. polygona*
Polygonum Rumex, *E. trifolii* , *Trifolium alpestre*,
Golovinomyces biocellatus *Salvia*, *Leveillula duriaei*
, *L. helichrysi* *Helichrysum arenarium* *L. scolymi*
Inula.
(*Erysiphe limonii*, *E. prunastri*, *E. thesii*, *Golovinomyces echinopsis*, *G. morozkovskii*, *Leveillula cylindrospora* *Podosphaera clandestina*),
(*Erysiphe astragali*, *E. lonicerae*, *E. tortilis*, *E. vanbruntiana*,
Neoerysiphe galii, *Podosphaera dipsacearum*).

110 -

Adonis wolgensis,
Capsella bursa-pastoris *Erysiphe cruciferarum*,
Onobrychis tanaitica *Oxytropis* sp. *Erysiphe trifolii*, *Inula hirta*
Scorzonera mollis *Golovinomyces cichoraceorum*, *Salvia nutans*
S. tesquicola x *S. nutans* *Leveillula duriaei*, *Artemisia marschalliana*
L. lactucarum, *Inula germanica* *I. oculus-christi* *L. scolymi*, *Dipsacus*
pilosus *Podosphaera dipsacearum*, *Malus sylvestris* *P. leucotricha*
Bryonia alba *Melampyrum argyrocomum* *P. xanthii*.

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 - , , , . -
 ,)
 .
 Erysiphales . . (, 1958)
 . . (, 1979 , , 2005). -
 , . . « »
 , , .
 ,
 . . . (KW). , ,
 1955 .
 . . , 13 , -
 , 1986
 19
 , ,
 (,
 , , 1988). 2005 .
 - 122
 , (, 2005).
 14 0
 (47).
 Sordariomycetes 51 24 , 11 , 7
 3 . Sordario-
 mycetidae – 25 10 , – Xylariomycetidae
 (20 , 9); Hypocreomycetidae 7 4 ;
 , *Trichosphaeria notabilis*, Tricho-
 sphaeriales .
 Diatrypaceae
 Valsaceae (11 4). ,
 , *Diatrype stigma*, *Diatrypella quercina*, *Valsa ambiens*

Xylariomycetidae
Eutypella,
Eutypella, 7
 6
Eutypella *E. acericola*
Acer campestre *A. tataricum*,
Eutypella *Acer*
 – *Eutypella cerviculata* *E. stellulata* *Acer campestre*
A. platanoides *Eutypa* (
 Diatrypaceae Xylariales)
 – 5 7 ,
 (, , , 1986).
Eutypa,
Acer *Ulmus*, *Eutypa scabrosa*, *Ulmus minor*,
 Amphisphaeriaceae, *Discostroma corticola*
Rosa sp. *Armeniaca vulgaris*
Coniochaeta ligniaria (*Rosellinia igniaria* (Grev.)
 Nitschke, Xylariales),
 Coniochaetales (Huhndorf,
 Miller, Fernandez, 2004).
 Sordariomycetidae
 Valsaceae. , , *Valsa*
Leucostoma,

, , ; – *Valsa melanodiscus*, *V. pini*, *Valsella adhaerens* *V. diatrypa* – .

Diaporthales

Allantoporthes tesella (Melanconidaceae) *Fraxinus excelsior*
Gnomonia rubi (Gnomoniaceae) *Rubus caesius*.

Schizothecium hispidulum (Lasiosphaeriaceae,
Sordariales). ;

2005 (. . .) . , , , ,

Valsa ambiens – 10 .

, , *Diaporthe eres*
Phomopsis occulta Traverso *Pinus sylvestris*.

D. eres , (, , 1991).

–
, , *Valsa Leucostoma*,
(*Leucostoma niveum*
Valsa melanodiscus), –

(*Valsa ambiens* *Cytospora leucosperma* *Amygdalus nana*, *Caragana frutex*). *Cytospora*
Valsella, ,

Hypocreomycetidae

Nitschkiaceae, Coronophorales: *Acanthonitschkea tristis*, *Nitschkia grevillei* *N. cupularis*.

Nectriaceae,

Nectria cinnabarina

Nectria pinea

Nectria flavoviridis

Cosmospora episphaeria (*Nectria episphaeria* (Tode) Fr.)

Eutypella acericola *Eutypa lata*.

Sordariomycetes

Erysiphales,

42 30

Dothideomycetes, Eurotio-

mycetes, Leotiomycetes, Orbiliomycetes, Pezizomycetes Taphrinomycetes.

: *Orbilina vinosa* *Acer campestre*,

Tympanis saligna *Sirodothis saligna* *Salix acutifolia*, *Leptosphaeria*

endiusae *Ophiobolus fruticum* *Glycyrrhiza echinata*, *Sporormiella*

intermedia, *S. lageniformis* *Saccobolus glaber*

93 (

Erysiphales) 47

Rosaceae,

Salicaceae Aceraceae.

(1958),

50-

30

80- , , 1976-1977 ., -
(, , ., 1988).

26

16 . - ,
2005 . . . ,

67 24 .

Septoria (20),
Ramularia (7), *Phoma* (6), *Cytospora* (5), *Cercospora* *Passalora* (3
) . *Bipolaris*, *Cladosporium*, *Dinemasporium*, *Fusicladium*,
Passalora, *Pseudocercospora*, *Pseudocercospora*, *Stigmata*, *Tubercularia*,
Amerosporium, *Discula*, *Cryptosporiopsis*, *Cylindrosporium*, *Diplodia*,
Phomopsis, *Polystigmata*, *Phyllosticta*, *Seimatosporium*, *Sphaeropsis* -
23 11

44 13 .

(14), -
(36) .

Ramularia (37 13), (28 16)
Septoria, (17 10)
 « », -
 - 21 10 ,
 - 7 6 . *Quercus robur*,
Discula umbrinella, -
Phomopsis quercina . *Acer*
Tubercularia vulgaris, *Cytospora leucostoma*, *C. rubescens*, *Phyllosticta acerina*,
Ulmus – *Cytospora leucostoma*, *C. rubescens*, *Sphaeropsis ulmicola*,
Populus – *Cytospora chrysosperma*, *C. leucosperma*, *C. leucostoma*, *Sphaeropsis populi*. *Phoma pomorum*
Prunus stepposa -
Cladosporium iridis *Iris pineticola*.
Septoria geranii *Geranium sanguineum*,
 (, 2004),
Septoria cannabina, *Cannabis sativa*.

, *Septoria* (5) *Phyllosticta* (1),
 (10) , ,
 « » , -
 , -
 ,
 : - 8 6 , - 9
 4 . ,
Septoria (5), *Passalora* (2), *Ramularia* (2). -
 , *Septoria caraganae*
Caragana arborescens,
 ; *Pseudocercospora dictamni* *Dictamnus gymnostilis*,
 ; - *Passalora*
circumscissa *Prunus stepposa*;
Septoria convolvuli *Convolvulus arvensis*;
Seimatosporium salicinum -
Salix fragilis,

(, 1958).

12 , - 7, - 8 .

15 7

22 6

Septoria (15), *Ramularia* (6), *Cercospora* (4), *Phoma* (3). *Dinemasporium*, *Passalora*, *Pseudocercospora*, *Pseudocercosporella*, *Ramularia*, *Srigmina*, *Cylindrosporium*, *Cytospora*, *Polystigmina*, *S imatosporium* .

(*Dinemasporium*)

Septoria.

Cercospora bizzozeriana *Cardaria draba*, *C. centaureae*
Centaurea trichocephala, *C. scorzonerae* *Ramularia silvestris* *Cephalaria*
uralensis, *Pseudocercospora opuli* *Viburnum opulus*, *Septoria agrimoniae-*
eupatoriae *Agrimonia eupatoria* L. *S. rivini* *Prionitis falcaria*.

Septoria.

1953-1956 .

45 (, 1958).
 Uredinales 1979 .,
 30
 (, 1980).
 « »
 (, , ., 1987).
 (, , , .,
 1988). 2005 .
 (,) 35
 81
 Uredinales, *Puccinia* 46 , *Uromyces* – 22,
Melampsora – 6, *Phragmidium* – 4 . *Coleosporium*, *Pucciniastrum*
Tranzschelia -

Uromyces (27,2%)

Uredinales *Uromyces*
 20,8%, 21,7%, – 27,6%,
 – 28,2% (, , , 1998).
 106
 84 , 29 Magnoliophyta.
 Uredinales,
 Asteraceae (25), Apiaceae (13) Fabaceae (12).
 Asteraceae (16), Fabaceae (10),
 Apiaceae (9) Poaceae (5),
Puccinia *Uromyces* -

(.4.1).

4.1.

Puccinia *Uromyces*
(%)

	-	-	-	-	-
<i>Puccinia</i>	4,3	23,9	21,7	13,0	36,9
<i>Uromyces</i>	-	27,3	13,6	27,3	31,8

Puccinia -
(36,9%) (21,7%) , (*Uromyces* -
31,8% 13,6%),
-
Uromyces (
27,3%) , *Puccinia* (13,0% 23,9%).

: Eu-hetero- - 28 (34,6%), Eu-auto- - 19
(23,5%), Brachy- - 12 (14,8%), Micro- - 12 (14,8%), Hemi- -
6 (7,4%), Ophis- Cata- - 2 (2,5%).

(, , , 1998).

Uredinales,
: 56, - 41, -
23 .

Uredinales, 60% 9

Uredinales

12

(1950- , 1970- 2005): *Melampsora euphorbiae*, *Puccinia calcitrapae*, *P. caricina*, *P. coronata*, *P. falcariae*, *P. hieracii*, *P. punctata*, *P. schirajewskii*, *P. tanacetii*, *Uromyces geranii*, *U. limonii* *U. rumicis*.

1957, 1959; , , 1966; , 1973 , 1974 , 1980, 1992; , , 1977).

12 (, , , 1988),

Laetiporus sulphureus (, , , 1988) . . . (1955)

Calvatia candida . . . , 84

2004 . -

(KW), (2004–2005).

224 86 , 32 8

Basidiomycetes, 9

«Ainsworth & Bisby's Dictionary of the Fungi» (2001). 18

, 41 – (, 2005 ; Prydiuk, 2007a,b). -

(, , ,), -

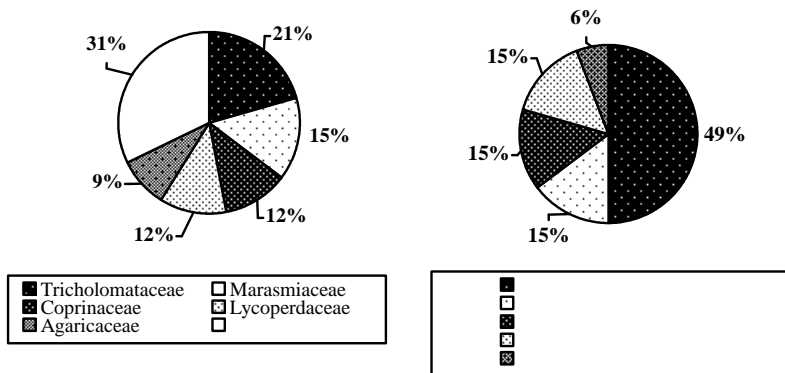
« ».

34

21 , 14 3 (Agaricales – 29 , Phallales – 3, Polyporales – 2).

Tricholomataceae (7 ,) Marasmiaceae (5 ,)

Coprinaceae Lycoperdaceae (4) (. 4.1,).



. 4.1.

« »

() - ()

Marasmius (5), *Agaricus*

Coprinus (3).

Agrocybe pediades, *Bovista dermoxantha*, *Lycoperdon lividum* *Marasmius wynnei*;

(*Calyprella capula*, *Coprinus herinkii* *C. utrifer*)

Agaricus tabularis,

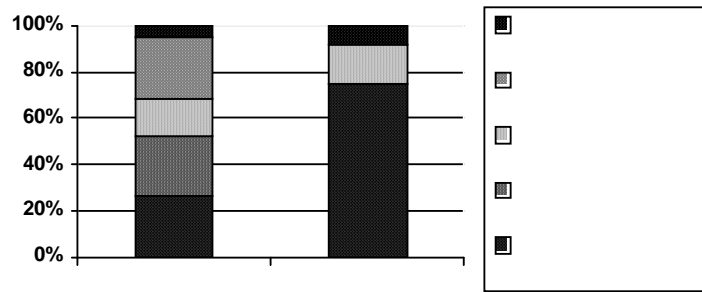
, *Polyporus rhizophilus*

(17),

(5

), (. 4.1,).

(12). (19) -



.4.2.

« » -

(, 5 - 5 ,
 - 3, - 1), ,
 , ,
 (. 4.2). -

Agaricus haemorrhoidarius *Marasmius wynnei*.

Collybia
dryophila (- var. *dryophila* var.
aquosa) *C. peronata*, *Marasmius epiphyllus*

Crepidotus
cesatii, *Laetiporus sulphureus*, *Marasmius rotula* *Mycena inclinata*.
Coprinus herinkii

(9), (4.2). *Agrocybe pediades*, *Bovista dermoxantha*, *Marasmius wynnei*.

« ».

137 67

, 30 8 (Agaricales – 105, Boletales Polyporales – 7, Phallales – 6, Hymenochaetales – 5, Russulales – 4, Thelephorales – 2, Auriculariales – 1).

Tricholomataceae (25), Agaricaceae, Coprinaceae Cortinariaceae (15), Lycoperdaceae Pluteaceae (8), Bolbitiaceae Geastraceae (6) (4.3).

Coprinus (11), *Inocybe* (9), *Lepiota* (7), *Mycena* (6), *Pluteus* (5). 15

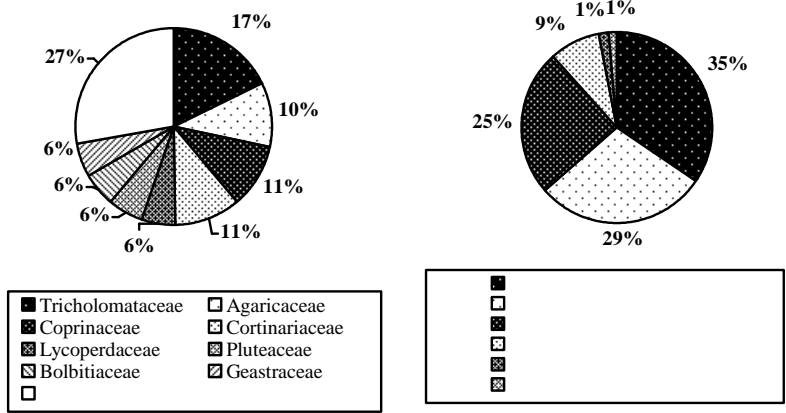
Conocybe microrhiza, *Entoloma exiguum*,

Tricholoma focale,

Leucocortinarius bulbiger, *Myriostoma coliforme* (36

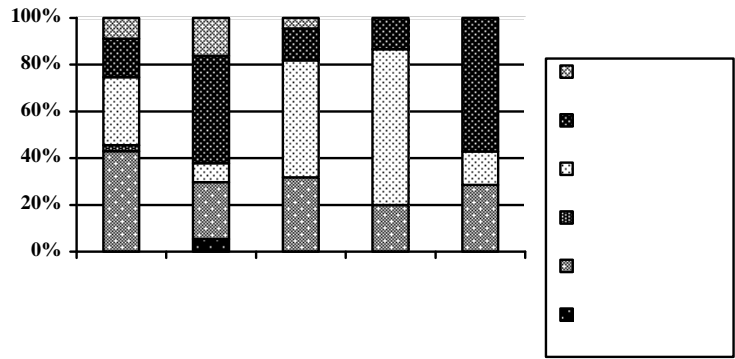
63

Boletus edulis, *B. pinicola*, *Entoloma subradiatum*, *Fistulina hepatica*, *Inocybe maculata*, *I. splendens*, *Lepiota cristata*, *Mycena inclinata*, *Pluteus boudieri*, *P. cervinus*, *Psathyrella nolitangere*, *Suillus granulatus*, *S. luteus*.



4.3. « »
 () - ()
 (47)
), (40), (34)
 (12). ,
 (. 4.3,).
 (79), (37),
 (22), (15) (7) (. 4.4).
 :
 (*Disciseda compacta*) (*Leucoagaricus
 cretaceus*).
 Agaricales (65
), Phallales (4), Polyporales (3), Boletales, Hymenochaetales Russulales
 (2), Auriculariales (1).
 Tricholomataceae (16), Coprinaceae (12), Agaricaceae (10),

Pluteaceae (6), Bolbitiaceae Cortinariaceae (5).
 -
 (34), (24) (13)
 (. 4.4).



. 4.4.
 « » -
 ,
 ,
 (,
 , 1990).

Agaricus xanthodermus, *Lepiota cristata*, *Lycoperdon molle*
Macrolepiota procera .
 (*Conocybe brachypodii*, *Coprinus*
callinus, *C. cortinatus*, *C. lagopides*, *Leucoagaricus crystallifer*, *Melanoleuca*
griseofumosa, *M. microcephala*, *Pholiotina mairei* *Psathyrella scotospora*).

Auricularia auricula, *Coprinus domesticus*, *Daedalea quercina*, *Fistulina*
hepatica () ,

Fomes fomentarius, *Hypholoma fasciculare*, *Mycena inclinata*, *Pluteus cervinus*
Stereum hirsutum. *Entoloma exiguum* *Pluteus boudieri*

Amanita pantherina, *Boletus chrysenteron* *Scleroderma verrucosum*.
(*Inocybe griseovelata*)

Collybia dryophila,

C. peronata *Mycena pura*.

7

(Agaricales – 23, Boletales – 6, Hymenochaetales, Russulales
Thelephorales – 2, Phallales Polyporales – 1),

Tricholomataceae (8), Cortinariaceae (5),

Boletaceae Lycoperdaceae (3).

(17),

(9) (6) , (3)

(2) (. 4.4).

Amanita muscaria,

Boletus edulis, *B. pinicola*, *Suillus granulatus*, *S. luteus* *Thelephora*
terrestris. (*Inocybe cicatricata*, *I. dulcamara* var. *pygmaea*

I. striata) , *Tricholoma focale*

Bovista dermoxantha, *Coltricia perennis*,

Lycoperdon perlatum, *Macrolepiota procera* *Marasmius oreades*. *Inocybe*
microrhiza

Auriscalpium vulgare, *Collybia butyracea*

C. dryophila.

Agaricales (17), Polyporales (3),

Auriculariales Phallales

(1).

Cortinariaceae

Tricholomataceae (4), Bolbitiaceae, Pluteaceae Polyporaceae (3).

(11)

(7), , - (. 4.4).

Auricularia auricula, *Coprinus micaceus*, *Laetiporus sulfurous*, *Pluteus salicinus* *Polyporus squamosus*. *Pluteus boudieri*

Cystolepiota seminuda, *Lepista sordida* *Marasmius wynnei*. *Conocybe brachypodii* *Pholiotina mairei*

Inocybe maculate.

Agaricales (9), Polyporales (4),

Auriculariales Hymenochaetales (1).

Coprinaceae 4 , 1-2

(10), , - (. 4.4).

Auricularia auricula, *Coprinus domesticus*, *Laetiporus sulfureus* *Phellinus igniarius*.

(

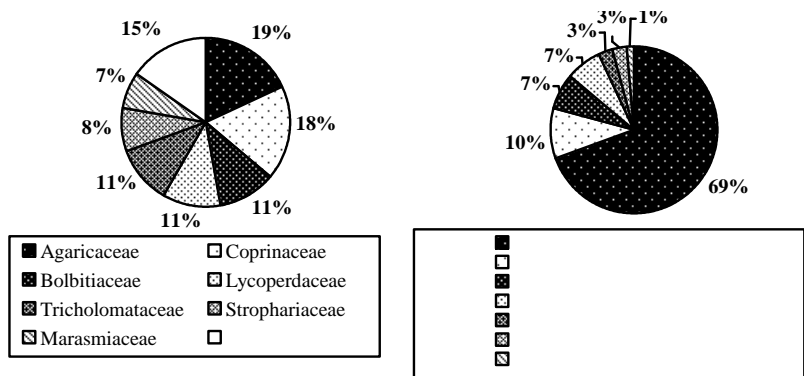
)

« ». 72 ,

35 , 13 3 (Agaricales - 70 , Polyporales Russulales - 1).

Agaricaceae Coprinaceae (13), Bolbitiaceae, Lycoperdaceae Tricholomataceae (8), Strophariaceae (6), Marasmiaceae (5) (. 4.5,).

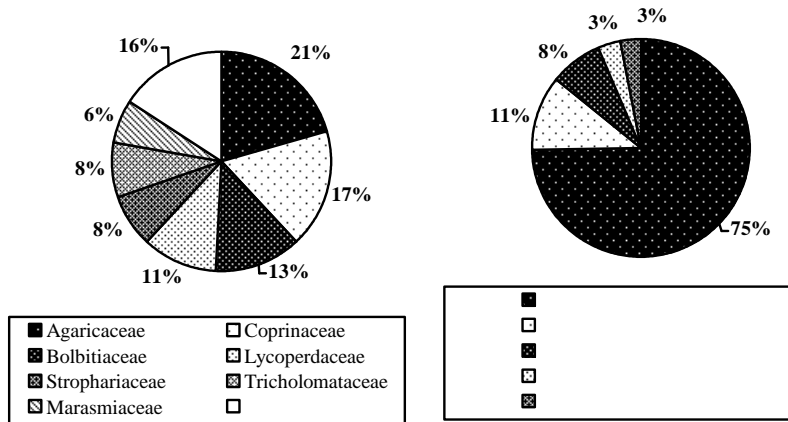
Agaricus (9), *Psathyrella* (6), *Coprinus* (7), *Agrocybe*
Calvatia (4).
Calocybe constricta, *Clitopilus scyphoides*, *Gerronema postii*, *Macowanites*
krjukowensis, *Agaricus tabularis*,
Limacella steppicola
Polyporus rhizophilus.



4.5. « »
 () - ()
 -
 (50),
 (- 7, - 5,
 - 2, - 1) (. 4.5,).
 (63),

Agaricales – 61.
(Polyporales Russulales),

Agaricaceae (13), Coprinaceae (11), Bolbitiaceae (8), Lycoperdaceae (7),
Strophariaceae Tricholomataceae (5), Marasmiaceae (4)
(. 4.6,).



. 4.6. « » () - ()
- 47 . : -
- 7, - 5, - 2
(. 4.6,).
Agaricus augustus, *A. bernardii*, *A. campestris*, *A. semotus*, *A. tabularis*,
Agrocybe pediades, *Macrolepiota excoriata*, *Marasmius oreades* *Stropharia*
coronilla.

5.

« » . . . -

(KW) 67

1940 .

(– *Blumeria graminis*, *Erysiphe adunca*, *E. convolvuli*, *Golovinomyces sordidus* *Neoerysiphe galeopsidis*). (*Erysiphe adunca* *E. euonymi*) 50-

(1953). (*Erysiphe convolvuli*, *E. polygoni* *Neoerysiphe galeopsidis*) . .

1972 . , ,

(1975 ., 1977 ., 1978 .). (, , 1992), 22 8

23

7 Erysiphales. *Erysiphe* s.l., *Golovinomyces* *Podosphaera* s.l., (7, 6 5,). , ,

, – *Erysiphe adunca*, *E. clandestina*, *E. lonicerae*, *Golovinomyces magnicellulatus*, *Phyllactinia fraxini* *Podosphaera ferruginea*, *Phyllactinia fraxini*

Quercus petraea, *Q. pubescens* *Q. rubra* *Erysiphe alphitoides*, *Ulmus minor* *E. clandestina*, *Salvia nemorosa* s. str. *Golovinomyces biocellatus*, *Sonchus oleraceus* *G. cichoraceorum*, *Petunia hybrida* *G. orontii* *Fraxinus excelsior* *Phyllactinia fraxini*

Ascomycota, Erysiphales, 1924 . . .
Poronia punctata, . . . (-
, 1929). 40- . . .
(, 1953 ; ,
, 1973),
- 1988-1989 .,
(, , 1992; , , 1992; , ,
, 1992).

(KW).

Ascomycota
33 , 21 , 7 4 .
Sordariomycetes 12 10 . -
Epichloe typhina
Festuca rupicola, *Phyllachora graminis* *Agropyron* sp., *Gnomonia tetraspora* *Sempervivum ruthenicum* *Poronia punctata*.
Sordariomycetidae,
- Diaporthales.

(*Leucostoma niveum*, *L. personii*, *Valsa sordida*)

– Hypocreales (*Epichloe* *Nectria*) Xylariales (*Diatrypella* *Poronia*).

(21 11)

Ascomycota.

Dothideomycetes, Pleosporales.

Pleospora (7),

Pleospora (, , 1973; , 1992).

Pleospora,

Pleosporaceae (, *Lewia infectoria*

L. scrophulariae, *Pleospora infectoria* Fuckel *P. vulgaris* Niessl) , Montagnulaceae

(*Montagnula dura*, *Pleospora dura* Niessl).

Pleosporales ,

Cucurbitariaceae. 5 *Cucurbitaria*,

Hysterographium fraxini (Hysteriales)

Fraxinus *Catalpa*. Dothideomycetes,

Guignardia graminea

Teichospora inverecunda (Botryosphaeriales Dothideales).

Massaria inquinans, Eurotiomycetes

(, 1953), *Colpoma quercinum* (Leotiomyces)

Morchella steppicola (Pezizomycetes).

Ascomycota s.l.

, 1949, 1953 ; , 1980; , (1992).

(1953) (, , , 1992),
83 .

2005 .,

120 .

94

31 ,

Diplodia (22), *Camarosporium* (9), *Phoma* (9), *Phomopsis* (8),
Septoria (6), *Ascochyta* (5), *Cytospora* (4).

Amerosporium, *Aplosporella*, *Cercospora*, *Cladosporium*,
Coniothyrium, *Coryneum*, *Cylindrosporium*, *Cytosporina*, *Dendrophoma*,
Diplodina, *Discosia*, *Discula*, *Fusicoccum*, *Macrophoma*, *Melanconium*,
Microsphaeropsis, *Naemospora*, *Neomarssoniella*, *Phloeospora*, *Rhabdospora*,
Seiridium, *Sirodothis*, *Stigmina*, *Tubercularia*.

(*Cercospora*, *Cladosporium*,
Stigmina, *Tubercularia*), , 4

Quercus robur (9), *Populus* (6), *Juglans regia* *Ulmus* sp. (5), *Celtis occidentalis* *Fraxinus* sp. (4), *Robinia pseudacacia* *Syringa* (3), *Acer nrgundo*, *Gleditschia triacantos* *Lonicera tatarica* (2).

Fraxinus excelsior *Diplodia inquinans*, *D. samaricola*, *Phomopsis controversa* *Tubercularia vulgaris*.

– *Robinia pseudacacia*

Camarosporium pseudacacia, *Diplodia profusa* *Phoma fuckelii*, *Gleditschia triacanthos* – *Camarosporium triacanthi* *Diplodia gledit-schiae*.

Quercus robur,

Coryneum depressum, *C. disci-forme*, *Cylindrosporium associatum*, *Discosia artocreas*, *Discula umbrinella*, *Fusicoccum advenum*, *Naemospora croceola*, *N. microspora* *Phomopsis glandicola*.

Discula umbrinella,

Cytospora chrysosperma, *C. nivea*, *Dendrophoma pleurospora*, *Diplodia mutila*, *Sirodothis populnea*, *Septoria populi*, *Cytosporina juglandicola*, *Diplodia juglandis*, *Melanconium juglandinum*, *Neomarssoniella juglandis*, *Phomopsis juglandina*.

Septoria (6), *Ascochyta* (5), *Phoma* (4), *Discula*, *Neomarssoniella*, *Phloeospora* (1), *Ascochyta syringae*, *Septoria chelidonii*, *S. hippocastani*, *Phoma exigua*,

Apiognomonium errabunda (*Discula umbrinella*) – *Quercus robur*, *Gnomonia leptostyla* (*Neomarssoniella juglandis*) – *Juglans regia*, *Mycosphaerella mori* (*Phloeospora maculans*) – *Morus alba*, *Mycosphaerella populi* (*Septoria populi*) – *Populus tremula*.

94

17

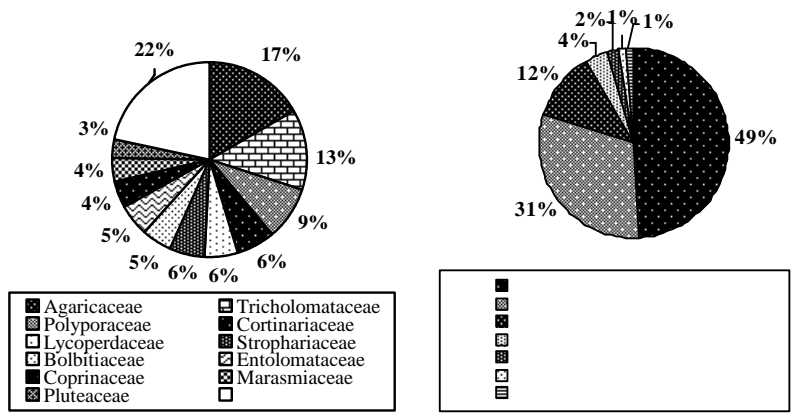
23

(, , 2006).

Aesculus hippocastanum

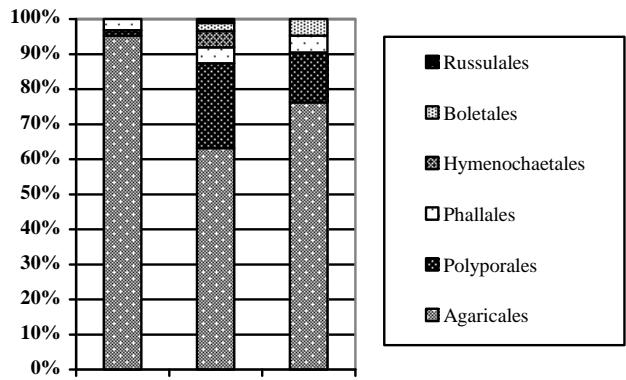
Septoria hippocastani,
Phyllosticta sphaeropsidea *Leptodothiorella aesculicola*.
Cerasus *Phoma pomorum*, –
Phloeosporrella padi. *Juglans*
Neomarssoniella juglandis;
Discula umbrinella (*Apiognomonina errabunda*)
; ,
Tilia, – *Quercus robur*. ,
, - ,
. ,
, .
1954 . . . ,
Scleroderma verrucosum
(, 1954).
, (, 1956, 1957, 1959). ,
. , -
- . . .
(, 1970, 1971 , , 1973 , , , 1974 , 1975 , 1976, 1980, 199 2).
,
. . . (1971, 1972, 1974).
«
» (, , 1977).
,
. . . .
(KW) ,
9 «Ainsworth & Bisby's Dictionary of the fung » (2001), 157
, 77
, 30 6 Basidiomycetes. -

Agaricales (119) Polyporales (23).
 Phallales (7),
 Hymenochaetales (4), Boletales (3) Russulales (1).
 Agaricaceae (26), Tricholomataceae (21),
 Polyporaceae (14), Cortinariaceae (10), Lycoperdaceae Strophariaceae (9),
 Bolbitiaceae Entolomataceae (8) (. 5.1,).



. 5.1. ()
 ()
 Agaricaceae
 ,
 ,
 , Tricholomataceae, Polyporaceae
 Cortinariaceae,
 ,
 Agaricus (14), Entoloma (8),
 Lepiota (7), Clitocybe, Coprinus, Geastrum, Marasmius Mycena (5).

(77), (48), (19)
 (6) (. 5.1,).



c

. 5.2.

(61) (. 5.2).
 (*Geastrum campestre* *G. coronatum*),
Polyporus rhizophilus.

64
 Agaricales
 Phallales
 Polyporales –

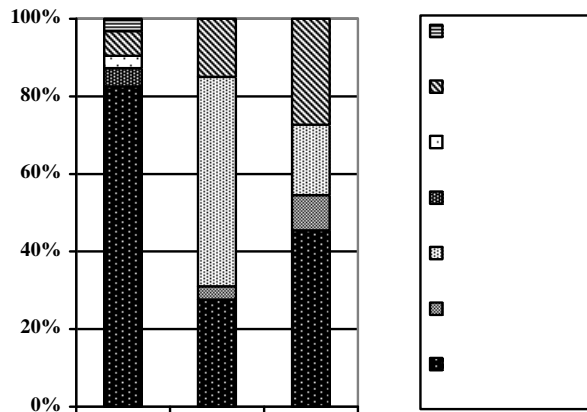
(52) (. 5.3), 4
 (*Amanita*
vittadini, *Entoloma saundersii*, *Hebeloma pusillum*),
 (*Laccaria*
laccata); (*Galerina hypnorum*, *Leptoglossum*
griseopallidum, *Rickenella fibula*); (*Pleurotus eryngii*
 var. *ferulae* *Ferula orientalis* *Polyporus rhizophilus*
Stipa); (*Psilocybe merdaria* *Stropharia*
semiglobata).

Agaricus augustus, *Coprinus atramentarius* *Macrolepiota*
excoriata.
 , *Agaricus abrubtbulbus*, *A. velenovskyi*, *Battarrea*
phalloides, *Melanoleuca striimarginata*, *Stropharia cyanea* .
 , *Galeropsis*
bispora, *Entoloma griseorubidum* *E. lividocyanulum*.
 , *Agaricus tabularis* *Galeropsis desertorum*

87 .
 Agaricales (55), ,
 Polyporales (21) (. 5.2).
 Hymenochaetales (4), Phallales
 (4), Boletales (2) Russulales (1). , -
 (47), -
 (24) (. 5.3).
 (13) -
 (*Antrodia sinuosa*,
Coprinus micaceus, *Flammulina velutipes* var. *pratensis*, *Hohenbuehelia*
atrocoerulea, *Lentinus lepideus*, *Mycena haematopoda*, *Panellus stypticus*,

Pholiota lenta, *Trametes versicolor*),
 (*Fomitiporia robusta*, *Fuscoporia contigua*, *Phellinus igniarius*).

Coprinus disseminatus, *Mycena inclinata*, *Pholiota destruens*, *Pleurotus cornucopiae*, *Pluteus salicinus*, *Schizophyllum commune*, *Vuilleminia comedens*,
Bolbitius reticulatus,



©

. 5.3.

Agaricus xanthodermus, *Lepiota lilacea*, *Macrolepiota procera* *Marasmius oreades*.
Leucopaxillus rhodoleucus
Volvariella gloiocephala, *Agaricus romagnesii*

Entoloma turbidum, *Hebeloma hiemale* *Scleroderma verrucosum*.

(), 22
Agaricales (16
Polyporales
Boletales (*Astraeus hydrometricus*) Phallales
(*Gastrum fornicatum*) (. 5.2).
(10) (6) (. 5.3).

Agaricus arvensis.

Entoloma clypeatum, *Inocybe rimosa*, *Tricholoma imbricatum*

Russulales (*Lentinellus*
cohleatus).

(, *Stereum hirsutum*).

Myxomycota : *Ceratiomyxa* (*C. fruticulosa*); *Tubulifera* (*T. arachnoidea*; *T. microsperma*); *Lycogala* (*L. epidendrum*); *Arcyria* (*A. denudata*, *A. obvelata*); *Stemonitis* (*S. axifera*, *S. splendens*); *Fuligo* (*F. candida*, *F. septica*); *Physarum* (*Ph. album*, *Ph. globuliferum*); *Didymium* (*D. squamulosum*); *Diachea* (*D. leucopodia*); *Mucilago* (*M. crustacea*).

Mucilago crustacea,
Lycogala epidendrum –
; *Stemonitis axifera* *Arcyria obvelata* –
; *Stemonitis splendens* –
; *Fuligo septica* – ; *Tubulifera arachnoidea* –
; *Physarum album* –
; *Ceratiomyxa fruticulosa* –
; *Physarum globuliferum* –

Didymium squamulosum, *Fuligo candida* *Tubulifera microsperma*,
; *Diachea leucopodia*,

(Novozhilov, Schnittler, Zemlianskaia, 2007).

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 ,
 .
 . 70 -

 -
 (1938).
 70-80- 23
 6 (, , , 1987; ,
 , 1988; , 1989; , , , 1992).
 ,
 - - ,
 .
 2002-2004

 (*Erysiphe berberidis*, *E. pru-*
nastri, *Golovinomyces artemisiae*, *G. valerianae*, *Leveillula cylindrospora*).
 -
 (, 2005). ,
 , , , ,
 .
 - »
 ,
 .
 , , , ,
 . 2006 .
 2007 .
 - , .
 .

Erysiphe s.l. (27),
Golovinomyces *Podosphaera* s.l. (11 10,
). *Leveillula* – -

5

-

: *Erysiphe buhrii*,

E. caulicola, *E. friesii*, *E. limonii*, *E. lycopsidis*, *E. mayorii*, *E. penicillata*,
E. prunastri, *Golovinomyces echinopsis*, *G. morozkovskii*, *G. riedlianus*,
Leveillula cylindrospora, *L. lactucarum*, *Neoerysiphe cumminsiana*, *Phyl-*
lactinia mali *Podosphaera epilobii* – , *Erysiphe adunca*,
E. berberidis, *E. ho-weana*, *E. ornata*, *E. viburni*, *Golovinomyces valerianae*,
Neoerysiphe galii –

1-2 *Erysiphe berberidis*, *E. caulicola*,

E. howeana, *E. hypophylla*, *E. lonicerae*, *E. mayorii*, *E. necator*,
E. ornata, *E. penicillata*, *E. viburni*, *Golovinomyces echinopsis*, *G. riedlianus*,
G. valerianae, *Leveillula cylindrospora*, *Neoerysiphe cumminsiana*,
Phyllactinia guttata, *Ph. mali*, *Podosphaera epilobii* *P. leucotricha*.

170

, – *Dianthus platyodon* *Erysiphe buhrii*, *Syrenia*
dolichostylos *E. cruciferarum*, *Euonymus odessana* *E. euonymi*,
Scabiosa ucrainica *E. knautiae* *Leveillula* sp., *Polygonum janatae*
E. polygoni, *Inula sabuletorum* *Tragopogon borysthencus*
Golovinomyces cichoraceorum, *Centaurea breviceps* *Jurinea laxa* *G.*
depressus, *Plantago maxima* *G. sordidus*, *Artemisia marschalliana*
Leveillula lactucarum, *Linaria dulcis* *Leveillula* sp., *Betula borysthencica*

Phyllactinia guttata, *Rubus nessensis* *Podosphaera aphanis*
Pulicaria uliginosa *P. xanthii* . *Artemisia marschalliana*, *Betula*
borysthenaica, *Centaurea breviceps*, *Dianthus platyodon*, *Euonymus odessana*,
Jurinea laxa, *Linaria dulcis*, *Plantago maxima*, *Polygonum janatae*, *Pulicaria*
uliginosa *Tragopogon borysthenaicus*

- (Amano, 1986).

Phyllactinia guttata *Betula borysthenaica*, *Golovinomyces depressus*
Centaurea breviceps -
(1996).

Ascomycota,

Phyllachora – *Ph. cynodonthis* *Ph. graminis*,
Cynodon dactylon *Elytrigia repens*

(1938)

1976) *Carpinus betulus*, *Gibberella maxima* (

, 2002),

(. . .) .

45 28 ,

Sordariomycetes – 20 11 , Dothideo-

. (. . . , . . . ,
).
 . . . – *Camarosporium kriegei*,
Pseudoseptoria donacis *Sphaeropsis lichenoides* (. . . , 1991).

18 12

–
Phoma (4 . . .), *Passalora*, *Ramularia* *Septoria* (2 . . .).
Fusicladium, *Stigmina*, *Camarosporium*, *Naemospora*, *Phomopsis*, *Phyllosticta*,
Pseudoseptoria, *Sphaeropsis* .

6 4 12 8 .

(. . .).
Fusicladium,
Ramularia, *Passalora*, *Stigmina*, *Septoria*,
 (8 . . .).

Fusicladium pomi,
Passalora bellynckii, *P. rhamni*, *Stigmina carpophila*, *Naemospora microspora*,
Phoma herbarum, *P. macrostoma*, *Phyllosticta cruenta*, *Septoria pyricola*,
S. rubi, *Sphaeropsis lichenoides*; – *Passalora bellynckii*,
Camarosporium kriegeerii, *Phoma exigua*; –
– *Ramularia pratensis*, *Pseudoseptoria donacis*. –
1990 . *Fusicladium pirorum*
(*Venturia pyrina*) *Pyrus communis* 1910 .
(1910),
– *Stigmina*
carpophila,
Prunus stepposa.

, , -
, -
, ,
. .
, 70-
. .
(1938). ,
70-80- . . ,
84 - (, 1980 ; , ,
1982; , , , 1987; , , 1988;
, 1989; , , , 1992).
49 6 . ,
- -

(, 2005) 2006 . (, , 2002–2004 . (, 2007) .

54
 Uredinales, *Puccinia* 28 , *Uromyces* – 15,
Melampsora – 5, *Phragmidium* – 3, *Coleosporium*, *Miyagia*
Tranzschelia .
 , 101
 , 81 Uredinales.

(. 6.1).

6.1. *Puccinia Uromyces*

	<i>Puccinia</i>		<i>Uromyces</i>	
	N	%	N	%
Micro-	4	14,3	1	6,7
Hemi-	4	14,3	-	-
Eu-auto-	5	17,9	4	26,7
Eu-hetero-	8	28,5	10	66,7
Brachy-	4	14,3	-	-
Cata-	1	3,6	-	-
Opsis-	2	7,1	-	-
	28		15	

14,3%. , *Puccinia*
Uromyces
6,7%, ,
18,5% *Uromyces*.

(. 6.2). , *Puccinia* 50% -
38,2%.
71 58
, 26
Uredinales Asteraceae (10),
Poaceae (7) Fabaceae (6). ,
Fabaceae, ,

(203) (26)
Uredinales (*Puccinia* -
13 , *Melampsora* *Uromyces* - 4 , *Phragmidium* - 2,
Coleosporium, *Miyagia* *Tranzschelia* - 1). 10
, *Tranzschelia discolor*

Amygdalus
communis (, 1952).
30
26 , 15 . 8 6

Asteraceae.

1-3

– *Centaurea breviceps* *Puccinia hieracii*, *Thalictrum simplex*
P. recondita, *Artemisia marschalliana* *P. tanacetii*, *Prunus stepposa*
Tranzschelia discolor *Chamaecytisus borysthenticus* *Uromyces laburni*.

6.2.

Puccinia *Uromyces*

	<i>Puccinia</i>		<i>Uromyces</i>	
	N	%	N	%
-	4	14,3	2	6,8
	5	17,9	2	6,8
	5	17,9	4	26,7
	14	50,0	7	46,7
	28		15	

,
 , . . . (, 1973 , 1974 , , , 1980, 1993).
 . . .
 (, 1974 ; , , 1977). , . . .
 . . . ,
 , *Fistulina hepatica*
 (, , 1988).
 95

2006 .

6

(KW),

101

60

, 32

8

Basidiomycetes

9

«Ainsworth & Bisby's Dictionary of the fungi»

(2001).

Agaricales (59),

Polyporales (15), Boletales Russulales (10).

- : Hymenochaetales – 3, Phallales – 2, Cantharellales Thelephorales – 1 .

Cortinariaceae

(11), Agaricaceae (10), Polyporaceae Tricholomataceae (9), Pluteaceae (7), Russulaceae Strophariaceae (6), Boletaceae (5) (. 6.1,).

Agaricus (6),

Stropharia Tricholoma (5), Amanita, Cortinarius Russula (4),

Boletus Hebeloma (3).

- Amanita muscaria, Boletus edulis, Gymnopilus

junonius, Leccinum scabrum, Marasmius oreades, Vuilleminia comedens

, Pluteus pseudorobertii,

5 (Cortinarius huronensis, C. uliginosus, Clitocybe dicolor, Russula

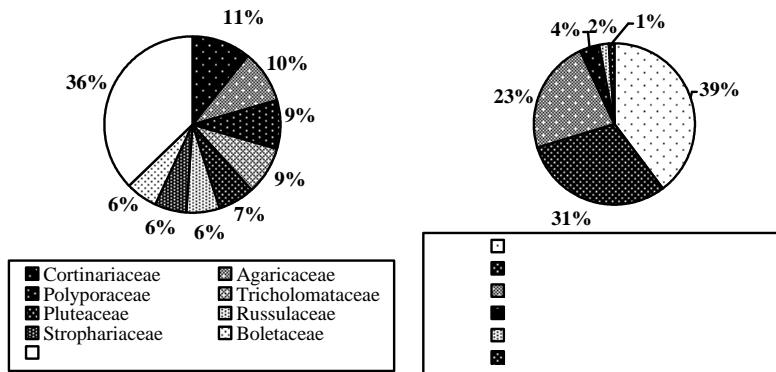
violacea Tricholoma auratum)

Cortinariaceae,

Tricholomataceae Russulaceae (. 6.1,).

(Cortinariaceae, Polyporaceae, Tricholomataceae).

(Agaricaceae, Strophariaceae).



. 6.1.

()

()

« »

(40) (31),

(23 , 23 %).

, - *Armillaria mellea*, *Fistulina hepatica* *Phellinus tremulae*.

- 4, - 2, - 1
(*Pleurotus eryngii* *Eryngium sp.*) (. 6.1,).

, , , .

, , .

-

26

Agaricales.

Agaricaceae (8) Strophariaceae (5)

(. 6.2). 8 1-3

(18)

4 , 3 -

Pleurotus eryngii (. 6.3).

Agaricus campester, *Leucoagaricus leucothitus*,

Macrolepiota excoriata *Marasmius oreades*.

, *Agaricus maskae*, *A. porphyrocephalus*,

Galeropsis plantaginiformis, *Hygrocybe citrina*

(*Psilocybe merdaria*,

Stropharia semiglobata, *S. umbonatescens*) Strophari-

aceae, *Coprinus sterquilinus* - Coprinaceae.

, *Hebeloma*

pusillum *Inocybe lacera*,

(*Laccaria laccata*)

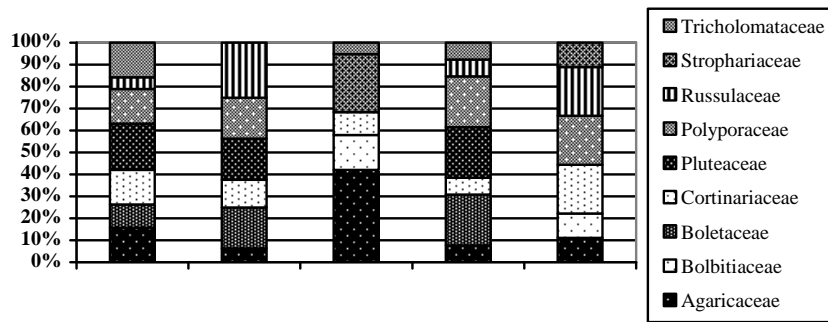
(35

), (27) (18).
15, -9, -5 .

Agaricales (18) Polyporales (8), Boletales Russulales
Phallales - , Thelephorales -
(*Phellodon melaleucus*).

Pluteaceae (4), Agaricaceae, Cortinariaceae, Polyporaceae
Tricholomataceae (3) (. 6.2). -

- 15 , - 13, - 5,
- 2 (. 6.3).



. 6.2.

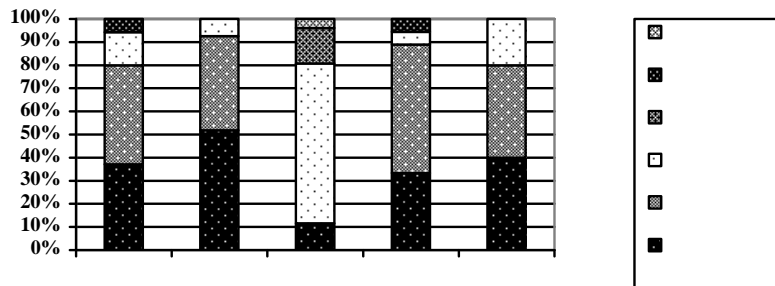
, *Fistulina hepatica*,
(, , 1988),

Gymnopilus junonius, *Peniophora quercina*, *Schizophyllum commune*, *Vuilleminia comedens* . *Amanita phalloides*,
Boletus chrysenteron *Tricholoma flavobrunneum* . -
Lepiota cristata *Phellodon melaleucus* .

Russulales (7), Agaricales Polyporales (6), Boletales (5) .
, Phallales (*Ramaria flava* *R. gracilis*)
(*Phellodon melaleucus*) – Thelephorales.

Russulaceae (4), Boletaceae,
Pluteaceae Polyporaceae (3) (. 6.2). -
(14)

(11) (. 6.3). *Amanita muscaria*, *Boletus edulis*, *Lactarius plumbeus*, *Leccinum scabrum*, *Paxillus involutus* *Russula aeruginea* . -
Gymnopilus junonius, *Irpex lacteus*, *Stereum hirsutum* *Vuilleminia comedens*. *Pluteus pseudorobertii* .



. 6.3.

Agaricales (7), Polyporales (5), Boletales (3), Hymenochaetales (2) Russulales (1).
 Boletaceae, Pluteaceae Polyporaceae (3), Hymenochaetaceae (2) (. 6.3). -
 : (10) -
 (6), -
 (. 6.3). (*Phellinus tremulae*) , , , *Coriolopsis trogii*, *Ganoderma lipsiense*, *Gymnopilus junonius*, *Inocutis rheades* .
 - *Boletus edulis*, *Leccinum aurantiacum*, *L. scabrum* *Russula violacea*.

Agaricales (7), Polyporales Russulales (3), Boletales i Hymenochaetales (1). -
 - : -
 (6), (3) (. 6.3).
 .
Naucoria escharoides -
 .
 (*Datronia mollis*, *Inonotus radiatus*, *Pycnoporus cinnabarinus*, *Schizophyllum commune* .)

Agaricales (7) Boletales (2), -
 , , 9
 , 5

Agaricales (3), Cantharellales Russulales ()
)
, ,
. . , , -
2007 .,
:
, *Amanita muscaria*, *Boletus edulis*,
Gymnopilus junonius, *Leccinum aurantiacum*, *L. scabrum* *Paxillus involutus*.

7.

1999 . - , 23
 16215,1 (, 2005).
 : (52,9%),
 (33%),
 (4,1%) (, 2005).

Didymiaceae (6) Trichiaceae (5
).
Didymium (5) *Trichia* (4).
Physarum album
Didymium melanospermum, *Arcyria pomiformis*,
Cribraria rufa, *Lycogala epidendrum* *Trichia favoginea*. 14 -

(35%)
Pinus sylvestris. *Arcyria*
pomiformis, *Cribraria rufa*, *Collaria rubens*, *Lycogala epidendrum*.
Didymium melanospermum *Physarum album*,
Pinus sylvestris,
Pinus strobus
Quercus robur. , *Didymium melanospermum*
Physarum album.
Pinus sylvestris

Betula pendula,
 (25 %)

Betula pendula.
Ceratiomyxa fruticulosa, *Dictydiaethalium plumbeum*, *Trichia decipiens*,
T. favoginea, *T. varia*. *Quercus robur*
Licea variabilis *Oligonema aurantium*.
 (*Trichia botrytis*, *Didymium minus*)
Pinus strobus. *P. strobes* *Badhamia melanospora*,
Betula pendula,
Didymium melanospermum.
Didymium iridis *D. nigripes*,
Quercus robur *Betula pendula*.
Mucilago crustacea,

(),
 ().

Stemonitidaceae (10) Physaraceae (9),
 Stemonitidaceae (*Collaria rubens*),
 Physaraceae
 (*Badhamia melanospora* *Physarum album*),
 Didymiaceae (*Diderma testaceum*),
 Cribrariaceae ,
 Arcyriaceae (*Arcyria pomiformis*) Stemonitidaceae (*Collaria rubens*).

: *Didymium* (5) *Trichia* (4), – *Cribraria*
 (6), *Arcyria* *Physarum* (5).

Cribraria *Physarum*, *Arcyria* *Didymium*,
Comatricha, *Stemonitis* *Trichia*. *Comatricha*
Stemonitis, *Didymium* – ,
Arcyria, *Cribraria* *Physarum*,
Didymium – , *Trichia*

51 ;
 8: *Arcyria pomiformis*, *Ceratiomyxa fruticulosa*, *Cribraria rufa*, *Licea*
variabilis, *Lycogala epidendrum*, *Trichia decipiens*, *T. favoginea* *T. varia*.
Arcyria
pomiformis, *Ceratiomyxa fruticulosa* *Lycogala epidendrum*,
Didymium
melanospermum *Physarum album*.

:
Pinus sylvestris 53%, *Betula pendula* *Alnus glutinosa* – 11,
Quercus robur – 10, *Populus tremula* – 2%
Picea abies,
 9%
 (35%) *Pinus sylvestris*.

Betula pendula
 29%
 19%
 9%
 4%.

Quercus robur 18%
Alnus glutinosa *Populus tremula*.
Pinus strobus,
 33- 34- 24%

Arcyria incarnata, *A. obvellata*, *Ceratiomyxa fruticulosa*, *Comatricha nigra*,
Didymium melanospermum.
Arcyria pomiformis ()
Cribraria ().
Licea variabilis, *Trichia decipiens*, *T. favoginea*, *T. varia*.

Badhamia melanospora
Betula pendula, *Pinus strobus*; *Didymium iridis*
Quercus robur; *Didymium nigripes* *Physarum album*
Betula pendula, *Pinus*
sylvestris (), *D. melanospermum*,
Pinus sylvestris, *P. strobes*, *Quercus robur*, *Mucilago*
crustacea *Badhamia*
utricularis ; *Leocarpus fragilis* *Stemonitis herbatica*
 Poaceae *Pinus sylvestris* ().

(),

(, 2004; ,
, 2006).

Erysiphales

(..) 2003 .
– 2004 . – 2005 . ,

19

(. 3.1).

Erysiphe s.l. (9) *Podosphaera* s.l. (5).

–
, – *Podosphaera myrtillina* *P. spiraeae*. *Erysiphe*
mayorii, *E. ornata*, *E. penicillata*, *E. vanbruntiana* *Golovinomyces*
magnicellulatus , , –

27 -

, – *Anthoxanthum odoratum*, *Bromus mollis* *Poa pratensis*
Blumeria graminis, *Betula pubescens* *Erysiphe ornata*, *Helianthus*
tuberosus *Golovinomyces cichoraceorum*, *Galeopsis bifida*
Neoerysiphe cumminsiana, *Vaccinium myrtillus* *Podosphaera myrtillina*
Filipendula denudata *P. spiraeae*.

Ascomycota

2003–2005 . 157
20 , 19 –
(, , , 2004 , ; , 2005, 2006).
Ascomycota s.l. 142 (15 -
).
Sordariomycetes
30 . 19 Sordariomycetidae.
Sordariales, Lasiosphaeriaceae.
Schizothecium (*S. aloides*, *S. hispidulum* *S. vesticola*)
,
Lasio-sphaeria *Podospo-ra*.
(*Lasio-sphaeria* *hirsuta* *Podospo-ra* *deci-piens*)
, *Podospo-ra* *deci-piens*
,
(
, 1969).
(*Chaetosphaeria*
pulviuscula), Sordariales,
Chaetosphaeriales. *Bertia*
moriformis (Nitschkiaceae)
Coronophorales , Hypocreo-
mycetidae.
Sordariomycetidae *Ceratosphaeria*
lampadophora, Annulat ascaceae,
Betula pendula.
Ceratosphaeria, -

Apiosporaceae (*Apiospora montagnei*
Phragmites australis)

Xylariomycetidae 13
 (9) Xylariales.

Xylariaceae (5 4) Diatrypaceae (4 2).
Phomatospora dinemasporium

Xylariales

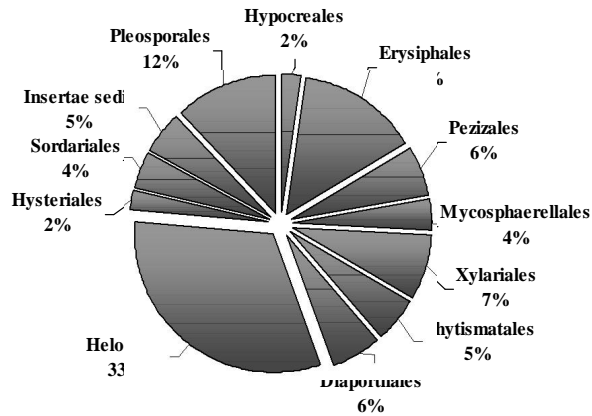
Diatrype bullata, D. stigma, D. disciformis Xylaria polymorpha,

Hypocreomycetidae
 Hypocreales (7),
Claviceps (Clavicipitaceae), *Nectria Cosmospora* (Nectriaceae)
Hypocrea Hypomyces (Hypocreaceae). *Hypomyces*
 (*H. aurantius, H. chrysospermus H. ochraceus*),

Sordariomycetes, (-
) : Leotiomycetes (52
), Sordariomycetes (30), Dothideomycetes (24), Pezizomycetes (17)
 Orbiliomycetes (3).

11
 Helotiales (45), Erysiphales (19), Pezizales (17),
 Pleosporales (16) Xylariales (10) (. 7.1).

Helotiales,
 - 45 23 6 .



7.1. Ascomycota s.l.

Helotiaceae (19), Hyaloscyphaceae
 (11) Dermateaceae (9), Rutstroemiaceae
 Sclerotiniaceae, Bulgariaceae.
Hymenoscyphus (11), *Lachnum* (5) *Mollisia* (4).
Bisporella citrina, *Chlorociboria*
aeruginascens, *Hymenoscyphus caudatus*, *H. scutula*, *Mollisia cinerea*, *M. ligni*,
M. melaleuca, *Tapesia fusc* *Rhytisma acerinum*.
Capitotricha bicolor, *Croci reas coronatum*, *Encoelia fascicularis*, *Heyderia*
pusilla, *Hymenoscyphus calyculus*, *H. piphyllus*, *Incrucipulum ciliare*, *Lachnum*
sulphureum *Tapesia strobilicola*,

10

Arachnopeziza araneosa

Dasyscyphella mughoncola,

(Svr ek, 1967; Dennis, 1978; Arendholz, Raitviir, 1988).
Dennisiodiscus prasinus, *Ciboria viridifusca*, *Hyaloscypha tigillaris*, *Hymenoscyphus discretus*, *H. subtilis*, *Lachnum palearum*, *Mollisia amenticola* *Trichopezizella nidulus*.

Pezizales (17 12 , 4). Pyronemataceae
 (8) Pezizaceae (3),
 Ascobolaceae Helvellaceae
 (*Coprotus sexdecimsporus*
Lasiobolus cuniculi)
 – *Ascobolus perplexans*
Byssonectria terrestris.
 Pleosporales 16 10 .
 Sporormiaceae,
 6 *Sporormiella*. Phaeosphaeriaceae
 4 . 6 . -
 3
Sporormiella (*S. australis*, *S. minimoides* *S. vexans*),
 Rhytismatales 7
 7 Rhytismataceae. *Cocco-*
myces coronatus, *Colpoma quercinum*, *Lophodermium pinastri* *Rhytisma*
acerinum.
 Mycosphaerellales – 5 *Guignardia Mycosphaerella*, -
 Mycosphaerellaceae. Hysteriales
 : Hysteriaceae –
Hysterium pulicare, Mytiliniaceae – *Lophium mytilinum*.

Leptospora – *L. rubella*,

19

Acrospermum pallidulum,
Ceratostomella ampullasca *Ombrophila violaceae*,
(, 2003), *Hymenoscyphus*
repandus, *Rutstroemia sydowiana* *Saccobolus caesariatus*,
(, 1991; , 2002).
Sporormiella intermedia

S. lageniformis,

(, 1937;
, 1969), *Lophiostoma semiliberum*,
(, , 2001).
Ascomycota s.l.
(. 7.2). 113 ,
72%

(51),

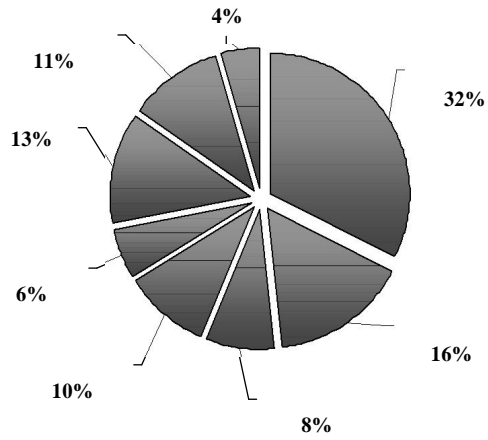
Ascocoryne cylichnium, *A. sarcoides*,
Bisporella citrina, *Chlorosplenium aeruginascens*, *Hymenoscyphus fructigenus*,
H. salicellus, *Mollisia ligni*, *M. melaleuca*, *Orbilbia coccinella*, *Scutellinia*
scutellata; *Diatrype bullata*, *D. stigma*, *Hypocrea rufa*,
Lasiosphaeria hirsuta *Sphaeropsis sapinea*.

25

Hymenoscyphus herbarum, *H. scutula*, *Didymo-*
sphaeria conoidea, *Leptosphaeria doliolum*, *Leptospora rubella*, *Lophiostoma*
semiliberum, *Phaeosphaeria herpotrichoides*.

12

Cocomyces coronatus, *Hymenoscyphus caudatus*
Mycosphaerella punctiformis. 9
Peziza badia, *Peziza leporina*
Aleuria aurantia. 16
Sporormiella australis, *S. intermedia* *S. vexans*.
Sporormiella intermedia, *S. minima* *Lasiobolus*
cuniculi.
24 (17)
Guignardia reticulata,
Phyllosticta cruenta *Polygonatum multiflorum*
P. odoratum, *Mycosphaerella pyri*, *Septoria pyricola*
Prunus domestica. *Rhytisma acerinum*
– *Acer platanoides* *Lophodermium pinastri*,
Pinus sylvestris.
Colletotrichum dematium *Sedum acre*,
Phoma acetosellae *Rumex acetosella*, *Septoria oenotherae* *Oenothera*
biennis. 7
Nectria cinnabarina *Tubercularia*
vulgaris. *Valsa*, *V. ambiens*,
– *Cytospora ambiens* –
V. stenospora *Cytospora*
stenospora, *Alnus glutinosa*.
Ascomycota s.l. 103
, 36 – , 30 – 9 –



. 7.2. Ascomycota s.l.

(41) , (43) -
 , 12 - 19 -
 , 10 8 .

Bisporella citrin , *Chlorosplenium aeruginascens* , *Co comyces coronatus* ,
Diatrype stigma , *Hymenoscyphus caudatus* , *H. salicellus* , *H. scutula* ,
Lophiostoma semiliberum , *Mollisia ligni* , *Mycosphaerella punctif rmis* , *Orbilina*
coccinella , *Sporormiella australis* , *S. vexans* *Guignardia*
reticulata , *Nectria cinnabarina* *Rhytisma acerinum* . -
Ascocoryne cylichnium , *Mollisia*

ligni, *M. melaleuca*, *Orbilia sarraziniana*, *Scutellinia scutellata*, *Uncinula adunca*, *Diatrype bullata*, *Lasiosphaeria hirsuta*, *Orbilia sarraziniana*, *Scutellinia setosa* *Valsa ambiens*,

Acanthophiobolus helicosporus, *Diaporthe arctii*, *D. orthoceras*, *Phaeosphaeria eustoma*, *P. herpotrichoides*, *Pleospora dura*.

15

(Anamorphic fungi). (Coelomycetes – 12

), Sphaeropsidales

(8).

, – *Myxothyrium leptideum*, *Phoma acetosellae* *Septoria oenotherae*.

Melanconiales 4 (Colleto-

trichum dematium, *Discogloeum innumerabile*, *Pestalotiopsis stevensonii*

Seimatosporium salicinum). (Hyphomycetes),

3 Hyphomycetales (*Alternaria tenuissima*,

Passalora ferruginea *Ramularia pratersis*).

Choanatiara lunata,

Pinus sylvestris.

Ramularia pratersis,

Rumex acetosa.

(Urediniomycetes) 23

6 5 Uredinales.

Pucciniaceae, 15 , Melampsoraceae,

Puccinia (13).

Melampsora,

Populus L. *Salix* L. *Uromyces*.

Uredinales

Uredinales

Pucciniastrum arcticum,
Rubus saxatilis.

(15)

- (7) -

(6)

Coleosporium tussilaginis *Melampyrum nemorosum*,
Puccinia acetosae *Rumex acetosa*, *P. asarina* *Asarum europaeum*,
P. coronata *Frangula alnus*, *Pucciniastrum vaccinii*
Vaccinium myrtillus. 9

Melampsora epitea *Salix*, *Puccinia caricina* *Carex acutiformis*
C. elata, *P. magnusiana* *Phragmites australis*. 8
Phragmidium potentillae *Potentilla impolita*, *Puccinia acetosae* *Rumex acetosa*,
P. bromina *Symphytum officinale*.

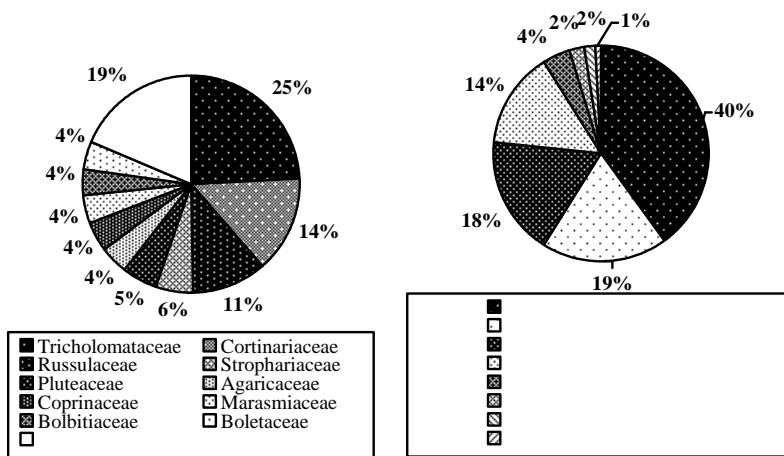
1972–2002 .
210 (, 2003).
2003 . () 2006 . ()
, 90 , 68
, 50 – , 34 –
, 12
(,
2004 , 2006; Prydiuk, 2006, 2007a,b). ,
278 .

86, 31, 8
 Basidiomycetes (9 «Ainsworth & Bisby's Dictionary of the fungi», 2001).
 Agaricales (211), Russulales (32) Boletales (24),
 96%
 : Polyporales – 5, Cantharellales – 3,
 Hymenochaetales, Phallales Thelephorales – 1,
 (Polyporales Hymenochaetales -
 Tricholomataceae (67), Cortinariaceae (40), Russulaceae (31),
 Strophariaceae (16), Pluteaceae (14), Agaricaceae, Coprinaceae
 Marasmiaceae (12), Bolbitiaceae Boletaceae (11).
 81%
 (.7.3,).

: *Russula* – 17, *Lactarius* *Mycena* – 14, *Amanita*
Clitocybe – 11, *Cortinarius* – 10, *Tricholoma* – 9, *Coprinus*, *Galerina*
Marasmius – 8
Amanita muscaria, *Armillaria mellea*, *Boletus badius*, *Clitocybe*
gibba, *Collybia dryophila*, *Coprinus disseminatus*, *Flammulina velutipes*,
Hypholoma fasciculare, *Laccaria laccata*, *Lactarius plumbeus*, *L. rufus*,
Lycoperdon perlatum, *Marasmius oreades*, *Mycena galericulata*, *Russula*
emetica, *Schizophyllum commune*, *Scleroderma aurantium*, *Suillus luteus*

(111), (53),
 (49) (40)

: - 12, - 6,
 - 5, - 2 (. 7.3).
 (52,9%),
 (175
), 65% (, 2005).
 : - 137 , - 86, - 53,
 - 54, - 32, - 30, - 25,
 - 20, - 16, - 13,
 - 4, - 2, -
 - 1 .

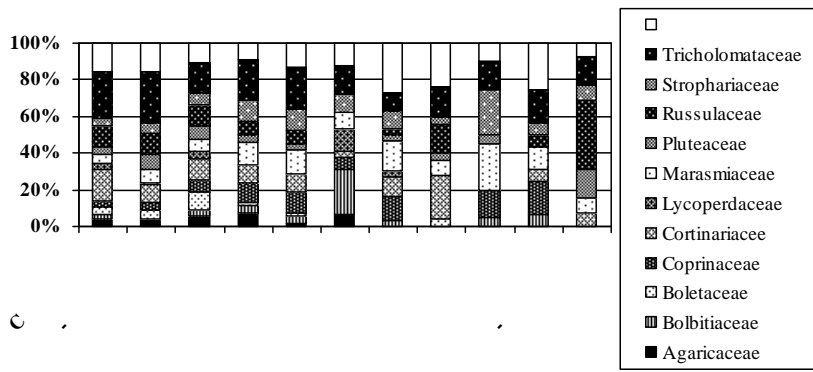


. 7.3. ()
 - ()
 ,
 Agaricales (128), Russulales (21)
 ,
 Boletales (20),

Polyporales – , Cantharellales – , Hymenochaetales,
Phallales Thelephorales – .
: Tricholomataceae (45), Cortinariaceae (31),
Russulaceae (20), Marasmiaceae Pluteaceae (8), Agaricaceae,
Boletaceae Strophariaceae (7) (. 7.4). 18 -
1-6 . -
: - 77,
- 31, - 30, - 27, -
- 5, - 3, - 2 (*Marasmiellus vaillantii*
Marasmius graminum), - (*Asterophora lycoperdoides*)
(. 7.5). ,
, , , ,
, , , , ,
Amanita fulva, *Boletus badius*,
Cantharellus cibarius, *Chroogomphus rutilus*, *Cortinarius cinnamomeus*,
Hygrophorus hypothejus, *Inocybe lacera*, *Laccaria laccata*, *Lactarius rufus*,
Russula erythropoda, *Suillus granulatus*, *Tricholoma flavovirens* .
(*Cortinarius delibutus*, *Entoloma*
mougeotii, *Inocybe cicatricata*, *I. ochroalba*), (*Cortinarius*
dilutus, *Entoloma caccabus*, *E. nitens*) .
(*Coltricia perennis*, *Lycoperdon perlatum*, *Macrolepiota procera*, *M. rhacodes*),
. -
- *Conocybe velutipes*, *Lycoperdon norvegicum*, *Pholiota mixta*
Psathyrella obtusata.
Clitocybe cerrusata, *Collybia peronata*, *Lepista*
inversa, *Marasmius androsaceus*, *Mycena epipterygia* .
Mycena capillaripes *M. cyanipes*.
Armillaria
mellea, *Crepidotus mollis*, *C. variabilis*, *Hypholoma fasciculare*, *Lycoperdon*
pyriforme, *Marasmius rotula* *Tricholomopsis rutilans*. *Crepidotus calolepis*,

Psilocybe semilanceata var. *coerulescens*, *Simocybe haustellaris* *S. sumptuosa*, *Galerina triscopa*

Galerina hypnorum, *Galerina pruinatipes* *G. vittiformis*



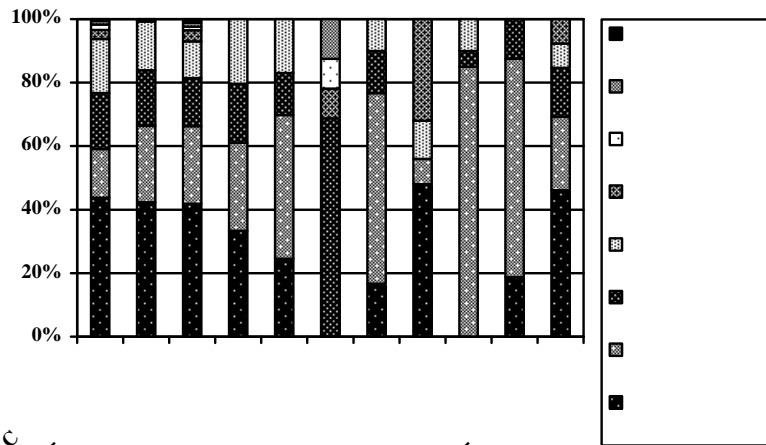
.7.4.

Agaricales
(100), Russulales (16) Boletales (15).
Polyporales, - Cantharellales - Phallales.

Tricholomataceae (39), Russulaceae (16), Cortinariaceae (13), Pluteaceae (11), Marasmiaceae (10), Strophariaceae (7), Boletaceae Coprinaceae (6) (. 7.4).

(58), (33),
(24) (21) (. 7.5).

(*Galerina hypnorum*).



.7.5.

Amanita citrina, *Boletus chrysenteron*, *Cortinarius cinnamomeus*, *Entoloma rhodopolium*, *Inocybe rimosa*, *Lactarius quietus*, *Russula consobrina*, *Scleroderma aurantium*, *Tricholoma imbricatum*, *Crepidotus mollis*, *Hypholoma sublateritium*, *Lycoperdon pyriforme*, *Marasmiellus ramealis*, *Mycena*

polygramma, *Panellus stypticus*, *Panus tigrinus*, *Pholiota aurivella*.

Agrocybe praecox,

Calocybe gambosa, *Cystoderma carcharias*, *Lepiota cristata*, *Lepista nebularis*, *Marasmius wynnei*, *Stropharia aeruginosa*,

Clitocybe clavipes, *Collybia dryophila*, *Mycena leptcephala*, *Strobilurus tenacellus*.

Agaricales (62), Boletales

(12) Russulales (10),

Polyporales (*Panus conchatus*).

Tricholomataceae (14), Cortinariaceae

Russulaceae (10), Boletaceae (8), Coprinaceae, Marasmiaceae, Pluteaceae

Strophariaceae (6), Agaricaceae (5) (7.4).

: (36), (21),

(13), (10), (3

) (7.5).

(7.5).

Amanita rubescens, *Cortinarius armillatus*, *Lactarius plumbeus*, *L. torminosus*, *Leccinum scabrum*, *L. testaceoscabrum*, *Russula flava*, *Tricholoma terreum*.

Coprinus disseminatus, *Flammulina velutipes*, *Hypholoma fasciculare*, *Mycena galericulata*, *Pholiota aurivella*, *Psathyrella hydrophila*.

Fomes fomentarius, *Piptoporus betulinus*,

Macrolepiota

procera, *M. rhacodes*.

Lepiota clypeolarioides,

Clitocybe dealbata, *C. gibba*, *Collybia butyracea*, *Mycena pura* . (*Cantharellula umbonata*, *Galerina vittiformis* *Hypholoma myosotis*),

54
 Agaricales (44), Boletales (5), Russulales (4) Polyporales (1).
 Tricholomataceae (14),
 Pluteaceae (7), Marasmiaceae (6), Agaricaceae Russulaceae (4
) (. 7.4). -
 : - 18 , - 15,
 - 11, - 10 (. 7.5).

Agaricales (44), Russulales (4), Boletales (3) Polyporales
 (2). Tricholomataceae
 (12), Marasmiaceae (7), Coprinaceae Strophariaceae (6),
 Cortinariaceae (5), Russulaceae (4) (. 7.4).
 (24) (13),
 (9) (7) (. 7.5).

Armillaria mellea,
Coprinus micaceus, *Crepidotus mollis*, *C. variabilis*, *Hypholoma fasciculare*,
Kuehneromyces mutabilis, *Mycena alcalina*, *Panus tigrinus* *Schizophyllum*
commune, - *Laccaria laccata*, *Naucoria escharoides*,
Paxillus involutus *Scleroderma aurantium*.

Agaricales.

(. 7.5).
 Bolbitiaceae (8), Tricholomataceae
 (5), Lycoperdaceae (4), Marasmiaceae Strophariaceae (3)
 (. 7.4). -
 :
 (22),
 (4), (3) (. 7.5).
Agaricus campester, *Agrocybe
 pediades*, *Bovista plumbea*, *Calvatia caelata*, *Marasmius oreades* *Stropharia
 coronilla*.
Melanoleuca humilis, *Panaeolus
 papilionaceus* *Psilocybe semilanceata*.
Psathyrella typhae (
) *Hemimycena candida* (
Symphytum officinale). *Rickenella fibula*
 (*Galerina hypnorum*
Omphalina ericetorum)

Agaricales (25), Polyporales (3), Boletales Russulales (
 1). Marasmiaceae
 (5), Coprinaceae (4), Coprinaceae, Cortinariaceae, Polyp oraceae,
 Strophariaceae Tricholomataceae (3).

(. 7.4). ,

(18), (5), (4)

(3) (. 7.5).

Armillaria mellea, *Coprinus micaceus*,
Crepidotus variabilis, *Mycena galericulata*, *Pholiota aurivella*, *Pleurotus ostreatus*, *Polyporus leptcephalus*, *P. squamosus* *Schizophyllum commune*,
– *Laccaria laccata* *Paxillus involutus*.

(4,1%) (, 2005). -

(25)

Agaricales (18),
Russulales (4) Boletales (3).

: Cortinariaceae Tricholomataceae (6), Russulaceae (4).

8 1-2 .

(. 7.4). -

(12) (8),
(3) (2),

(. 7.5).

Cortinarius semisanguineus, *Lactarius helvus*,
Paxillus involutus, *Russula emetica* *Suillus variegatus*.
Amanita fulva, *Cortinarius armillatus*, *C. obtusus*, *Laccaria proxima*,
Lactarius rufus, *L. thejogalus* *Leccinum holopus*, –
Hypholoma elongatipes *Tephroclybe palustris*. *Galerina*

sphagnorum *Hygrocybe coccineocrenata*

(19) Agaricales,
Panus tigrinus (Polyporales).
Marasmiaceae Strophariaceae (5), Coprinaceae
Tricholomataceae (3) (. 7.4). -
(17),
(*Marasmius epiphyllus* *Mycena vitilis*), - (*Conocybe*
tenera), (. 7.5).

Armillaria mellea, *Flammulina velutipes*,
Hypholoma fasciculare, *Marasmiellus ramealis*, *Mycena galericulata*
Schizophyllum commune.
(*Populus alba* *P. nigra*),

16 Agaricales (14),
Polyporales Russulales (1).
Coprinaceae Tricholomataceae (3),
1-2 (. 7.4). -
: (11), (3)
(2) (. 7.5). ,
(13), , , -
9%
(, 2005).
Agaricales (8) Russulales (5),
Russulaceae 5 , 6 1-2

(. 7.4). 5 - : -
(6), (3), (2),
(1) (. 7.5).
Pluteus sororiatu ;
Hemimycena delectabilis -
, ()
, - .

8.

2006 . 31600 .

. 38% -

(, - , - -

), 35% , 16% ,

- , (, - ,

, 1982; , 1986).

,-

Ascomycota s.l., .. 2004-2005 .

Ascomycota s.l., -

107 , 57 , 30 18

(26).

Erysiphales.

25 -

7 (. 3.1).

Erysiphe s.l. (13), *Golovinomyces*

Podosphaera (4).

Erysiphe baeumleri *E. ulmariae*, *E. astragali*, *E. palczewskii*, *E. syringae-japonicae* *Phyllactinia guttata* -

Alopecurus pratensis *Blumeria graminis*, *Salix caprea* *Salix viminalis*
Erysiphe adunca, *Vicia cassubica* *E. baeumleri*, *Trifolium sativum*
E. trifolii, *Filipendula denudata* *E. ulmariae* *Rudbeckia laciniata*
Golovinomyces cichoraceorum

Erysiphe convolvuli *Convolvulus arvensis*, *E. trifolii*

Fabaceae, *Golovinomyces cynoglossi* *Pulmonaria obscura*, *Erysiphe*
alphitoides *Quercus robur*, *Phyllactinia guttata* *Betula pendula*, *Erysiphe*
adunca Salicaceae.

Erysiphe alphitoides,

Phyllactinia guttata.

Golovinomyces cynoglossi (*Pulmonaria obscura*) *Erysiphe*
astragali (*Astragalus glycyphyllos*).

Erysiphe aquilegiae *Ranunculus sp.*, *E. ulmariae*
Filipendula denudata, *E. adunca* *Salix L.*

Erysiphe
cruciferarum *Pimpinella saxifraga*, *E. trifolii*

Fabaceae, *Blumeria graminis* (Poaceae).

Golovinomyces sordidus *Plantago major*,
G. cichoraceorum *Cichorium intybus*, *G. depressus* *Arctium lappa*
Erysiphe trifolii *Melilotus albus*.

Sordariomycetes,

21 (13)

Sordariomycetidae.

Sordariales (7) Diaporthales (5).

Sordariomycetidae

Glomerellaceae *Glomerella cingulata.* 5

Hypocreales Hypocreomycetidae,

Xylariales – Xylariomycetidae, ,

Phyllachorales,

Sordariomycetes, *Phyllachora graminis.*

Sordariales, ,

– Lasiosphaeriaceae Sordariaceae.

Podospora Lasiosphaeria,

– *Sordaria macrospora.*

Diaporthales – *Diaporthe* (2),

Leucostoma, Valsa Valsella (1).

– Hypocreaceae,

Nectriaceae (2) Clavicipitaceae (1).

Sordariales

, , , .

Podospora setosa Lasiosphaeria canescens

, *Podospora setosa,*

, .

, , , , ,

Laiosphaeria canescens, *Robinia*

pseudoacacia. ,

, . 6

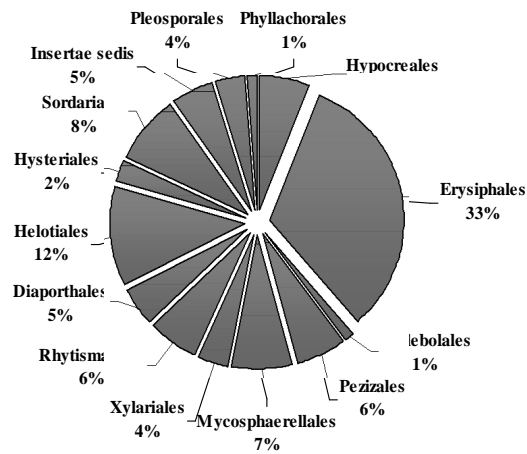
–

Laiosphaeria hirsuta, *Podospora curvula, P. pauciseta*

Sordaria macrospora (Sordariales), *Hypocrea rufa* (Hypocreales).

, *Hypocrea gelatinosa*,
 (, 1991),
Sordaria macrospora,
 (, 1969).
 Sordariomycetes, Ascomycota
 : Leotiomyces (15), Dothideomycetes
 (11), Pezizomycetes (6) Orbiliomycetes (3). -
 Helotiales (10), Mycosphaerellales
 (6), Pezizales (5) Rhytismatales (4). 1-3
 (. 8.1).
 Helotiales (10 5) -
 Helotiaceae Dermateaceae, -
Mollisia (3) *Hymenoscyphus*
 (4). *Tapesia*, *Bisporella* *Chlorociboria* .
 Mycosphaerellales Mycosphaerellaceae -
Mycosphaerella, 5
 - *Guignardia*. 5 ,
 Pezizales.
 Pyrenomataceae (2), Ascobolaceae Pezizaceae (1
). (*Lasiobolus ciliatus*)
 , genera incertae sedis.
 Rhytismatales
 Rhytismataceae. 4 ,
Coccomyces, *Colpoma*, *Propolis* *Rhytisma*.
Orbilina,
 Orbiliaceae Ascomycota,

Orbiliomycetes.
 Hysteriales. , *Thelebolus polysporus*
 Thelebolales.
 Ascomycota,
 – *Iodophanus testaceus*
Orbilium leucostigma.
 (Pezizomycetes),
 (Orbiliomycetes),
Pinus L.,
Lamprospora modesta.
 (, 1980).



8.1. Ascomycota s.l.

(. 8.2).

(44),
(25).

Mollisia cinerea, *Bisporella citrina*, *Hymenoscyphus fructigenus*, *H. salicellus*,
Diaporthe caraganae, *Diatrypella favaceae*, *D. quercina*, *Tapesia fusca*.

8

- : *Hymenoscyphus herbarum*, *H. scutula*,
Leptospora rubella, *Lophiostoma angustilabrum*, *Mollisia ulmariae*.

9

(),

Ascobolus imersus, *Podospora curvula*, *P. pauciseta*, *Sporormiella minima*,
Sordaria macrospora.

- *Coccomyces coronatus* *Lamprospora modesta*.

36

26

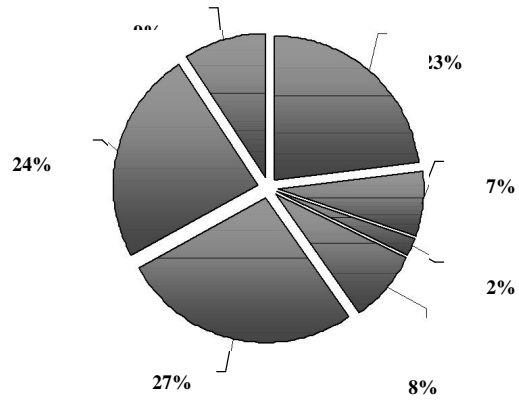
: *Ascochyta calystegiae* *Septoria calystegiae* *Calystegia*
sepium, *Phoma lupini* *Septoria kaznowskii* *Lupinus polyphyllus*,
Ramularia cylindroides *Pulmonaria obscura*, *Ramularia sambucina*
Sambucus racemosa.

: *Guignardia reticulata*

Phyllosticta cruenta, *Mycosphaerella jaczewskii*
Asteromella borszczowii *Septoria caraganae*, *Mycosphaerella podagrariae*
Asteromella aegopodii *Septoria aegopodina*, *Mycosphaerella pyri*
Septoria pyricola.

Rhytisma acerinum,
Melasmia acerina – *Acer*
platanoides.
 10
Betula pendula *Diplodia betulae*, *Diplodia*
 Robinia pseudoacacia.
Tilia cordata

Phyllachorales – *Phyllachora graminis*.



. 8.2.

Ascomycota s.l.

Ascomycota s.l. (67)

25

– 9,

– 8

(26) : (36) , 19

- ()
).
 , ,
 .
Rhytisma acerinum, - *Melasmia acerina* -
Acer platanoides.
 , , *Nectria*
cinnabarina , *Tubercularia vulgaris*.
Mycosphaerella pyri,
 - *Septoria pyricola* -
Prunus domestica,
 . ,
 :
Mycosphaerella podagrariae *Asteromella aegopodii* *Aegopodium*
podagraria *Guignardia reticulata* *Phyllosticta cruenta*
Polygonatum multiflorum. -
Bisporella citrin , *Chlorosplenium aeruginascens*,
Coccomyces coronatus, *Diatrypella favaceae*, *D. quercina* *Hypoxyton*
fragiforme. -
 . ,
 ,
Pimpinella saxifraga *Mycosphaerella podagrariae*
Septoria aegopodina, *Calystegia sepium* - *Ascochyta calystegiae*, *Septoria*
calystegiae *Phoma herbarum*.
 .
Diplodia caraganae *Caragana arborescens*, *Camarosporium*
robiniae *Robinia pseudoacacia*, *Valsa ambiens* *Betula pendula*.
 ,
 .

26
 14 , 6 5
 (Coelomycetes) Melanconiales Sphaeropsidales, 18
 (Hyphomycetes) 8
 Hyphomycetales, Stilbellales Tuberculariales.
 Sphaeropsidales,
 15 6
 Sphaerioidaceae. *Phoma*
 (5), *Diplodia* *Septoria* (3),
 (Melanconiales)
 Melanconiaceae,
Asteroma, *Colletotrichum* *Pilidium*. -
 Hyphomycetales, 6
 Dematiaceae Moniliaceae.
 4 *Ramularia*,
 Dematiaceae
Alternaria
tenuissima *Passalora dubia*.
 Stilbellales (*Phragmocephala elliptica*) Tuberculariales
 (*Bactridium flavum*) i ,
 , *B. flavum*,

Septoria calystegiae
Calystegia sepium, *Ramularia rhabdospora* *Plantago major* *R. tricherae*
Knautia arvensis.

Urediniomycetes

Uredinales,

32 8 , 5 9
 , Pucciniaceae (22), Melampsoraceae (5), Phragmidaceae
 (3), oleosporiaceae Uropyxidaceae (1).

Puccinia (14) *Uromyces* (6),

Melampsora (5).

Phragmidium

, *Gymnosporangium*
cornutum *Sorbus aucuparia*, *Puccinia glechomatis* *Glechoma hederacea*
G. hirsuta, *Puccinia variabilis* *Taraxacum officinale* *Puccinia xanthii*
Xanthium sp.

Uredinales

(17). , -
 10 , - - -7,
 - 5 .

Melampsora populnea *Populus tremula*,
Puccinia arenariae *Moehringia trinervia* *Stellaria holostea*, *P. glecho-*
matis *Glechoma hederacea* *G. hirsuta*, *P. asarina* *Asarum europaeum*,
Uromyces laburni *Caragana arborescens* *Chamaecytisus ruthenicus*.

(13)

Phragmidium

potentillae *Potentilla argentea* *P. neglecta*, *Puccinia coronata*
P. graminis -

6

Salix – Melampsora allii-fragilis,

M. caprearum *M. epitea*.

Puccinia caricina *Carex*.

5 Uredinales.

Crepis tectorum *Elytrigia repens* *Puccinia crepidis*
P. recondita .

68

9- «Ainsworth & Bisby's Dictionary of
the Fungi» (2001), 34 16 4
Basidiomycetes. 8 , 25

41 -

(, 2006,
Prydiuk, 2006, 2007a,b),

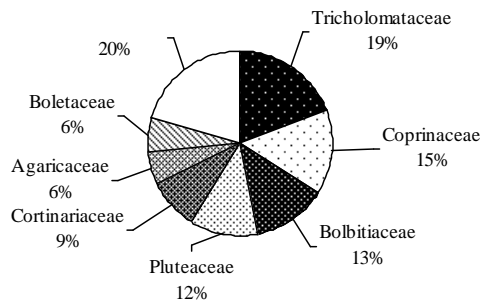
(59),

Agaricales, 5 – Boletales, 3 – Russulales, 1 – Phallales.
Tricholomataceae (13),
Coprinaceae (10), Bolbitiaceae (9), Pluteaceae (8), Cortinariaceae (6),
Agaricaceae Boletaceae (4) (. 8.3).

- , ,
Russulaceae.

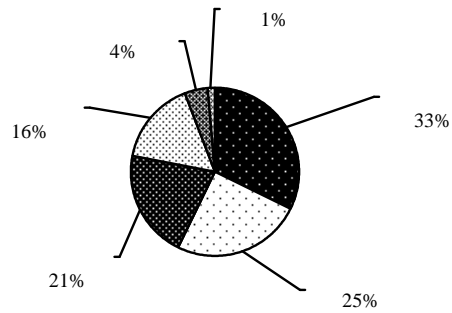
, , ,
Coprinus *Pluteus* (6), *Clitocybe*,
Inocybe *Psathyrella* (4). ,
, *Clitocybe gibba*, *Collybia peronata*, *Coprinus*
disseminatus, *C. domesticus* *Psathyrella candolleana*.

Clitocybe fusc squamulosa, *Conocybe echinata*, *C. moseri*, *Entoloma undatum*, *Galerina cinctula*, *Inocybe hirtella* var. *bispora*, *Pholiotina vestita*, *Pluteus pusillulus*. (, 5) – *Flammulaster gracilis*, *Melanophyllum echinatum*, *Pholiotina brunnea* .



. 8.3.

(. 8.4). 6 - , (22), (17), (14) (11).
 ,
 (*Coprinus niveus*, *C. radiatus*, *Panaeolus sphinctrinus*)
 (*Coprinus friesii*).
 , , ,
 , ,
 , ,
 , ,

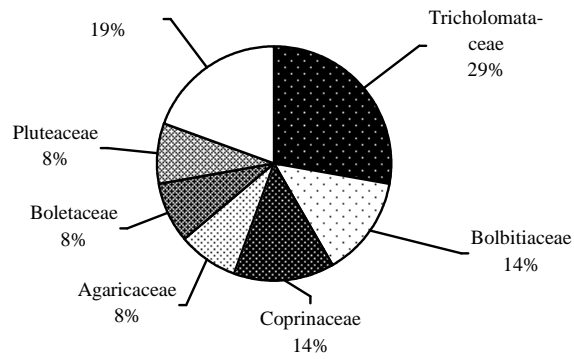


. 8.4.

: (36) -
 , (18) - ,

5 (*Entoloma undatum*, *Inocybe dulcamara* var. *pygmaea*, *I. hirtella* var. *bispora*, *Pholiotina velata*, *Volvariella taylori*),
 (*Agrocybe pediades*, *Bovista dermoxantha*, *B. plumbea*, *Coprinus radiatus*, *Stropharia melasperma*).
 (*Coprinus radiatus*, *Pluteus ephebeus* *P. petasatus*)

(*Melanoleuca brevipes* *Psathyrella badiophylla*) (Inocybe
cookei *Russula pectinatoides*,
Psathyrella candolleana,
Lactarius obscuratus).

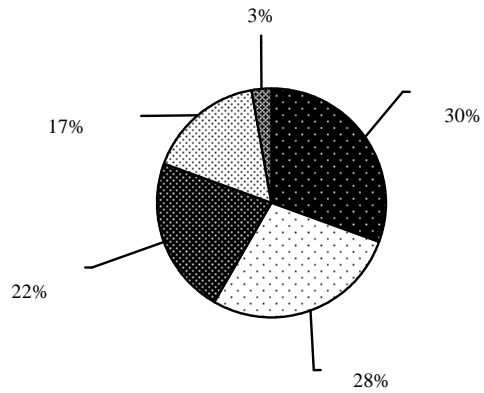


. 8.5.

36 30
 Agaricales, 4 – Boletales, 1 –
 Phallales Russulales.
 Tricholomataceae (10), Bolbitiaceae Coprinaceae (5),
 Agaricaceae, Boletaceae Pluteaceae (3) (. 8.5).
 :
 – 11, – 10, – 8,
 – 6 – 1 (. 8.6).

Phallus impudicus *Psathyrella candolleana*,
Agaricus semotus, *Conocybe tenera*, *Cystolepiota seminuda*, *Lepista*

sordida, *Marasmius wynnei* .)
 (*Melanophyllum echinatum*) ,
 (*Conocybe echinata*, *C. moseri* *Pholiotina vestita*)
Coprinus
disseminatus, *C. domesticus* *C. xanthothrix*. *Pluteus*
godeyi, *P. pusillulus* .
Clitocybe gibba *Collybia peronata*, *Clitocybe fuscusquamulosa*
Boletus
chrysenteron , *B. luridus*, *B. rubellus*, *Entoloma*
subradiatum, *Russula subfoetens* *Scleroderma verrucosum*
Coprinus friesii,



. 8.6.

Tricholomataceae Coprinaceae (4),
Agaricaceae (3). -
: (8),
(4), (2).

(*Coprinus*
disseminatus, *Flammulaster gracilis*, *Pleurotus ostreatus*, *Pluteus cervinus*,
Psathyrella pygmaea *Volvariella bombycina*)
Galerina cinctula

Cystolepiota seminuda, *Macrolepiota procera*, *Melanophyllum echinatum*
Pholiotina brunnea, - *Clitocybe brumalis*, *Clitocybe gibba*,
Collybia peronata *Mycena pura*.
Coprinus niveus *Panaeolus sphinctrinus*.

9.

1998–2000 .
Erysiphales, Uredinales Ustilagi nales, Peronosporales, 314
41 , 12 , 4 4 Oomycota,
Ascomycota Basidiomycota (, 2002). , 2003–2006
421 163 , 59 , 22
Ascomycota (257 , 60,9%), Basidiomycota (70, 16,8%)
(94, 22,3%) (, 2007).
1916–1917 . ()
12 ,
290 , 18
Peronosporales), 272 –
Ascomycota – 33 , Basidiomycota – 120
– 119 (– , 1921).

2004 . , -
 2006 .
 (-
) 2006 .

26 , 16 , 7 4 2006 .
 :
 (, ,) () .

(*Physarum globuliferum*), (*Diachea leucopodia* *Licea variabilis*), *Polytrichum commune* (*Badhamia affinis*) (*Fuligo septica* *Diachea leucopodia*).
 : *Arcyria* (*A. cinerea*, *A. denudata*, *A. ferruginea*, *A. incarnata*, *A. obvelata*, *A. pomiformis*); *Badhamia* (*B. affinis*); *Cribraria* (*C. argillacea*, *C. aurantiaca*); *Diachea* (*D. leucopodia*); *Diderma* (*D. testaceum*); *Didymium* (*D. minus*); *Fuligo* (*F. septica*); *Licea* (*L. variabilis*); *Lycogala* (*L. epidendrum*); *Mucilago* (*M. crustacea*); *Physarum* (*Ph. album*, *Ph. globuliferum*, *Ph. pulcherripes*); *Stemonitis* (*S. axifera*, *S. fusca*, *S. splendens*); *Stemonitopsis* (*S. typhina*); *Symphytocarpus* (*Symphytocarpus* sp.); *Trichia* (*T. favoginea*); *Tubulifera* (*T. arachnoidea*).

(6)

Arcyria, *Physarum* *Stemonitis* (-

).

() *Diachea leucopodia*
Stemonitis axifera, 6 ,
Arcyria obvelata *Tubulifera arachnoidea*, 5 .
Diachea leucopodia
(4),
, , , . *Stemonitis axifera*
- (4), ,
. *Arcyria obvelata*
- , . *Tubulifera*
arachnoidea ,
.
, , ,
, , ,
-
Lycogala epidendrum, , , , ,
(), , ; *Mucilago crustacea* - ,
(), , ; *Stemonitis axifera* *Arcyria obvelata* -
, , () ; *Fuligo septica* - , ,
; *Trichia favoginea* - (), , ;
Stemonitis splendens - , , () ; *Tubulifera*
arachnoidea - , , (), ; *Arcyria*
pomiformis - , ; *Physarum globuliferum* - ,
; *Ph. album* - , ; *Stemonitis*
fusca - , .
,
- *Cribraria argillacea* *C. aurantiaca*,
, ; *Licea variabilis* -

Leotiomycetes (25).

– Orbiliomycetes Pezizomycetes. , -

28 5 Helotiales,

Rhytismatales Orbiliales, Pezizales.

Helotiales 21 9

Dermateaceae (9), Helotiaceae (8), Hyaloscyphaceae (4).

Mollisia *Hymenoscyphus* (5).

Lachnum *Tapesia* (3). ,

Calloria, *Ascocoryne*, *Hyaloscypha*,

Crocicreas, *Chlorociboria* .

(10), (9)

(2).

,
Mollisia melaleuca, *Tapesia fusca*, *Chlorociboria*
aeruginascens, *Hymenoscyphus caudatus*, *H. scutula*, *Lachnum virgineum*

– , -

, *Alnus glutinosa*

Corylus avellana. , *Lachnum virgineum*,

, ,

Rhytismatales , 4

Coccomyces, *Lophodermium* *Rhytisma* Rhytismataceae.

, ,

, *Coccomyces coronatus* , *Lophodermium pinastri* –

, *Rhytisma acerinum* – *Acer platanoides*, *Rh. punctatum* –
A. tataricum.

Orbiliales (Orbiliomycetes)

Orbilia (*O. auricolor*, *O. delicatula* *O. sarraziniana*).

Pezizales, Pezizomycetes

Ascobolaceae (1)

Pyronemataceae (2). , *Ascobolus immersus*,

– *Geopyxis carbonaria*

Pyronemataceae

Trichophaea woolhopeia

(, 1999).

1–3

Hyaloscypha quercicola, , *Lachnum*

clavigerum – *Urtica dioica*.

Mollisia arundinacea, *Tapesia hydrophila*,

Orbilia auricolor,

(, 2005; Fungi of Ukraine, 1996).

Trichophaea woolhopeia

(, 2002).
 Sordariomycetes 2 – Dothideomycetes.
peziza Lasiosphaeria ovina,
Podospora pauciseta,
Hypocrea gelatinosa,
 (, 2005; Fungi of Ukraine, 1996).
 Ascomycota, 2006 .
 2006 .
 8 , 39 19
 (19) *Puccinia*.
Phragmidium , *Melampsora* *Uromyces* –

, *Coleosporium*, *Cronartium*, *Gymnosporangium* *Puccini-*
astrum – .

Asteraceae (8) Rosaceae (6).
 1–3 . (22)
 , 13 , 9 –

Uredinales

, . 13
 , 11 8 .
 , - (-
) ,
 (, , 2005), « »
 (, , , 1994).
 , , -

Coleosporium tussilaginis *Melampyrum nemorosum*, -
Inula sabuletorum. -

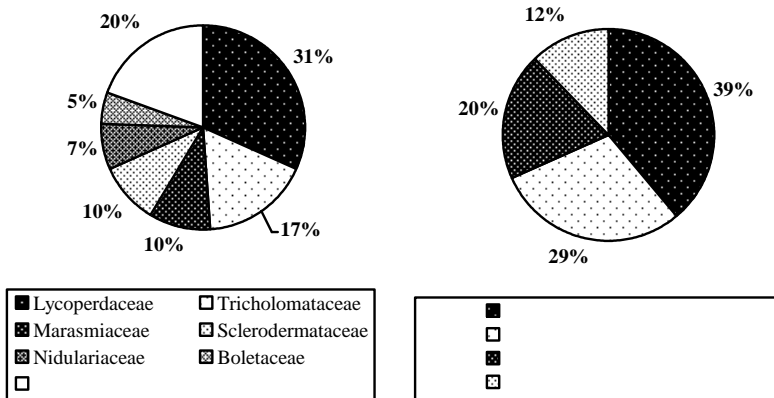
41 , 25 , 14
 5 Basidiomycetes (, 9
 «Ainsworth & Bisby's Dictionary of the Fungi», 2001).
 (*Bovista dryina*) , 7 –
 Agaricales
 (32) Boletales (6). , 1 Phallales,

Polyporales Russulales.

: Lycoperdaceae (13), Tricholomataceae (7), Marasmiaceae Sclerodermataceae (4), Nidulariaceae (3) Boletaceae (2) (.9.1,).

: *Lycoperdon* - 6, *Bovista* - 4, *Marasmius* *Scleroderma* - 3 .
Crucibulum laeve, *Lycoperdon perlatum*, *Scleroderma areolatum* *Vascellum pratense*. -

: - 8 - 16 , - 12, -
- 5 (.9.1,).



.9.1.

()

- ()

13

(12),

(7),

(6),

(5),

(4),

(3), (2) (1).

, : *Clitocybe gibba*, *Collybia fusipes*, *Delicatula integrella*, *Hypholoma fasciculare*, *Lactarius quietus*, *Lycoperdon atropurpureum*, *L. perlatum*, *Marasmius rotula*, *Panellus stypticus*, *Pleurotus cornucopiae*, *Scleroderma bovista* *Tylopilus felleus*.

Crucibulum laeve, *Bovista dermoxantha*, *Calvatia excipuliformis*, *Lycoperdon perlatum*, *Scleroderma areolatum*, *S. verrucosum* *Sphaerobolus stellatus*.

– *Bovista aestivalis*, *B. dermoxantha*, *B. plumbea*, *Calvatia caelata*, *Cyathus stercoreus* *Vascellum pratense*.

, *Crucibulum laeve*, *Lycoperdon pyriforme*, *Marasmiellus ramealis*, *Marasmius rotula*, *Mycena polygramma* *Trichaptum bifforme*.

Hypholoma fasciculare, *Laccaria laccata*, *Lycoperdon perlatum*, *Marasmius oreades*, *Scleroderma areolatum*.

- *Clitocybe candicans*, *Lycoperdon nigrescens*, *Marasmius bulliardii*, *Mycena capillaripes* *Scleroderma areolatum*.

Crucibulum laeve, *Bovista dryina*, *Calvatia excipuliformis*, *Lycoperdon molle* *L. perlatum*.

Delicatula integrella, *Lycoperdon perlatum*, *Marasmiellus ramealis* *Schizophyllum commune*.

, *Lycoperdon atropurpureum*, *L. molle*, *L. perlatum* *Scleroderma areolatum*

- *Astraeus hygrometricus*, *Crucibulum laeve* *Cyathus striatus*.

(*Calvatia caelata* *Leccinum scabrum*) (*Lycoperdon perlatum*

L. umbrinum) , (*Mycenastrum corium*)

10.

« »

1008

, 51 , *Pinus cretacea*,

(, 2003).

XXI .:

(, , , 2002; , , 2004;
, , , 2005; Sukhomlyn, Triskiba, 2003),
, (, ,
2005).

2004 .

17 *Physarum* (3), *Arcyria* *Trichia* (
2), *Ceratiomyxa*, *Comatricha*, *Craterium*, *Fuligo*, *Lycogala*, *Metatrichia*,

Mucilago, *Stemonitis*, *Stemonitopsis* *Tubulifera* (). -
-
, (,). *Mucilago crustacea*
-
(), *Arcyria cinerea* *Trichia*
favoginea ,
(). *Trichia varia*, 6
: , ;
T. varia , -
. *Fuligo septica*, 5 ,
(3) - (2
) .
Lycogala epidendrum,
(3) (1), *Arcyria cinerea*,
-
. 4 -
- *Metatrichia vesparia*, ,
Mucilago crustacea - - , *Trichia favoginea* -
, *Tubulifera arachnoidea* -
. (9), *Arcyria*
ferruginea (-), *Ceratiomyxa fruticulosa* *Comatricha*
nigra (), *Craterium leucocephalum* (), *Physarum*
album (), *Ph. decipiens* (-), *Ph. nutans*
(), *Stemonitis fusca* (), *Stemonitopsis typhina*
(-), .
, ,
, .
, .

2005 . (, 2005). ()
19 .

7 : *Craterium leucocephalum*, *Lycogala epidendrum*, *Metatrichia vesparia*, *Mucilago crustacea*, *Trichia favoginea*, *T. varia*, *Tubulifera arachnoidea*.

17, – 20
5 , *Ceratiomyxa fruticulosa*,
Lycogala epidendrum, *Physarum album*, *Trichia favoginea*, *T. varia* (,
, 2006).

5 (28 2 2004 .
).
« » (15-16 2005 .)
– (19 2005 .).
7 (2 8 2003 .).

(, 2006,).

Lycogala epidendrum,

(), ; *Mucilago crustacea* –
(), ; *Fuligo septica* –
; *Stemonitis axifera* *S. splendens*, *Arcyria obvelata* –
(), ; *Trichia favoginea* – (),
; *T. varia* – (),

() - 1950 .,

1952 .

1959 ,).

1973 .

1989 .

1980 .

1989 .)

(1986 .).

1976 ., – 1977 ., 1978 .,
 1985 ., 1986 . 1989 . 220 .,
 « » (, 1989), -

41 8
 Erysiphales. *Erysiphe* s.l. (13),
Golovinomyces (11) *Podosphaera* s.l. (10).

Erysiphe astragali, *Golovinomyces echinopis*, *G. simplex* *Phyllactinia guttata*.
Erysiphe thesii, *Golovinomyces echinopis* *G. morozkovskii*,
Erysiphe divaricata, *E. urticae*, *Neoerysiphe galii* *Podosphaera dipsacearum*.

135 , *Golovinomyces biocellatus* *Podosphaera savulescui*
Hyssopus cretaceus *Adonis vernalis* –
 (1996)

– *Agropyron desertorum* *Poa angustifolia*
Blumeria graminis; *Astragalus cicer* *Erysiphe astragali*; *Erucastrum cretaceum*, *Sinapis arvensis*, *Sisymbrium officinale* *S. orientale* *E. cruciferarum*; *Anethum graveolens*, *Eryngium campestre* *E. planum* *E. heraclei*;
Medicago lupulina *M. sativa* *E. pis* ; *Polygonum novoascanicum*
E. polygoni; *Artemisia absinthium* *A. dracunculus* *Golovinomyces*

artemisiae; *Ajuga genevensis* *G. biocellatus*; *Achillea nobilis*, *Anthemis tinctoria* *Senecio erucifolius* *G. cichoraceorum*; *Carduus hamulosus*, *Centaurea diffusa* *C. trichocephala* *G. depressus*; *Verbascum lychnitis* *V. nigrum* *G. verbasci*; *Teucrium chamaedrys* *Leveillula duriaei*; *Chaiturus marrubiastrum* *Stachys recta* *Neoerysiphe galeopsidis*; *Betula pubescens* *Corylus avellana* *Phyllactinia guttata*; *Fragaria ananassa* *Podosphaera aphanis*; *Dipsacus strigosus* *P. dipsacearum*; *Euphrasia pectinata* *P. fusca*; *Rosa canina* *R. rubiginosa* *P. pannosa* *Campanula rapunculoides*, *Jurinea brachycephala* *Origanum vulgare* *Oidium* spp.

XXI c . , , -
 , ,
 (1951) . . (1959 ,),
 . . (1991), *Phoma*
thallina *Swida sanguinea*. 2004 .
 (10).
 (94) – 2004 .
 41 12 . ,
 , , , , .
 , , , , ;
 , .

Septoria (15), *Ramularia* (5), *Phoma* (5), *Ascochyta* (4), *Phyllosticta* (3). *Alternaria*, *Cercospora*, *Passalora*, *Stigmina*, *Didymosporina*, *Discula*, *Neomarssoniella*

– 29 7

11 5

: *Septoria quercicola*

Quercus robur, ; *Septoria urticae* – , ; *Passalora murina* *Viola odorata*, *Septoria tabacina* *Artemisia* sp., (, 2004).

: – 32 , – 7, – 4 .

Passalora murina, *Ramularia lactea*, *R. variabilis*, *Ascochyta ligustri*, *Discula umbrinella*, *Phoma herbarum*, *Phyllosticta cruenta*, *Septoria agrimoniae-eupatoriae* *S. quercicola*.

Cercospora olivascens, *Ramularia brunnea*, *Ascochyta asclepiadearum*, *A. cornicolae*, *Didymosporina aceris*, *Phyllosticta maculiformis*, *Septoria gei*, *S. hyperici*, *S. pyricola*, *S. stachydis*, *S. urticae*. *Passalora bellynckii*, *Cercospora centaureae*, *Ascochyta viciae*, *Phoma macrostoma*, *Septoria chelidonii*, *S. euphorbiae*, *S. pyricola*.

Alternaria tenuissima, *Ramularia rhabdospora*, *Stigmata carpophila*, *Phoma exigua*, *Septoria aegopodii*, *S. stachydis*.

Ramularia rhabdospora, *R. rubella*, *Phoma herbarum*, *Phyllosticta potentillica*, *Septoria agrimoniae-eupatoriae*, *S. rubi*, *S. salviae-pratensis*.

Phoma artemisiae, *Septoria rubi*, *S. salviae-pratensis*, *S. tabacina*.

(, 2002).
Ramularia variabilis, *Ascochyta ligustri*, *Phoma macrostoma*, *Septoria chelidonii*, *S. oenotherae*.

2004 . 24 8 , 6
 Uredinales, 32 11 -
 (9) ,
Puccinia. *Uromyces* , *Melampsora*
Phragmidium – , *Pucciniastrum* – , *Coleosporium*,
Melampsorium *Tranzschelia* .

Uredinales

() 32 5 (, ,
., 1987), ()
36 7 (, , ., 1994).

9 , - 21

Asteraceae (8) Rosaceae (5). Uredinales,
(5),
(4).

6 9 , 7
(-
) , -
5 .

(eu-auto - 10, eu-hetero - 8). micro-
brachy- hemi- ,

Medicago falcata *Uromyces striatus*
Erysiphe pisi, *Artemisia vulgaris* *Puccinia artemisiicola*
Golovinomyces artemisiae (Erysiphales),
Sphaerellopsis sp.

- 8, - 5, 7
 - 13

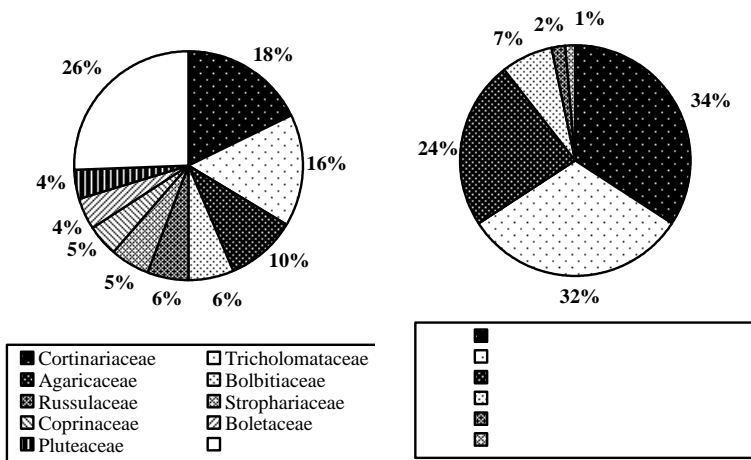
Uredinales

148
Clavariadelphus
pistillaris, *Grifola frondosa* *Hericium coralloides*,
 (, 2002;
 , 2005; Sukhomlyn, Triskiba, 2003).
 - 2004 . ()
 , C
 , 146 , 90
 , 96 -
 , 62 - , 35 -
 « » 238
 83 36 9 Basidiomycetes

(, 9 «Ainsworth & Bisby's Dictionary of the Fungi», 2001). (179)

Agaricales, (Boletales – 18 , Russulales – 16, Polyporales – 12, Phallales – 7, Auriculariales Hymenochaetales – 2, Dacrymycetales Tremellales – 1). , Cortinariaceae (42), Tricholomataceae (38), Agaricaceae (24), Bolbitiaceae (15), Russulaceae (14), Strophariaceae (13), Coprinaceae (11), Boletaceae Pluteaceae (10) (. 10.1,).

Inocybe (17), *Lepiota* (12), *Mycena* (10), *Hebeloma* *Lactarius* (9), *Conocybe* (8), *Pholiota* (7), *Agaricus*, *Boletus*, *Coprinus* *Cortinarius* (6).



. 10.1.

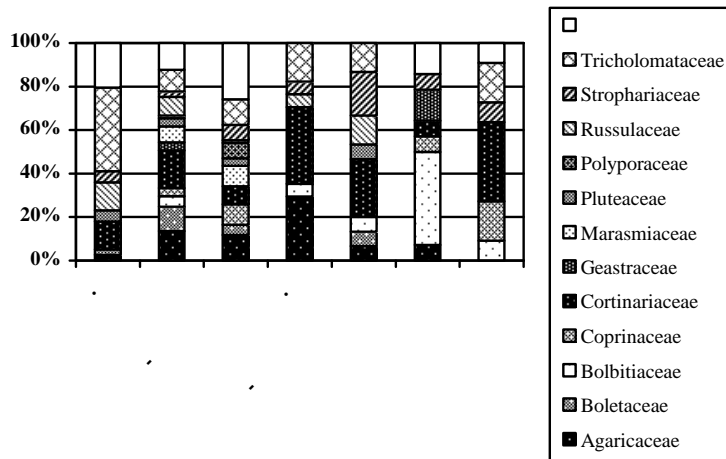
()

()

: (81),

(76), -

(56), (17), (5) (3)
) (. 10.1,). ,
 (), ,
 , :
 , , ,
 (, , 1990).
 , :
 , ,
) (81) , - (85
 (39), (17), - (15),
 (14), (11), - (9),
 (6), (4), (2).
 85 . 8 ,
 Agaricales (58).
 Polyporales (11) Boletales (5),
 (Auriculariales, Hymenochaetales, Phallales, Russulales)
 (Dacrymycetales, Tremellales) .
 Agaricaceae Tricholomataceae (10),
 Coprinaceae Marasmiaceae (8), Cortinariaceae (7), Polyporaceae
 Strophariaceae (6) (. 10.2).
 5 - :
 (37) , (28), (14),
 (5) (1) (. 10.3).



. 10.2.

Armillaria mellea,
Auricularia mesenterica, *Coprinus disseminatus*, *C. micaceus*, *Fistulina hepatica*, *Hypholoma fasciculare*, *Mycena inclinata*, *Pluteus cervinus*,
Schizophyllum commune *Stereum hirsutum*.
(*Crepidotus lundellii* *Pluteus umbrosus*), *Grifola frondosa* – ,

Agaricus xanthodermus, *Coprinus comatus*, *Lepiota cristata*, *Lycoperdon perlatum*, *Macrolepiota rhacodes*,
Marasmius oreades . (*Lepiota cristatoides* *L. ignipes*)

Amanita phalloides, *Boletus chrysenteron*, *Inocybe geophylla* var. *lilacina*, *Lactarius vellereus* *Tricholoma sculpturatum*,
Boletus erythropus, *B. luridus*, *Hebeloma sacchariolens*, *H. sinapizans*, *Inocybe furfurea*, *I. maculata* *Scleroderma citrina*. *Cortinarius lutulentus* *Inocybe*

auricoma

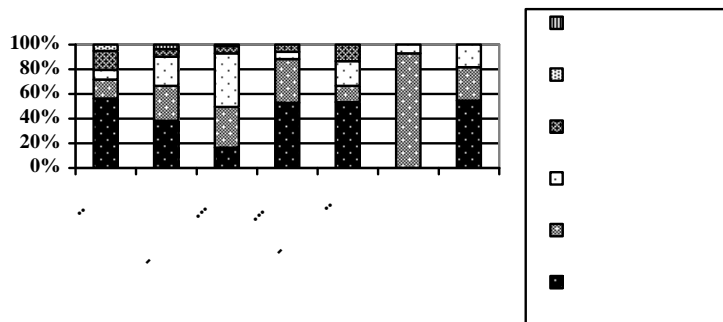
Clavariadelphus

pistillaris

Collybia butyracea, *C. dryophila*,

Marasmius androsaceus *Mycena pura*.

(*Stropharia semiglobata*).



. 10.3.

6 (Agaricales – 56

, Boletales – 11, Russulales – 7, Phallales – 3, Polyporales – 2, Auriculariales – 1),

Cortinariaceae (14), Agaricaceae (11), Boletaceae (9), Tricholomataceae (8), Russulaceae (7) Marasmiaceae (6) (. 10.2).

1–3 .

: – 31 , – 23, – 19, – 5 – 3 (. 10.3).

Boletus chrysenteron, *B. subtomentosus*, *Hebeloma testaceum*, *Inocybe rimosa*, *Lactarius quietus*, *Paxillus involutus*, *Russula delica* *R. foetens*. *Inocybe corydalina*, *I. ochroalba*, *I. patouillardii* *Leccinum percandidum*

, *Entoloma myrmecophilum* *Lactarius mairei* var.
zonatus . -
Lepiota cristata, *Macrolepiota procera*, *M. rhacodes*
Stropharia aeruginosa. (*Cystolepiota rosea*, *Lepiota*
ignivolvata, *Psilocybe semilanceata*) ,
(*Cystolepiota sistrata*) – .

Armillaria mellea, *Coprinus disseminatus*, *C. micaceus*, *Crepidotus*
mollis, *C. variabilis*, *Mycena vitilis*, *Panellus stipticus* *Schizophyllum*
commune. *Grifola frondosa*, *Hericium coralloides*, *Mycena capillaris* *Pluteus*
semibulbosus ,

Clitocybe geotropa *Marasmius androsaceus*, *Clitocybe mortuosa*

Panaeolus papilionaceus, *P. semiovatus* *P. sphinctrinus*.

, Agaricales (27) ,
Boletales (7) Russulales (5) .
: Tricholomataceae (15), Cortinariaceae Russulaceae (5)
(. 10.2). 1-2 . -

: (22) ,
(6), (3) (2) (. 10.3).

Amanita muscaria, *Chroogomphus rutilus*,
Laccaria laccata, *Lactarius rufus*, *Suillus granulatus*, *Tricholoma flavovirens*,
T. imbricatum *T. terreum*.
(*Entoloma juncinum*, *Gomphidius roseus* *Russula atrorubens*), *Cortinarius*
jubarinus *Hebeloma edurum* . ,

« ».

Stropharia aeruginosa.
Cystoderma amianthinum, *C. granulosum* *Melanoleuca cinerascens*,
Lepiota pseudhelveola var. *sabulosa* *Tephrocycbe confusa*

Collybia butyracea *Mycena pura*, *M. subaquosa*
(Mycena purpureofusca, Paxillus
panuoides, Pholiota spumosa) *(Galerina vittiformis, Rickenella*
fibula),

Agaricales (16) Russulales (1). -
Cortinariaceae (6), Agaricaceae (5)
Tricholomataceae (3) (. 10.2). -
: (9), (6), -
(1) (. 10.3).

Tricholoma terreum.
Inocybe fuscidula , ,
Cortinarius biformis, *C. fasciatus*, *Hebeloma pallidum* *Inocybe hystrix*

Cystolepiota seminuda *Lepiota cristata*. *Lepiota*
wasseri *Pholiotina brunnea*, *Lepiota mutata* *L. subincarnata*
Pholiotina
tuberculosa, – *Xeromphalina fellea*.

7 , 17 -

Agaricales, Agaricaceae
 : (*Agaricus impudicus*, *Camarophyllus pratensis*, *Macrolepiota procera* *M. rhacodes*),
 (*Lepista inversa* *Mycena pura*), (*Pluteus salicinus*)
 (*Inocybe pseudoreducta*).

(Agaricales – 12
 Russuales – 2 Boletales – 1),
 ortinariaceae (4) Strophariaceae (3) (. 10.2).

(3),
 (2) (. 10.3). *Leccinum scabrum*

Russula taeniospora.
Hypholoma fasciculare. *Pholiota limonella*
Macrolepiota rhacodes – , *Conocybe velutipes* – ,
 (*Lepista inversa* *L. nebularis*)

11 Agaricales.
 (*Hebeloma candidipes*
Naucoria subconspersa , *Entoloma lanicum*
 (*Pholiotina filaris*).
 (*Mycena alba*)
 (. 10.3).

- 2 , -
Hebeloma ingratum
 ,
 4 . -
 , *Conocybe microspora* , *C. semi-*
globata - , *Galerina laevis*.
 :
 (Agaricales - 12 Phallales - 2).
 Bolbitiaceae (6) Geastraceae (2)
 (. 10.2). -
Coprinus
disseminatus,
Cyathus stercoreus, *Tubaria conspersa*,
 ,
 (*Conocybe pulchella*, *C. siliginea*,
Geastrum elegans, *G. floriforme* *Panaeolina foenisei*), *Conocybe*
subpubescens, *C. subxerophytica* var. *brunnea* *Lepiota oreadiformis*
 ,
 (35, 15%).

11.

« »

6 2004 . « » ()
1047/2004. -
14314,8 . ,
(- ,
1980).
, , , , .
, - (, 1971).
- - (, 2002).
:
(, 1972). , -
(, , , 2001 ; , 2002).
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- .
.
(, 1907, 1910; , 1916; - ,
1921; , 1930). . . 60-
139
(, 1960, 1961).

(, , 1975; , 1991).

. . . . ()
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2000-2005
(),

(). 10
, 1300 .

(Gilbert, Martin, 1933; Stephenson, 1988;
Nannenga-Bremekamp, 1991).

143 (154),
34 , 10 , 6 2 Myxomycota .
15,3% ()
Protosteliales), 57,6% , 91,0% .

(. 11.1).
Physarales (50), Trichiales (30), Stemonitales (29)
Liceales (27).
: Ech nostel ales (33,3%),
Physarales Stemon tales. ,

11.1.

	(,)
Protosteliomycetes (1)	Protosteliales (1)	Ceratiomyxaceae (1)	<i>Ceratiomyxa</i> (1)
	Echinosteliales (6)	Clastodermataceae (1)	<i>Clastoderma</i> (1)
		Echinosteliaceae (5)	<i>Echinostelium</i> (5)
		Liceaceae (6)	<i>Licea</i> (6)
			<i>Dictydiaethalium</i> (1)
	Liceales (27)	Reticulariaceae (12)	<i>Lycogala</i> (5)
			<i>Reticularia</i> (3)
			<i>Tubulifera</i> (3)
		Cribrariaceae (9)	<i>Cribraria</i> (9)
			<i>Arcyria</i> (13)
			<i>Hemitrichia</i> (4)
	Trichiales (30)	Trichiaceae (30)	<i>Metatrichia</i> (1)
			<i>Perichaena</i> (3)
			<i>Trichia</i> (9)
			<i>Amaurochaete</i> (1)
			<i>Collaria</i> (1)
			<i>Comatricha</i> (5)
			<i>Diachea</i> (2)
			<i>Enerthenema</i> (1)
			<i>Lamproderma</i> (1)
Myxomycetes (142)	Stemonitales (29)	Stemonitidaceae (29)	<i>Macbrideola</i> (1)
			<i>Paradiacheopsis</i> (3)
			<i>Stemonaria</i> (1)
			<i>Stemonitis</i> (7)
			<i>Stemonitopsis</i> (4)
			<i>Symphytocarpus</i> (2)
			<i>Badhamia</i> (6)
			<i>Craterium</i> (3)
		Physaraceae (35)	<i>Fuligo</i> (6)
			<i>Leocarpus</i> (1)
			<i>Physarum</i> (19)
	Physarales (50)		
		Didymiaceae (15)	<i>Diderma</i> (6)
			<i>Didymium</i> (8)
			<i>Mucilago</i> (1)

Physarales

Echinosteliales, Liceales, Trichiales.

Physaraceae (35), Trichiaceae (30), Stemonitidaceae (29).
Physarum (19), *Arcyria* (13), *Trichia*, *Cribraria* (9), *Didymium* (8), *Stemonitis* (7), *Badhamia*, *Diderma*, *Fuligo*, *Licea* (6).

1,0:2,0:3,0:1,70:3,40:4,21.

5 (3,5%)

A): *Arcyria cinerea*, *A. pomiformis*, *Echinostelium minutum*, *Fuligo septica*, *Tubulifera arachnoidea* (Stephenson, Kalyanasundaram, Lakhanpal, 1993).

13 (9,1%)

): *Arcyria denudata*, *Diderma effusum*, *Lycogala epidendrum*, *L. terrestre*, *Metatrichia vesparia*, *Mucilago crustacea*, *Physarum album*, *Stemonitis axifera*, *S. fusca*.

41 (28,7%)

(58,7%) – (R).

;

(, 1999).

(Chao, Shen, 2003).

184.

(distribution fitting)

($\chi^2 = 3,74$).

,
 (lg=1,94),
)
),
 143
 (87,4%)
 26 (18,2%) –
 125
 , 81 (56,6%) –

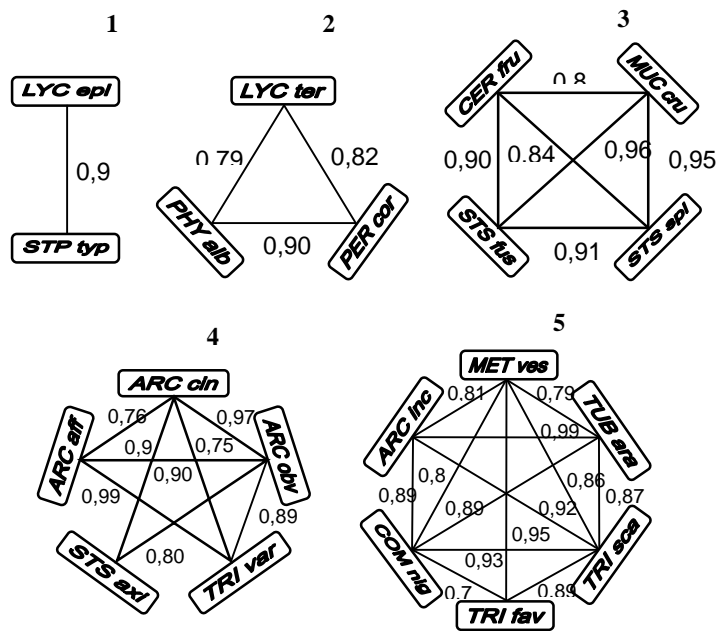
Arcyria helvetica, *Craterium brunneum*, *Diderma montanum*, *Didymium flexuosum*¹, *Echinostelium coelocephalum*, *Paradiacheopsis rigida*, *Physarum confertum*, *Reticularia splendens*, *Stemonitopsis peritricha* (Ing, 1999).

10

), (98
 (40), (90), (47)
 (16), (15), (11),
 (8) (7), (7)
).
 ,
),
 :
 75% , –80–90%,
 – 100%.

¹ *D. dubium* (, 2006).
 207

Trichiales Physarales
 (, ,), -
 Stemonitales Liceales -
 (,). -
 22
 7
 (.11.1).
 22 - *Arcyria*
denudata Fuligo septica.
 13
 65,0%
 : (93), (88), (34),
 - , (18), (15) (6).



. 11.1.

:

. ARC aff – *Arcyria affinis*,
 ARC cin – *Arcyria cinerea*, ARC inc – *Arcyria incarnata*, ARC obv – *Arcyria obvelata*, CER fru – *Ceratiomyca fruticulosa*, COM nig – *Comatricha nigra*,
 LYC epi – *Lycogala epidendrum*, LYC ter – *Lycogala terrestre*, MET ves – *Metatrachia vesparia*, MUC cru – *Mucilago crustacea*, PER cor – *Perichaena corticalis*, PHY alb – *Physarum album*, STS axi – *Stemonitis axifera*, STS fus – *Stemonitis fusca*, STS spl – *Stemonitis splendens*, STP typ – *Stemonitopsis typhina*,
 TRI fav – *Trichia favoginea*, TRI sca – *Trichia scabra*, TRI var – *Trichia varia*,
 TUB ara – *Tubulifera arachnoidea*

(correspondence analysis).

4

;
 : ;
 ; -
 ;
 -
 (. 11.2).
 (*Arcyria c nerea*, *Fuligo septica*, *Reticularia
 lycoperdon*, *Stemonitis fusca*)

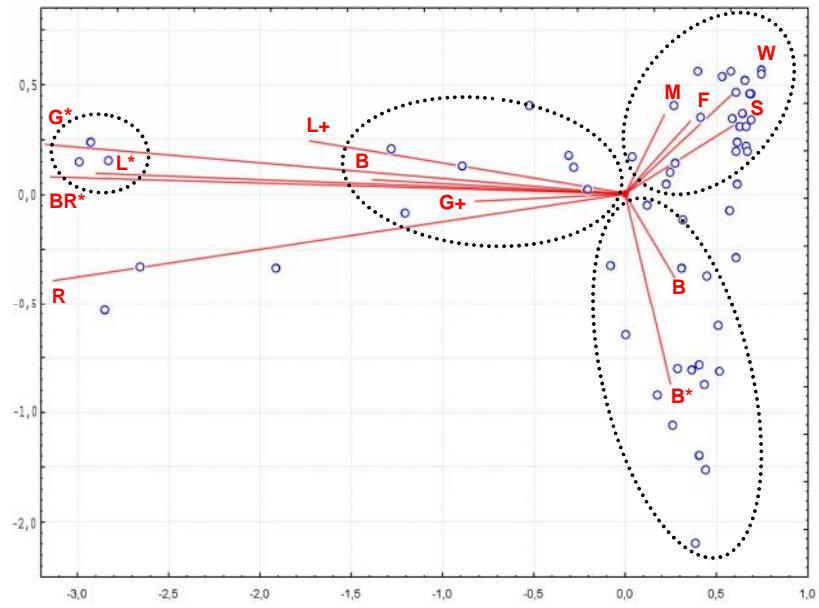
(Ing, 1999).
 (, 1993).
 (,)

Physarales (19,4–35,2–55,6–58,3%,)
 Liceales (21,5–17,0–13,0–8,3%) Trichiales (31,2–22,7–14,8–
 8,3%).

(. 11.3).

rbraraceae/Reticularaceae Physaraceae/Dydymaceae
 (0,9 3,5),
 (0 0,4).

Arcyria, Cribraria, Stemonitis Trichia
, Badhamia, Diderma, Fuligo, Licea Physarum –
Physarum
Didymium.

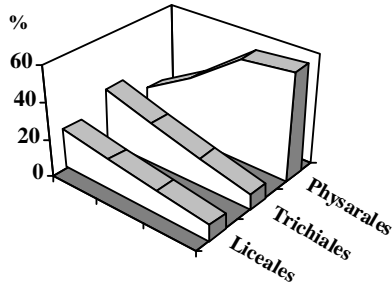


11.2.
 , B* - , +-
 , Br* - , Br+ - , F -
 , G* - , G+ -
 , L* - , L+ -
 , M* - , R - , S -
 W -

93 ,
 61 ,
 6 - 26 -

Trichiales
 (32,2%) Stemonitales (24,1%), Trichiaceae (32,2%), Stemonitidaceae
 (24,1%) Physaraceae (14,9%).

Liceales (37,5%), Stemonitales (31,3%),
 Stemonitidaceae (31,3%), Cribrariaceae (18,8%) Reticulariaceae (18,8%).



. 11.3. (%)

88 -
 18
 (33), (21), (16),
 (12) , (10)).

() ,

(, ,)

corticalis, *Macbrideola cornea* *Perichaena*
 (*Arcyria pomiformis*)
Echinostelium minutum, (*Perichaena*
Arcyria cinerea, *Cribraria violacea*, *Echinostelium minutum*, *Paradiacheopsis*
fimbriata *P. solitaria*.

(Stephenson, 1988; Härkönen, Ukkola, 2000).

19

5,0 5,9 – 50 100%.

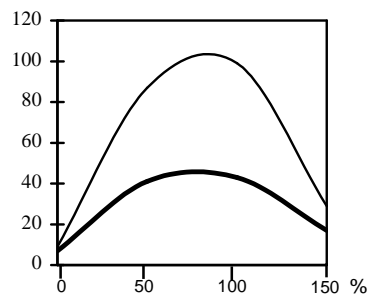
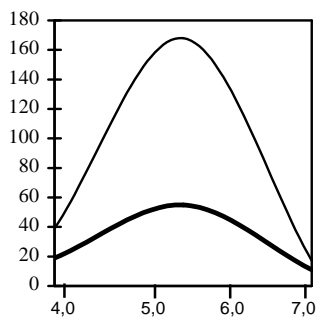
(11.4).

(*Acer tataricum*, *Euonymus europaea*, *E. verrucosa* Scop. *Sambucus nigra*),

Paradiacheopsis fimbriata (4,3–4,9).

Arcyria pomiformis *Echinostelium minutum*.
Perichaena chrysosperma, *P. corticalis* *Cribraria violacea* (5,5–6,6).

(11.5).



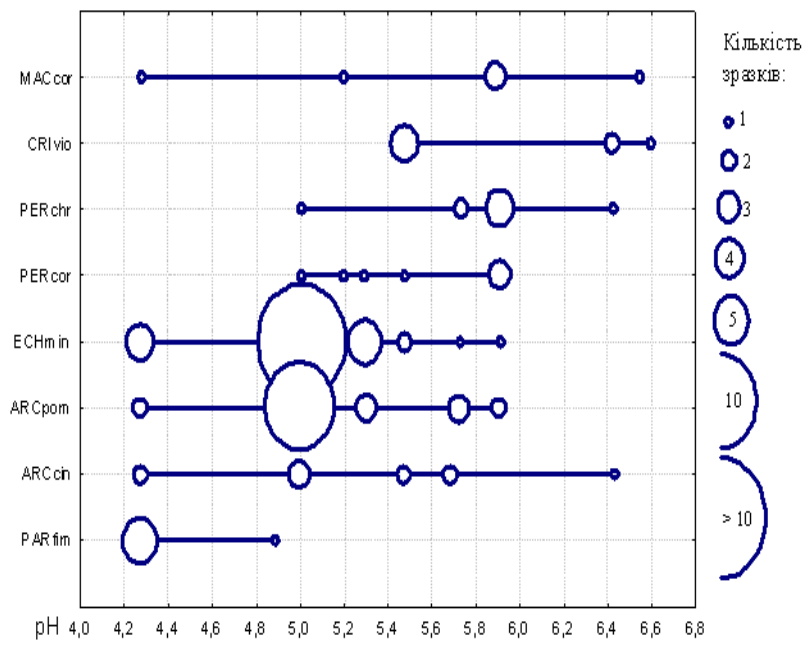
. 11.4.

,
 , 34
 -
 (6).

-
 54 ,
 , 31 -
 (10) -

Leocarpus fragilis.

(*Acer campestre*, *Euonymus verrucosa*).



. 11.5.

: ARCCin – *Arcyria cinerea*, ARCpom – *A. pomiformis*,
 CRIvio – *Cribraria violacea*, ECHmin – *Echinostelium minutum*, MACcor –
Macbrideola cornea, PARfim – *Paradiacheopsis fimbriata*, PERchr – *Perichaena*
chrysosperma, PERcor – *P. corticalis*

pilosa, *Glechoma hederacea*). (*Aegopodium podagraria*, *Carex*

Ascomycota s.l. (Erysiphales).
Ascomycota

(, , , 2003).
Ascomycota
211 108 , 7 :
Sordariomycetes, Leotiomycetes, Dothideomycetes, Pezizomycetes, Taphrinomycetes, Eurotiomycetes Orbiliomycetes.

Sordariomycetes – 115

46 .

Xylariomycetidae (42 16).

Xylariales.

(*Diatrype*, *Diatrypella*, *Eutypa*, *Kretzschmaria*,
Xylaria *Hypoxyton*).

: *Hypoxyton*
howeanum, ; *Biscogniauxia*

cinereolilacina *Tilia cordata*; *Hypoxyton* *rcidicolum*

Fraxinus excelsior; *Rosellinia corticium*

R. subsimilis, *Quercus robur*,
Armeniaca vulgaris *Cerasus vulgaris* (, , ,
2003; , , 2005). -
Daldinia,
19 , 4
(*Daldinia childiae*, *D. fissa*, *D. loculata* *D. pyrenaica*) ,
Daldinia concentrica (Ju, Rogers, San Martín, 1997;
Rogers, Ju, Watling et al., 1999). *Hypoxylon* *Nemania*
,
Hypoxylon (Ju, Rogers, 1996).
, 13 *Hypoxylon*,
Annulohypoxylon *Nemania*, , *Hypoxylon*
crocopeplum, *H. julianii*, *H. petriniae* . ,
Xylariales
,
.
Hypocreomycetidae 39 14 ;
36 Hypocreales. ,

Cordyceps (*C. bassiana*, *C. militaris* *C. memorabilis*),
,
– *Cordyceps capitata* *Elaphomyces*.
Torrubiella arachnophila
Chrysopidae.

Hypocrea *Hypomyces* (9).
, *Hypocrea citrina*, *H. rufa* *H. strictipilosa*,
– *Hypocrea pulvinata* *H. sulphurea*.
Trichoderma, ,
Hypocrea koningii, *H. lixii* *H. pachybasioides*. 9 *Hypomyces*
,
,

10

Passalora aesculina, *P. murina*, *Ramularia centaureae-atropurpureae*,
R. silenes-procumbentis, *Rutola graminis*, *Ascochyta chelidoniicola*, *Phoma*
verbenaceae, *Phyllosticta chelidonii*, *Septoria geranii*, *S. tabacina*; 6

: *Ramularia tricherae*, *Cheilaria*
agrostis, *Phyllosticta polygonorum*, *P. tiliae*, *Septoria erigerontis*, *S. ver-*
bascicola; 3

: *Ascochyta calystegiae*, *Ramularia*
lamii var. *lamii*, *Phyllosticta potentillica* (, 2004 ,).

7 : *Passalora ferruginea*, *P. gra-*
minis, *P. microsora*, *Ramularia rhabdospora*, *Septoria lamiicola*, *S. lysima-*
chiae, *S. urticae*.

(43)

- 16 (37,2%). , ,
Cercospora *Ramularia*. 27 (62,7%),
Ascochyta (2), *Phyllosticta* (5),

Septoria (13), 74% 46,5%

(, 2004).

16,

: - 25

- 8, - 3

Fusarium oxysporum, *Passalora graminis*, *P. murina*,
Ramularia lactea, *R. lamii* var. *lamii*, *Rutola graminis*, *Ascochyta chelido-*
niicola, *Cheilaria agrostis*, *Phyllosticta chelidonii*, *Septoria lamiicola*, *S. po-*
puli, *S. rubi*, *S. urticae*.

- *Tilia cordata*

Passalora microsora *Phyllosticta tiliae*,

Cladosporium herbarum, *Pollaccia radiosa*,
Discula betulina, *Phoma macrostoma*, *Phyllosticta intermixta*.

Discula betulina,

Betula pendula

Ascochyta calystegiae, *Coniothyrium*
montagnei, *Phoma graminis*, *Septoria pyricola*, *S. salicis*.

Ramularia silenes-procumbentis,
Phoma verbenaceae, *Phyllosticta potentillica*, *Septoria polygonorum*,
- *Ramularia rhabdospora*, *R. tricherae*, *Phoma artemisiae*,

Septoria erigerontis, *S. oenotherae*, *S. pyricola*, *S. tabacina*, *S. verbascicola*,
– *Passalora ferruginea*, *Ramularia centaureae-atropurpureae*, *Phyllosticta polygonorum*, *Septoria lysimachiae*.

Spermosporina alismatis,
Phyllosticta potentillica, *Septoria geranii*.

Passalora aesculina, *Aesculus hippocastanum*

().
(, , 1937),
Passalora aesculina

(
). *Mycovellosiella ferruginea*, *Passalora microsora*,
Pollaccia radiosa, *Ramularia lactea*, *Spermosporina alismatis*, *Phyllosticta potentillica*, *Septoria geranii*, *S. lamiicola*, *S. lysimachiae*, *S. oenotherae*,
S. polygonorum, *S. populi*, *S. pyricola*, *S. rubi*, *S. salicis*, *S. verbascicola*

(, 1955, 1961, 1962). *Cladosporium herbarum*, *Mycovellosiella ferruginea*, *Phyllosticta polygonorum*, *P. potentillica*,
P. tiliae, *Pollaccia radiosa*, *Ramularia lacteae*, *R. rhabdospora*, *R. tricherae*,
Spermosporina alismatis, *Septoria populi*, *S. pyricola*, *S. rubi*
(, 1999).

(*Ascochyta calystegiae*, *Cladosporium herbarum*, *Mycovellosiella ferruginea*, *Passalora microsora*, *Pollaccia radiosa*, *Septoria oeno-*

therae, S. populi, S. pyricola, S. rubi, S. salicis)

(, ,
1914). *Passalora microsora, Ramularia*.
lacteae, Spermospolina alismatis. ,

(*Phyllosticta polygonorum, P. tiliae, Ramularia tricherae, Septoria*
verbascicola), (*Ascochyta calystegiae, Phyllosticta*
potentillica), (*Mycovellosiella ferruginea, Passa-*
lora microsora, Ramularia rhabdospora, Septoria lamiiicola, S. lysimachiae),

· · · ,
196
(, , , 2001; , 2002, 2007; , 2005;
, , , 2006; , , 2007; Akulov,
Usichenko, Leontyev et al., 2002; Usichenko, 2003).

,
(26 , 7
) . , 222
, 118 , 46 11
Basidiomycetes (, 9 «Ains-

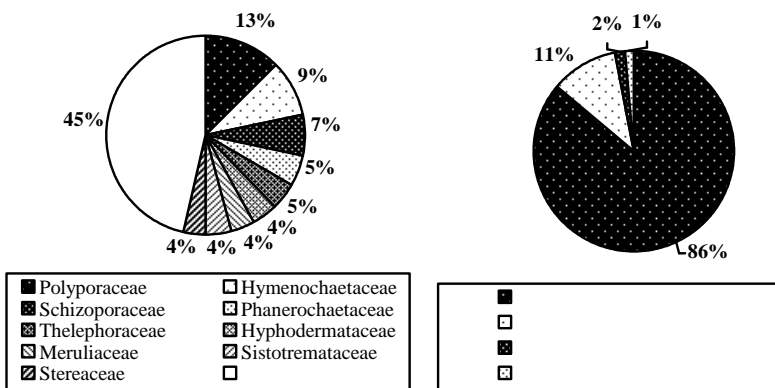
worth & Bisby's Dictionary of the Fungi», 2001).
Polyporales (102), Hymenochaetales (35),
Agaricales (27), Russulales (24) Thelephorales (13).

: Boletales – 5, Botryo-
basidiales, Cantharellales Tremellales – 4, Auriculariales
Dacrymycetales – 2 .
: Polyporaceae – 28 , Hymenochaetaceae – 20,
Schizoporaceae – 15, Phanerochaetaceae – 11, Thelephoraceae – 10, Hyphoder-
mataceae, Meruliaceae Sistotremataceae – 9, Stereaceae – 8

(. 11.6,).

Hyphodontia *Phanerochaete* (8), *Peniophora* (7), *Antrodia*
Hyphoderma (6), *Phellinus*, *Polyporus*, *Thelephora* *Tomentella*
(5).

Bjerkandera adusta, *Boletus chrysenteron*, *Collybia dryophila* var. *aquosa*,
Coltricia perennis, *Coniophora puteana*, *Coprinus xanthothrix*, *Crepidotus*
mollis, *Daedalea quercina*, *Fistulina hepatica*, *Fomes fomentarius*, *Fomitiporia*
robusta, *Ganoderma lipsiense*, *Hymenochaete rubiginosa*, *Irpex lacteus*,
Laetiporus sulphureus, *Mycena vitilis*, *Oxyporus corticola*, *Peniophora cinerea*,
Pluteus salicinus, *Polyporus arcularius*, *Schizopora paradoxa*, *S hizophyllum*
commune, *Stereum hirsutum*, *Trametes versicolor*, *Trichaptum abietinum*,
Vuilleminia comedens .



. 11.6.

()

()

(*Athelia*
fibulata, *Coprinus echinosporus*, *Crepidotus crocophyllus*, *Flammulaster*
muricatus, *Hypochnicium caucasicum*, *Inocybe bresadolae*, *Pluteus hiatus*

P. luctulosus), (*Antrodia ramentacea*, *Albatrellus cristatus*,
Botryobasidium aureum, *Ceraceomyces microsporus*, *Hyphodontia abieticola*,
Piptoporus quercinus, *Pleurotus calyptratus*, *Simocybe sumptuosa* .)

, *Hericium coralloides* *Polyporus umbellatus*.

- :
(), (191
) , (24), (4) -
(3) (. 11.6,). , -
, ,
(68),
(66), - (55) (37).
(32) (15).

Bjerkandera adusta, *Byssomerulius corium*, *Datronia mollis*, *Flaviporus semisupiniformis*, *Hapalopilus rutilans*, *Hyphoderma setigerum*, *Phanerochaete tuberculata*, *Phlebia acerina*, *Trametes hirsuta* .

Ceriporia purpurea, *Coprinus xanthothrix*, *Crepidotus mollis*, *Daedaleopsis confragosa*, *Fistulina hepatica*, *Gloeophyllum trabeum*, *Inocutis dryophila*, *Peniophora limitata*, *Pleurotus pulmonarius*, *Pluteus salicinus*, *Porostereum spadiceum*, *Scytinostroma galactinum*, *Stereum gausapatum* .

- *Inocybe adaequata*,

I. bresadolae *Entoloma sordidulum*.

Cystolepiota seminuda, – *Collybia dryophila* var. *aquosa*

Mycena pelianthina.

Daedalea quercina, *Dendrothele acerina*, *Fomitiporia robusta*, *Gloeoporus dichrous*, *Irpex lacteus*, *Polyporus alveolaris*, *Porostereum spadiceum*, *Radulomyces confluens*, *R. molaris*, *Steccherinum fimbriatum*, *Stereum hirsutum*, *Vuilleminia comedens* .

Boletus chrysenteron *Russula pectinatoides*.

- *Auranti-*
porus fissilis, *Botryobasidium subcoronatum*, *Cantharellus cibarius*, *Fomes fomentarius*, *Fomitiporia punctata*, *Fomitopsis pinicola*, *Heterobasidion annosum*, *Peniophora cinerea*, *Phaeolus schweinitzii*, *Piptoporus betulinus*, *Trichaptum bifforme* . (*Russula heterophylla*).

Byssomerulius corium,
Hyphoderma setigerum, *Hyphodontia nesporii*, *Phanerochaete sordida*,
Schizopora flavipora .

- *Antrodia pulvinascens*,
Fomes fomentarius, *Hymenochaete cinnamomea*, *Hyphoderma mutatum*,
H. setigerum, *Oxyporus corticola*, *Peniophora rufa*, *Phlebia acerina*,
Skeletocutis nivea, *Steccherinum fimbriatum* .

Antrodia serialis, *Auriscalpium vulgare*, *Botryobasidium subcoronatum*, *Dichomitus squalens*, *Diplomitoporus flavescens*, *Fomitopsis pinicola*, *Heterobasidion annosum*, *Phlebiopsis gigantea*, *Thelephora terrestris*, *Trichaptum abietinum*.

12.

9 «Ainsworth & Bisby's Dictionary of the Fungi» (2001)
Myxomycetes, Protosteliomycetes Dictyosteliomycetes.
Myxomycota.
Protozoa (Protista).
(Fungi),
Myxomycetes
5 (Echinosteliales, Liceales, Physarales, Stemonitales,
Trichiales), 13 , 62 900 ().
(), (), (),
, ,
, ,
, ,
(),
, , , , , .
30- XVIII .

(Borszscow, 1868), ()
(, 1907),
(, 1914).
21 . , 1925 .
15 (, 1932). ,
2003–2007 .
36 .
XXI .
2003 .
5 6
11
(,)
(,) .

:
 - () - ()
).
 7
 159 , 4
 ,
 36 , 11 , 6
 2 Myxomycota. -
 , -
 2000-2005 .
 143 34 , 10 , 6
 2 (, 2006 ; , 2007). 6
 ,
 -
 - 10 , ,
 . , ,
 , -
 , ,
 26 16 , 7 , 4 1
 ; - 20 13 , 10 , 5 2 ;
 - 19 14 , 7 , 5 2 ; - 19
 13 , 6 , 4 1 ; - 17 13
 , 6 , 5 2 ; - 15 10 , 6 ,
 5 2 (, 2001; , 2005; , ,
 2005, 2006; .).
 ,
 Physarales (58).
 Stemonitales Trichiales (33).

Physaraceae Physarales (39), Stemonitidaceae
 Stemonitales Trichiaceae Trichiales (33
).
 , 6 : 20
Physarum (Physaraceae, Physarales), 13 – *Arcyria* (Trichiaceae,
 Trichiales), 11 – *Didymium* (Didymiaceae, Physarales), 9 –
Badhamia (Physaraceae, Physarales), *Cribraria* (Cribrariaceae, Liceales)
Trichia (Trichiaceae, Trichiales).
 , -
Comatricha (Stemonitidaceae, Stemonitales),
 8 , *Diderma* (Didymiaceae, Physarales), *Licea* (Cribrariaceae, Liceales),
Stemonitis (Stemonitidaceae, Stemonitales), 7 .
 -
 -
 . , *Physarum*
 ,
 - (19
) , ,
 - , - ,
 .
Arcyria,
 , 13 .
 (6). , ,
 - , - .
 - *Didymium*
 .
 (8) (5). ,
 - *Didymium*.

Cribraria *Trichia*. (6), *Badhamia*,
 ()
Badhamia 9
Cribraria ,
Cribraria *Trichia* 8 ,
 -4, - 2 , -
Trichia
Stemonitis. 7,
 - 3, - 2 , -
Stemonitis
Diderma *Licea*, *Stemonitis*,
 7 ,
 6 *Diderma*,
Diderma
Licea: 6 , -
Licea
 : ; ,
 ; ,
Lycogala epidendrum,
 7 6 7

arachnoidea (), *Mucilago crustacea* ().
 5 7
Ceratiomyxa fruticulosa (), *Fuligo septica* (),
Physarum album (), *Arcyria obvelata*, *Stemonitis*
axifera *S. splendens* (), *Trichia favoginea* (),
T. varia (). 4 7
 : *Physarum globuliferum*, *Stemonitis*
fusca, *Arcyria pomiformis* *Metatrichia vesparia*.

9 . *Cribraria cancellata* ,
 ; *Didymium melanospermum* – , ;
D. minus – , ; *Arcyria denudata*
Diachea leucopodia – , , ; *Arcyria cinerea*,
A. ferruginea *Stemonitis typhina* – , ; *Arcyria*
incarnata – , . 2 7
 21 .

(5 9)

Cribraria (*C. argillacea*, *C. aurantiaca*, *C. rufa*, *C. tenella*, *C. vulgaris*).

, . *argillacea* *C. aurantiaca*
 , *C. rufa* – , *C. tenella* – , *C. vulgaris* –
Didymium (*D. clavus*,

D. iridis, *D. squamulosum*) 11

, , *D. clavus* –
 , *D. iridis* () – , *D. squamulosum* –

, *Licea variabilis*

, *Tubifera microsperma* () – ,
Diderma spumaroides – , *Craterium leucocephalum* –

, *Fuligo candida* () –

(99)

, – *Echinostelium coelocephalum*, *Lycogala conicum*, *Reticularia intermedia*, *R. splendens*, *Cribraria intricata*, *Arcyria affinis*, *A. helvetica*, *A. minuta*, *A. stipata*, *Paradiacheopsis rigida*, *Stemonitopsis peritricha*, *Symphytocarpus flaccidus*, *Badhamia gracilis*, *Craterium brunneum*, *Fuligo laeviderma*, *F. luteonitens*, *Physarum confertum*, *Ph. vernum*, *Diderma cingulatum*, *D. deplanatum*, *D. effusum*, *D. montanum*, *Didymium dubium*, *D. minus* (, 2006).

, *Didymium bahiense*, *D. nigripes*, *Badhamia melanospora*, *Collaria rubens*, *Oligonema aurantium* ; *Diderma testaceum*, *Badhamia affinis*, *Physarum pulcheripes*, *Symphytocarpus* sp. ; *Badhamia versicolor* *Comatricha tenerrima* – ; *Didymium annelus* – .

“ ” .

(*Cribraria argillacea*, *C. cancellata*, *Stemonitis axifera*, *S. splendens*, *Arcyria denudata*, *A. obvelata*, *Trichia favoginea*, *T. varia*).

(, , ,) (,)

(*Badhamia foliicola*, *Diachea leucopodia*) (*Badhamia affinis*, *Tubulifera microsperma*), (*Fuligo septica*, *Physarum cinereum*).

(correspondence analysis). 4

34 - 98 , - 88, - 54 (, - 18, - 15, - 6 . , 65% (, 2007).

(Erysiphales)

(KW).

88

8

80%

Arthrocladiella mougeotii (Lév.) Vassilkov –

Erysiphe

s.l. (40), *Podosphaera* s.l. (18) *Golovinomyces* (15).

Erysiphales

(59),

« » (48), « » (45), « » (36),
« » (43) (41), – (36)
« » (34) (13.1).

Erysiphales

» – 27, « » – 25, « » – 24, –
23 – 19.

« » -

-

Erysiphales, 14-16

8-13

Blumeria graminis, *Erysiphe alphitoides*, *E. aquilegiae*,
E. convolvuli, *E. cruciferarum*, *E. heraclei*, *E. polygoni*, *E. trifolii*,
Golovinomyces biocellatus, *G. cichoraceorum*, *G. cynoglossi*, *G. depressus*,
G. sordidus, *G. verbasci*, *Leveillula duriaei*, *Neoerysiphe galeopsidis*,
Podosphaera aphanis, *P. euphorbiae*, *P. fusca*, *P. pannosa*, *P. xanthii*
Sawdaea tulasnei.

Leveillula

duriaei -

Erysiphe astragali, *E. berberidis*, *E. buhrii*, *E. clandestina*, *E. cruchetiana*,
E. divaricata, *E. friesii*, *E. howeana*, *E. lonicerae*, *E. mayorii*, *E. necator*,
E. ornata, *E. palczewskii*, *E. penicillata*, *E. syringae-japonicae*, *E. tortilis*,
E. vanbruntiana, *Golovinomyces echinopsis*, *G. hyoscyami*, *G. magnicellulatus*,
G. riedlianus, *G. simplex*, *G. valerianae*, *Leveillula cylindrospora*, *L. helic hrysi*,
L. scolymi, *Phyllactinia guttata*, *Podosphaera clandestina*, *P. ferruginea*
P. leucotricha.

Erysiphales

: 1)

(*Erysiphe astragali*, *E. divaricata*,
E. ornata, *Phyllactinia ferruginea*); 2)
(*Golovinomyces*
echinopis, *G. hyoscyami*, *G. simplex*, *Leveillula cylindrospora*, *L. scolymi*
).
(*Erysiphe clandestina*, *E. howeana*,
E. lonicerae, *E. necator*, *E. palczewskii*, *E. syringae-japonicae*).

, – *Erysiphe baeumleri*, *E. betae*, *E. caulicola*, *E. flexuosa*, *E. friesii*,
E. hypophylla, *E. ulmariae*, *E. viburni*, *Neoerysiphe cumminsiana*, *Phyllactinia*
fraxini, *Ph. mali*, *Podosphaera epilobii*, *P. fuliginea*, *P. mors-uvae*,
P. myrtillina, *P. pannosa* *P. spiraeae*.

Erysiphe (Microsphaera) baeumleri,
Vicia L.
(, 1989).
Pseudoidium sp.

Erysiphe pisi.
Vicia
Erysiphe betae, « ' » (
, 1957),
Beta vulgaris

- , , , -
 , , , , , ,
 , (-
 , 1925; , 1927; , 1957; , 1962; -
 , 1963; , 1964; , 1989), *B. trigyna* -
 (, 1927; ,
 1927; , 1989; , , , 2004;
 , , 2007). , ,
 . , , ,
 , , ,
Erysiphe caulicola, (),
 .
Astragalus L. *Chamaecytisus ruthenicus* (Fisch. ex Wol.) Klask.
 6 - , , ,
 (Garbowski, 1922; ,
 1989; , , , 2007).
 , , ,
Erysiphe (Uncinula) flexuosa - , -
 (Ale-Agha, Braun, Feige et al., 2000;
 Bolay, 2000; Zimmermannová-Pastir áková Adamska, Blaszkowski et al.,
 2000; Pi tek, 2002; Zimmermannová-Pastir áková, Pastir ák, 2002; Wol-
 czanska, Mulenko, 2003). *Aesculus* L.,
 (, , 2004).
 ,
 « » , *A. hippocastanum*,
 .

Erysiphe (Microsphaera) hypophylla (M.)
alphitoides,
E. alphitoides
E. hypophylla (M.)
Erysiphe ulmariae, *Filipendula* Mill.,
denudata *F. ulmaria*,
 (11) (1963, 1974;
 , 1989). 1990 *F. vulgaris*
 (2000; , 2004).
E. ulmariae
 22 1997 « »
F. vulgaris
E. ulmariae.
Erysiphe viburni (Microsphaera sparsa)
 (2007).
Viburnum opulus.

1928; , 1939; , 1989; Namyslowski, 1914).
V. opulus *V. tinus* (,
, 1991).

Neoerysiphe cumminsiana *Erysiphe*
cumminsiana (Braun, 1983). (Braun, 1987).
(, 1999),
(,).
. (Voityuk, Heluta, Nevo,
2004; Voytyuk, Heluta, Wasser et al., 2006) , *N. cum-*
minsiana ,
, .
). (-
, *Phyllactinia fraxini* –
, ,
Fraxinus L.,
, *Phyllactinia mali*
Crataegus L. *Pyrus* L.,
(, 1873; , 1910; , 1915; , 1925;
, 1958; , 1972; , 1989).

, , , ,
 . .
 (.) ,
 ,
Crataegus.
Podosphaera epilobii *Epilobium hirsutum*
 (-) 1986 .
 . , ,
 , , , , , -
 , , . ,
 , (,
 1907; , 1913; , 1916; , 1939; , 1959 ;
 , 1963; , 1989; Krupa, 1889; Wróblewski, 1912). ,
 , -
 (,).
Podosphaera fuliginea, «
 » *Veronica longifolia*,
 . 90
 , , , ,
 . 12
 (, 1916; , 1925; , 1949; , ,
 1974; , 1989; , , , , 1994).

Podosphaera mors-uvae –

Podosphaera myrtilina *Vaccinium*
myrtilus *V. uliginosum* .
 (, 1963, 1979; , 1989; Krupa, 1889) .

Podosphaera spiraeae,
Filipendula denudata *F. ulmaria* .

45 453 213
 Asteraceae (116), – Lamiaceae (39), Fabaceae (38), Rosaceae
 (27), Poaceae (26), Brassicaceae (21), Polygonaceae, Scrophulariaceae
 Apiaceae (18), Boraginaceae (17), Ranunculaceae (11) Salicaceae (10
). (33) 95 .
 . 3.1,

(. 13.1) $K_j = 0,40$

(. 13.1,) , -

(1964) . (, 1964).

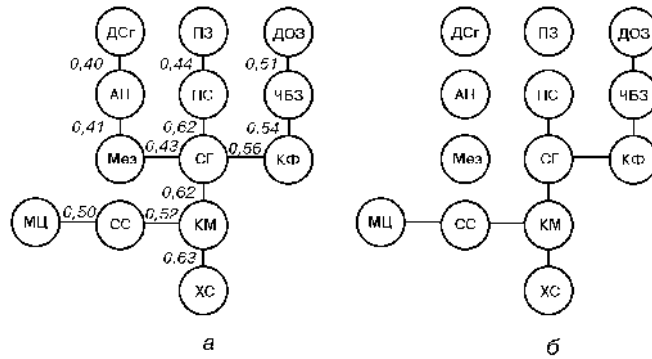
1 (. 13.1,).

(. . 1.1)

« »,

– « »

() ().



. 13.1.

13 ' : -

Kj = 0,40, - Kj = 0,50

Ascomycota (Erysiphales) 498 194 , 65 , 23 , 11 , 8 – Dothideomycetes, Eurotiomycetes, Lecanoromycetes, Leotiomycetes, Orbiliomycetes, Pezizomycetes, Sordariomycetes Taphrinomycetes (Ascomycota (Eriksson, Winka, 1997; Ainsworth & Bisby's Dictionary of the fungi, 2001; Eriksson, 2006)).

Ascomycota Sordariomycetes – 192 72 , 25 , 11 - 2 , (74 33) Sordariomycetidae. Diaporthales (45),

, *Valsa ambiens* – 10, *V. sordida* – 8, *V. ceratosperma*, *Leucostoma translucens*, *L. niveum* *Diaporthe eres* – 5

13.1.

13 ,

	–	0,38	0,22	0,20	0,17	0,30	0,20	0,31	0,21	0,20	0,25	0,40	0,24
	0,38	–	0,43	0,33	0,28	0,32	0,28	0,37	0,33	0,32	0,35	0,41	0,29
	0,22	0,43	–	0,59	0,62	0,41	0,56	0,42	0,45	0,62	0,45	0,36	0,49
	0,20	0,33	0,39	–	0,63	0,39	0,41	0,39	0,44	0,58	0,45	0,34	0,51
	0,17	0,28	0,62	0,63	–	0,43	0,51	0,32	0,52	0,57	0,41	0,32	0,48
	0,30	0,32	0,41	0,38	0,43	–	0,35	0,31	0,50	0,38	0,30	0,34	0,30
	0,20	0,28	0,56	0,41	0,51	0,35	–	0,30	0,36	0,41	0,35	0,36	0,54
	0,31	0,37	0,42	0,39	0,32	0,31	0,30	–	0,29	0,44	0,40	0,32	0,34
	0,21	0,33	0,45	0,44	0,52	0,50	0,36	0,29	–	0,47	0,37	0,35	0,39
	0,20	0,32	0,62	0,58	0,57	0,38	0,41	0,44	0,47	–	0,37	0,28	0,46
	0,25	0,35	0,45	0,45	0,41	0,30	0,35	0,40	0,37	0,37	–	0,34	0,51
	0,40	0,41	0,36	0,34	0,32	0,34	0,36	0,32	0,35	0,28	0,34	–	0,22
	0,24	0,29	0,49	0,51	0,48	0,30	0,54	0,34	0,39	0,47	0,51	0,22	–

Diaporthaceae Valsaceae

Gnomoniaceae, Melanconidaceae,

Valsaceae, *Apiognomonium errabunda*, *Diaporthella aristata*, *Diaporthopsis trinucleata*, *Hypospilina pustula*

Calosphaeriales – *Calosphaeria pulchella* (), Coniochaetales – *Coniochaeta ligniaria* *C. pulveracea* (), Diaporthales, – *Caudospora taleola* () (17), Sordariales. *Schizothecium* – *S. aloides*, *S. hispidulum* *S. vesticola* – *S. hispidulum*, *Podospora setosa* *Lasiochaeta canescens*, *Lasiochaeta hirsuta* *Podospora decipiens*, *Podospora curvula*, *P. pauciseta* *Sordaria macrospora*.

Cephalothecaceae Sordariales – *Albertiniella polyporicola*, *Ganoderma applanatum*. Chaetomiaceae *Chaetomium*.

Sordariomycetidae
Ceratospaeria lampadophora,
Annulatasaceae, *Betula pendula*
Ceratospaeria
Apiosporaceae, *Apiospora montagnei* *Phragmites australis*,
Hypocreomycetidae 52 16 ;
(48) Hypocreales.
, Coronophorales, Nitschkiaceae 4
Hypocrea (10),
Hypomyces (9) *Nectria* (8). -
(9).
(*Hypocrea citrina*, *H. rufa* *H. strictipilosa*), -
Hypocrea pulvinata *H. sulphurea*.
Trichoderma, , *Hypocrea koningii*, *H. lixii*
H. pachybasioides.
Hypocrea gelatinosa
, *H. rufa*
Hypocrea
Hypomyces -
(9) (3).
(*Hypomyces aurantius*
Exidia glandulosa), -
: *Hypomyces cervinigenus* *Helvella*
Hypomyces stephanomatis – *Humaria hemisphaerica*.
, *Nectria* 7
(*Nectria*
cinnabarina 13).

Hypocreaceae,
 - Nectriaceae.
 , *Neonectria coccinea* *Cosmospora episphaeria*,
 , *Nectriopsis candicans*
 , *Cosmospora magnusiana*
Diatrypella sp., *C. purtonii* *Diaporthe caraganae* *Hypoxydon* sp.
Calonectria decora *Massaria inquinans*, Clavicipitaceae,
 - *Claviceps* *Cordyceps*.
Claviceps - . *purpurea* 5 .
Cordyceps, -
 (*Cordyceps bassiana*, *C. militaris* *C. memorabilis*),
 - *Cordyceps capitata*
Elaphomyces.
Torrubiella arachnophila Chrysopidae.
 Xylariomycetidae (63 21
) Xylariales - Amphi-
 sphaeriaceae (6), Diatrypaceae (24), Xylariaceae (32)
 . (
Amphisphaeria, *Discostroma* *Lepteutypa*)
 : , -
 - . Diatrypaceae, ,
 , ,
 , *Diatrype*, *Diatrypella* (4
), *Cryptosphaeria* (2) , , *Diatrype stigma*
Diatrypella quercina 5 , .
 , *Eutypa* *Eutypella*,
 ,
 ,
Eutypa ,
 6

Eutypa lata , 6
Eutypella . Xylariaceae
 (

Kretzschmaria, *Xylaria* *Hypoxylon*).

. , ,
 : *Hypoxylon howeanum*,
 , *Biscogniauxia cinereolilacina* *Tilia*
cordata, *Hypoxylon rcdicolum* *Fraxinus excelsior*,
Rosellinia corticium *Rosellinia*
subsimilis, *Quercus robur*, *Armeniaca*
vulgaris *Cerasus vulgaris* (, , ., 2003; ,
 , 2005). - -
Daldinia
Daldinia childiae, *D. fissa*, *D. loculata*
D. pyrenaica, , *Hypoxylon crocopeplum*,
H. julianii, *H. petriniae* .

, Xylariomycetidae
 , , *Poronia punctata*,
 , *Phomatospora dinemasporium*

Dothideomycetes 2 , 6 , 21 ,
 44 132 .

Dothideomycetidae -
 Capnodiales Dothideales.

Mycosphaerella, 13

, , ,
 , *Metasphaeria metuloidea*
Sacchettoecium sepincola - , *Teichospora inverecunda* - .
 , Pleosporomycetidae,
 - 110 34 , ,
 4 . Pleosporales,

13 27 , -

Leptosphaeriaceae, Pleosporaceae Cucurbitariaceae, ,
Leptosphaeria (20), *Pleospora* (14) *Cucurbitaria* (13).

Leptosphaeria
« », 4
Cucurbitaria (5),

Pleosporales 5 ,
Pleospora herbarum *Cucurbitaria caraganae*, 4 – *Cucurbitaria elongata*
Melanomma pulvis-pyrius.

Fabr. , *Cucurbitaria caraganae* – *Caragana*
C. elongata *Robinia pseudoacacia*.

Pleospora herbarum – 11
Lewia scrophulariae – 10, *Leptosphaeria gloeospora* – 9 . .

Pleosporales
Dothideomycetes,
Botryosphaeriales, Hysteriales Patellariales, Ascosperma-
ceae – *Pleosphaeria Strickeria*. 16
10 , ,
, .

250

Leotiomyces 112 48 , 6 2
 Leotiomycetidae. – Helotiales
 Rhytismatales – (38 , 98
).
 , : Helotia-
 ceae (33), Dermateaceae (32), Hyaloscyphaceae (22), Sclerotiniaceae (9)
 Bulgariaceae (1). Helotiales
Hymenoscyphus (Helotiaceae) *Lachnum* (
 Hyaloscyphaceae) 13 , *Mollisia* – 10, *Tapesia* *Pezicula* –
 5 (Dermateaceae). Rhytis-
 matales (10 , 14)
 (1-3).

Leotiomyces

,
Mollisia cinerea, *M. ligni*, *Hymenoscyphus herbarum* *Colpoma*
quercinum, 5 ; *Mollisia melaleuca*, *Hymenos-*
cyphus scutula, *Monilinia fructigena*, *Coccomyces coronatus*, *Lophodermium*
pinastri, *Rhytisma acerinum*, *R. salicinum* *Therrya pini*,
 4
 , (60%)

Arachnopeziza araneosa

9

: *Dasyscyphella mughonica*, *Dennisiodiscus*
prasinus, *Ciboria viridifusca*, *Hyaloscypha tigillaris*, *Hymenoscyphus discretus*,
H. subtilis, *Lachnum palearum*, *Mollisia amenticola* *Trichopezizella nidulus*.

:
Capitotricha bicolor, *Croci reas coronatum*, *Encoelia fascicularis*, *Heyderia*
pusilla, *Hymenoscyphus calyculus*, *H. piphyllus*, *Incrucipulum ciliare*, *Lachnum*
sulphureum *Tapesia strobilicola*; – *Hyaloscypha quercicola*, *Lachnum*
clavigerum, *Mollisia arundinacea*, *Tapesia hydrophila* *Orbilbia auricolor*;

– *Eriopezia caesia*, *Perrotia flammea* .
 Helotiales, ,
 ,
 Rhytismatales, -
 ,
 Pezizomycetes,
 Pezizales (42 23 , 7).
 Pyronemataceae (15 10),
 : Pezizaceae Helvellaceae 6
 , Morchellaceae – 5, Ascobolaceae – 4, Sarcoscyphaceae – 2
 Rhizinaceae – 1 . – *Coprotus* *Lasiobolus*,
 ,
 ,
 (– *Humaria*
hemisphaerica *Rhizina undulata*, –
Scutellinia scutellata, -
 – 6
Helvella, 5 – *Peziza*, – *Morchella* *Otidea*,
Verpa conica, *Neottiella rutilans*, *Ptychoverpa bohemica*, *Aleuria aurantia*
 -
 , , (*Coprotus sexdecimsporus*, *Saccobolus glaber*,
S. versicolor, *Lasiobolus ciliatus*, *L. cuniculi*, *Iodophanus testaceus*), -
 (*Scutellinia scutellata*, *S. setosa*, *Microstoma protracta*, *Sarcoscypha*

coccinea), (*Geopyxis carbonaria*) . ,
. . . ,
: *Ascobolus*
perplexans, , *Byssonectria terrestris*
. . .
Pezizales *Trichophaea woolhopeia*,
,
Morchella steppicola, ,
« » .
Taphrinomycetes ,
1 , 2 , 2 , 8 , 7
Taphrina, – *Protomyces*.
,
(*Taphrina*) *Aegopodium podagraria* (*Protomyces macrosporus*).
Eurotiomycetes 2 -
, 2 , 2 , 3 3 ,
. Chaetothyriomycetidae (Pyrenulales,
Massariaceae) *Aglaospora profuse*,
, *Massaria inquinans* – .
,
Eurotiomycetidae – *Elaphomyces* cf. *granulatus* (Eurotiales).
Orbiliomycetes, Orbiliales,
Orbiliaceae 8 *Orbilina*. -
,
. *Orbilina xantho-*
stigma *O. sarraziniana* , – ,
, – . , *O. sarraziniana*,
O. auricolor, *O. delicatula* .
Orbilina auricolor, .
Stictis mollis – Lecanoromycetes (-
Ostropomycetidae, Ostropales) ,
. *Stictis* -

Ascomycota (Erysiphales) (211
108)
6 : Sordariomycetes (115 46),
Leotiomyces (42 29), Dothideomycetes (29 19),
Pezizomycetes (15 10), Taphrinomycetes (7 2),
Eurotiomycetes – Orbiliomycetes.
130
Ascomycota (Erysiphales), 4 , 12
, 32 74 (, 2000 , , 2001, 2002).
: Sordario-
mycetes (44), Leotiomyces (38), Dothideomycetes (37) Pezizo-
mycetes (11).
(126)
(,
, 2004 , ; , 2005, 2006),
: Leotiomyces (52), Sordariomycetes
(30), Dothideomycetes (24), Pezizomycetes (17) Orbiliomycetes (3).
Ascomycota (93)
(, 1958 ; , , , 1988;
, 2005). Sordario-
mycetes (51 24), (42 30)
: Dothideomycetes, Eurotiomycetes,
Leotiomyces, Orbiliomycetes, Pezizomycetes Taphrinomycetes.
(Erysiphales) 56 ,
Sordariomycetes (21),
Leotiomyces (15), Dothideo-
mycetes (11), Pezizomycetes (6) Orbiliomycetes (3).

Ascomycota 50 21 12
i 9 Sordariomycetes, 35 i 9 – Dothideo-
mycetes 3 3 – (Leotiomyces Eurotio-
mycetes) (, 1956, 1957, 1958 ; , , , 1998).
45 28 ,
Sordariomycetes – 20 11 , Dothideomycetes – 15
11 , Leotiomyces – 8 4
Pezizomycetes Lecanoromycetes.
38 23 , 12
, 8 , 6 , 5 .
Leotiomyces (25).
–
Orbiliomyces Pezizomycetes. 5
Sordariomycetes 2 – Dothideomycetes.
, ,
Ascomycota
33 , 21 , 7 4 (, ,
1953 ; , , 1973; , , , 1992;
, 1992; , , , 1992).
Dothideomycetes (18 7),
Sordariomycetes (12 10).
Eurotiomyces, Leotiomyces Pezizomycetes.
Ascomycota

Ascomycota,

Ascomycota

77 20 356 73 11
(21,6%
) 279 53
(78,4%).

311 92
(, 1998).

Septoria (57), *Diplodia* (32),
Phoma *Ramularia* (31), *Phomopsis* (21).

Ascochyta *Cytospora* (18), *Camaro-*
sporium (16), *Passalora* (11), *Cercospora* *Phyllosticta* (9), *Coniothyrium*,
Cylindrosporium *Rhabdospora* (5). 60 (25,1%
) ,

111 7 .

Septoria (45), *Ramularia* (23), *Passalora* (10), *Cercospora* (8), *Clado-*

sporium (2), *Pseudocercospora* (2), *Phloeospora* (1).
 12
Mycosphaerella. 31%
 23,8%
 466 (, 2005;
 Andrianova, 2005).
 2003–2006 14
 : *Bactridium*
flavum, *Passalora aesculina*, *P. murina*, *Phragmocephala elliptica*, *Ragnhildiana clematidis*, *Ramularia centaureae-atropurpureae*, *R. silenes-procumbentis*, *Rutola graminis*, *Ascochyta chelidoniicola*, *Choanatiara lunata*, *Phoma verbenaceae*, *Phyllosticta chelidonii*, *Septoria geranii*, *S. tabacina* (, 2004 ; , 2006; , 2006 ; Andrianova, 2007).
 6 *Passalora*, *Ramularia* *Septoria*.
Choanatiara lunata
Pinus sylvestris. , ,
 , (18,0–) 20,0–23,0 × 2,0–2,5 (–3,0) ,
 .
C. lunata 1984 .
Pinus L., (Nag Raj, 1984).
C. lunata
 (, , 2006).
 (- ,)

(),
Passalora aesculina,
Aesculus hippocastanum (, 2004).

(, , 1937). P. aesculina

- Ragnhildiana clematidis,
(, - , 2006).

Passalora ampelopsis, Ramularia tricherae, Cheilaria agrostis, Phyllosticta
polygonorum, Ph. tiliae, Septoria erigerontis, S. verbascicola;
- Ramularia pratensis, R. rhabdospora, Septoria
calystegiae; - Ascochyta calystegiae, Ramularia lamii
var. lamii, Phyllosticta potentillica;
Phoma veronicae, Septoria clematidis, S. oenotherae,

(116), (94),
(90), - (43) (41).
(
67) - ,
(2109) , (2764).
(26
) , (18), (15).

Bactridium, Phragmocephala, Pollacia, Ramulispora, Choanatiara, Monostichella, Myxothyrium, Pilidium.

Passalora, Ramularia, Ascochyta, Cytospora, Phoma, Phomopsis, Phyllosticta, Septoria,

Alternaria, Cercospora, Cladosporium, Stigmina, Tubercularia, Camarosporium, Colletotrichum, Coniothyrium, Rhabdospora, Tubercularia (4-5).

Passalora, Ramularia, Cercospora, Cladosporium, Septoria.

Diplodia, Camarosporium, Phoma, Phomopsis – , Phoma – ; Septoria, Ramularia, Phoma, Diplodia –

Ramularia, Septoria, Phoma, Phomopsis, Ascochyta;

Septoria – ; Phoma, Diplodia – .

: Cercospora depazeoides Sambucus nigra,

Cladosporium herbarum, *Ramularia*
inaequale *Picris hieracioides* *Taraxacum officinale*, *Ramularia*
variabilis *Verbascum*, *Stigmina carpophila*
, *Cytospora leucosperma* *C. leucostoma*
, *Phoma exigua* *Ph. herbarum*
, *Phyllosticta cruenta* *Polygonatum*, *Septoria*
pyricola *Pyrus communis*, *Septoria rubi*, *Rubus* L.,
S. scabiosicola *Dipsacaceae*.

Populus (17

), *Salix* (13), *Acer* (12), *Quercus*
Sambucus (11), *Prunus* *Ulmus* (9), *Malus*, *Pyrus* *Tilia* (6).

Artemisia (7), *Galium*, *Phlomis* *Viola* (6), *Centaurea* (5), *Cichorium*
Rumex (4), *Convolvulus*, *Euphorbia*, *Festuca*, *Limonium*, *Plantago*,
Salvia, *Tanacetum* *Thalictrum* (3),

, *Quercus robur* *Coryneum*
depressum, *C. disciforme*, *Cylindrosporium associatum*, *Discosia artocreas*,
Discula umbrinella, *Naemospora croceola*, *N. microspora*, *Phomopsis*
glandicola.

– *Discula umbrinella*,

«

» ,

,

,

.

,

, , ,

-

- ,

.

,

,

(, 2006).

Septoria (45), *Ramularia* (23), *Passalora* (10),
Cercospora (8), *Cladosporium*, *Pseudocercospora* *Pseudocercosporella* (2)
Phloeospora (1)

Mycosphaerella

3%

(, 2006).

,

-

-

Ramularia, *Cercosporella*

Pseudocercosporella

Septoria *Phloeospora*;

Passalora,

Pseudocercospora;

Cercospora.

,

,

-

Septoria

,

Cladosporium,

Septoria Phloeospora,
Cercospora i Passalora,
Ramularia.

(216 , 60,7%),
39% (139
)

– *Sphaerellopsis filum.*

– 94, – 59, – 198
– 12

() , () –
Alternaria tenuissima, *Ramularia rhabdospora*, *Ascochyta calystegiae*, *Phoma herbarum*, *Ph. macrostoma*, *Phyllosticta cruenta*, *Septoria oenotherae*, *S. pyricola*.

, ,
 (18 12),
 (8 3),
Ramularia (,
 , 2006).
 (,)

Ramularia
 (, 1999).

(43)
 – 16 (37,2%), *Passalora*
Ramularia. 27 (62,7%) ,
Septoria (13), *Phyllosticta* (5),
Ascochyta (2). -
 -
 -
 -

(, 2004).

– 29 : 7 , 12 5 .

(32).

Septoria (15), *Ramularia* (5),
Phoma (5), *Ascochyta* (4), *Phyllosticta* (3), 78%
Alternaria, *Cercospora*, *Passalora*, *Stigmina*, *Didymosporina*,
Discula, *Neomarssoniella* - ,

Septoria
quercicola *Quercus robur*,
S. urticae – ,
, *Passalora murina* *Viola odorata*,
Septoria tabacina *Artemisia* sp.,
(, 2004).

Phomopsis, *Ascochyta*, *Septoria*, *Phoma*,
Ramularia. (35%),
 23 11 -
 44 13
 (14),
 (36).
Ramularia
Septoria,
 (,).
Septoria (20), *Ramularia* (7), *Phoma*
 (6), *Cytospora* (5), *Cercospora* *Passalora* (3).
 (6)
 - « -
 » « ».
 - 37 13 ,
 (28 16) (17 10).

, -
 , -
 : -
 - 21 10 , -
 - 7 6 .
 ,
Septoria (5) *Phyllosticta* (1),
 (10)
 ,
 , .
 - 8 6 9 4 .
Septoria (5),
Passalora Ramularia (2).
 .
 ,
 : -
 , -
 ,
 , *Septoria*.
 15 7 22 6
Septoria (15),
Ramularia (6), *Cercospora* (4), *Phoma* (3).
 (*Dinemasporium*) -
 , , -
 () -
 . ,
 ,
Septoria.
 90
 30 ,

. *Septoria* (19), *Ramularia* (13), *Phoma*
(8), *Diplodia* (6), *Cytospora* (5). 26 8

, , 65 21

(24) ,

(, ,),

, -
,

: 28 13 , -15
9 , -24 11 , -39 20 .

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Phoma exigua *Stigmina carpophila* (
) , *Cladosporium iridis*, *Ramularia variabilis* *Cylindrosporium*
umbelliferarum (,), *Septoria ajugae* *S. salviae-pratensis* (,),
Diplodia rhamni (,).

(*Cercospora bizzozeriana*, *Spermosporina alismatis*, *Septoria salviae*
S. scabiosicola) ,

, - - -
, -
Ramularia phlomidicola ,

Phlomis tuberosa,

(- 120- , 94 - 31 , - 88 27 .) . 4 6

Quercus robur (9), *Populus* (6),
Juglans regia, *Ulmus* spp. (5), *Celtis occidentalis*, *Fraxinus* spp. (4),
Robinia pseudacacia, *Syringa* (3), *Acer n. gundo*, *Gleditschia triacantos*,
Lonicera tatarica (2).

« » ,
- 8 (*Cercospora*,
Stigmata, *Camarosporium*, *Cylindrosporium*, *Diplodia*, *Phoma*, *Rhabdospora*,
Septoria), 3 (*Cladosporium herbarum*, *Stigmata*
carpophila, *Camarosporium aequivocum*).

94
17

18 12
:
Phoma (4), *Passalora*, *Ramularia*, *Septoria* (2). 6
4 12 8

() -

Fusicladium, Ramularia, Passalora, Stigmina, Septoria,

(8) .

(10), - (3)

(2) . ,

14

(, 1938).

1956, 1957, 1958 ,). 1980-1990-

(, 1980 , ; , ,
., 1987; , , , 1988; , ,
., 1992; , , , 1998). 2003 .

Uredinales
(, , 2005;
2005 , , 2007; , , , 2007)
165

13 (. 13.2).

Uredinales
18
24 .

Puccinia (91) *Uromyces* (38),
55,5% 23,2%
(54,6%

24,4%)
Puccinia 51,5%, *Uromyces* – 21,0%
 Uredinales (Majewski, 1978)).

13.2.

<i>Aecidium</i>	3
<i>Coleosporium</i>	1
<i>Cronartium</i>	1
<i>Gymnosporangium</i>	1
<i>Melampsora</i>	12
<i>Melampsorium</i>	1
<i>Miyagia</i>	1
<i>Phragmidium</i>	8
<i>Puccinia</i>	91
<i>Pucciniastrum</i>	4
<i>Tranzschelia</i>	2
<i>Triphragmium</i>	2
<i>Uromyces</i>	38
	<hr/>
	165

Melampsora (12).
Phragmidium 8, 1-4.
 (. 13.3).

101 81 Uredinales.

61, 54

(57)

Uredinales
Phragmidium potentillae,
Potentilla L., 13

«
Uredinales
(*Coleosporium tussilaginis*, *Puccinia hieracii*,
P. recondita *P. tanacetii*) 11 . *Melampsora*
euphorbiae, *Puccinia calcit-rapeae*, *P. coronata* *Uromyces laburni*
10

349

175 , 47 (. 13.4).
Asteraceae (77), Fabaceae (31),
Poaceae (28) Rosaceae (27),
Rosaceae,

13.3.

<i>Aecidium</i>	-	1	-	-	3	1	-	-	-	-	-	1	-	-
<i>Coleosporium</i>	1	1	1	1	1	1	1	1	-	-	1	1	-	1
<i>Cronartium</i>	-	-	1	-	-	-	1	-	-	-	-	-	-	-
<i>Gymnosporangium</i>	-	1	1	-	-	-	-	-	-	-	-	-	-	-
<i>Melampsora</i>	4	5	3	3	3	2	1	1	4	2	2	6	1	5
<i>Melampsoridium</i>	-	-	-	1	-	-	-	-	-	-	-	-	-	-
<i>Miyagia</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	1
<i>Phragmidium</i>	1	4	4	3	2	3	3	3	1	3	2	2	1	3
<i>Puccinia</i>	11	13	19	9	35	23	28	12	6	29	25	35	17	28
<i>Pucciniastrum</i>	2	-	1	2	1	1	-	1	-	1	-	-	-	-
<i>Tranzschelia</i>	-	1	-	1	1	1	-	-	-	1	-	1	-	1
<i>Triphragmium</i>	-	-	-	-	1	-	2	-	-	-	-	-	-	-
<i>Uromyces</i>	3	5	3	4	19	14	9	5	3	19	8	15	4	15
	22	31	33	24	66	46	45	23	14	55	38	61	23	54
						101				81				

13.4.

Alliaceae	1	1
Apiaceae	14	21
Apocynaceae	1	1
Aristolochiaceae	1	1
Asclepiadaceae	1	1
Asparagaceae	1	2
Asteraceae	31	77
Balsaminaceae	1	1
Berberidaceae	1	1
Betulaceae	1	1
Boraginaceae	7	8
Brassicaceae	1	1
Campanulaceae	1	2
Caryophyllaceae	8	16
Chenopodiaceae	3	4
Clusiaceae	1	1
Convolvulaceae	1	1
Cyperaceae	3	16
Ericaceae	1	1
Euphorbiaceae	1	7
Fabaceae	17	31
Gentianaceae	1	2
Geraniaceae	1	1
Grossulariaceae	1	1
Hyacinthaceae	3	3
Iridaceae	1	2
Juncaceae	1	1
Lamiaceae	8	15
Liliaceae	2	3
Limoniaceae	1	5
Linaceae	1	3
Malvaceae	3	4
Onagraceae	1	1
Pinaceae	1	1

Plantaginaceae	1	1
Poaceae	18	28
Polygonaceae	4	11
Ranunculaceae	5	9
Rhamnaceae	2	2
Rosaceae	8	27
Rubiaceae	3	9
Salicaceae	2	12
Santalaceae	1	2
Scrophulariaceae	4	5
Urticaceae	1	1
Valerianaceae	2	2
Violaceae	1	3

Asteraceae (29), Fabaceae (16), Rosaceae (15), Poaceae (14).
27

Uredinales.

6

(1996) – *Calophaca wolgarica*,

Uromyces chesneyae; *Centaurea breviceps* –

Puccinia hieracii; *Stipa capillata* *S. lessingiana*,

Puccinia stipina; *Tulipa biebersteiniana* *T. quercetorum*,

- *Puccinia tulipae*.

Uromyces chesneyae *Puccinia tulipae*

Uredinales

Puccinia consimilis *Sisymbrium polymorphum*, *P.*

pachyderma *Gagea maeotica*, *Pucciniastrum arcticum* *Rubus saxatilis*,

Uromyces chenopodii *Suaeda altissima*, *Uromyces polycnemi*

Salsola L.

(Basidiomycetes) ’

: – 304, – 210, – 196,

- 190, - 157, - 148, - 95, - 84 (, 1954, 1955, 1956, 1957, 1959; , , 1966; , 1970, 1971 , , 1973 - , 1974 - , 1975 , , 1976, 1980, 1992; , 1971, 1972, 1974 , ; , 1977; , 1980, 1988, 2003; , 1988; , , , 1988; , 1990; , 1993; , , , 1998; , 1999, 2000 , 2003, 2004 , 2005 ; , , , 2001; , , , 2002; , 2002, 2007; Akulo, Usichenk , Leontyev et al., 2002; Sukhomlyn, Triskiba, 2003; Usichenko, 2003; , , , 2005; , 2005; , , , 2006; , , 2007; Prydiuk, 2007 ;).

11 ' (, , , , ,)
 ; - 278
 , - 238, - 224, - 222. , (6) (1
), , , 41
 68 .
 : - 1, - 7, - 8, - 12,
 - 18, - 35.
 (15%
). ,

5 , 10 . ,
 (Agaricus romagnesii,
 A. tabularis, Galeropsis desertorum) (Polyporus rhizophilus) ;
 , , (Agaricus tabularis, Tricholoma
 focale) (Leucocortinarius bulbiger, Limacella steppicola,
 Myriostoma coliforme Polyporus rhizophilus), -
 (Agaricus tabularis) (Leucocoprinus bohusi,
 Limacella steppicola Polyporus rhizophilus). ,
 (Clavariadelphus
 pistillaris, Grifola frondosa, Hericium coralloides), -
 (Hericium coralloides Polyporus umbellatus). ,

30 , 8, 59 -
 - 5 . ,
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 (,)

.. 13.5 13.6). 304 , -
 41, « » - 28
 (. 13.5). . - ,
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 , , ,
 , -
 (28) «

» (34). - ,

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(304), (278),

(238), (222) « »

(137). , -

, -

,

(101), ,

(157) « »

(110) ,

« » (81) « ' » (61),

« » (72) .

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(. 13.6). , ,

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. (,)

(, ,), ,

100–200

Basidiomycetes

(100)

13.6.

(-)

12	-	-	3	-	3	3	-	-	2	2	-	1	3	-
5	1	-	-	-	3	3	4	-	-	2	5	2	2	1
49	22	16	76	4	46	45	45	-	47	50	17	73	77	23
-	-	-	-	-	-	-	-	-	-	-	-	2	-	-
6	3	-	5	-	5	4	5	-	2	7	2	-	2	4
53	17	12	56	191	9	-	21	28	40	5	5	128	48	31
111	14	8	81	24	10	3	27	-	34	5	-	70	19	40
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	11	5	17	3	5	3	8	-	12	1	5	28	6	2
278	68	41	238	222	81	61	110	28	137	72	34	304	157	101
						191				224				

. *Hypoxylon howeianum* Peck –
 (Xylariales) //
 – / .
 : , 2003. – . 11–15.
 // .
 – : – , 1971. – . 80–94.
 // .
 : –
 75- (. , 8-10 1998). –
 , 1998. – . 124–125.
 // – 1999. – **56**, 5. – . 466–478.
 () // – 2004 . –
61, 4. – . 56–64.
 // – 2004 . – **61**, 5. – . 26–35.
 // ,
 , 2005. – . 2. – . 351–354.
 // :
 – , 75-
 (. , 31 – 3 2006 .). – . :
 , 2006. – . 14–15.
 // - XII ' - (. , 15–18
 2006 .). – : - , 2006. – . 188.
 //

(, 5-7 2006). - : - , , 2006. - . 297-302.

.. .. - -
// . . . - 2006 . - **63**, 5. - . 615-634.

.. .. A
- // . . . - 2006 . - **63**, 6. - . 751-760.

.. .. //
/ - . - : . . ,
1987. -

.. .. //
/ - . - : . . ,
1987. -

.. ..
. - : . . , 1983. - 216 .

.. .. // -
. - : . . , 2003. - . 11-18.

.. ..
// - 1982. - **39**, 2. - . 74-81.

.. ..
« . . » //
: - . - . . (. . , 14 2004). -
: « . . », 2004. - . 65.

.. .. // . . .
. - 1990. - **47**, 5. - . 97-98.

.. .. //
. 2. - : - , 1938. - . 129-141.

.. ..
// - - 1914. - . 3. - . 1-3.

. // .
 - 1907. - **11.** -
 . 1-41.

 // - 1962.
 - . 1. - . 49-59.

 1912 // - 1914. - . 1. - . 3-98.
 -
 , 1916-17 // -
 . - 1921. - . 5. - . 1-32.
 *Septoria* Fries « » //
 - 1955. - . 40, 191. - . 14-69.

 Hyphales
 « » // - 1961. -
 15, . 3. - . 5-20.

Septoria Fries «
 » // - 1962. - 15, . 3. -
 . 5-15.

 « »: //
 . - 1997. - **3**, . 1. - . 10-17.

Albugo Pers.
 // - 1982. - **16**, . 4. - . 289-294.

 -
 //
 . - , 1992. - . 11-24.

 // - 1960. - **17**, . 6. - . 94-99.
 //
 - 1961. - **18**, . 1. - . 104-113.

 1.
 . - , 1937. - 517 .

. . . *Agaricus* //
 - 1970. - **27**, 4. - . 520-523.
 . . .
 // - 1971 . - **28**, 3. - . 299-304.
 . . Agaricales, Aphyllophorales, Gasteromycetes ,
 - -
 // - I . - :
 . . , 1971 . - . 136-138.
 . . *Agaricus* L. ex Fr. //
 - 1973 . - **30**, 1. - . 54-59.
 . . .
 // - 1973 . - **30**, 3. - . 378-380.
 . . Agaricales // . . .
 . - 1973 . - **30**, 4. - . 457-466.
 . . Basidiomycetes . 1. ,
 //
 - 1974 . - **31**, 1. - . 78-82.
 . . (. Boletales, Agaricales, Russulales)
 . . // - 1974 . - **31**,
 2. - . 191-197.
 . . Boletales, Agaricales
 Russulales // - 1974 . - **8**,
 . 2. - . 140-142.
 . . (Agaricales)
 - -
 // - 1974 . - **8**, . 4. - . 392-397.
 . . *Galeropsis* Vel.
 emend. S. Wasser // - 1974 . - **31**, 5. - . 567-577.
 . . Basidiomycetes . 2.
 Agaricaceae Cohn (. Agaricales Clem.) // -
 1975 . - **32**, 1. - . 32-38.
 . . Basidiomycetes . I .
 Agaricaceae Cohn. (. Agaricales Clem.) // -
 1975 . - **32**, 3. - . 318-322.

Basidiomycetes . IV.
 Agaricaceae Cohn. (. Agaricales Clem.). 3. // . . . -
 1976. - **33**, 4. - . 362-367.
 - : . . . , 1980.
 - 328 .
 Amanitales
 Locq. // . . . - 1988. - **45**, 6. - . 76-78.
 - : . . . ,
 1992. - 166 .
 -
 : . . . , 1977. - 355 .
 . . .
Phrynocephalus mysta ens (Pallas, 1876) //
 . . 3. - . : - . . . , 1964.
 - . 75-85.
 / -
 : - , 1930. - 20 .
 2. / - : ,
 1969. - 516 .
 *Leveillula helichrysi* Heluta et
 Simonian (Erysiphales) // -
 2006. - **63**, 6. - . 777-782.
 //
 3. - . : -
 - , 1964. - . 19-22.
 :
 - , 2002. - 20 .
 (Erysiphales) //
 - 2005. - **56** (79). - . 117-129.
 *Leveillula* Arnaud
 // - 1979 . - **36**, 1. - C. 48-52.
 (Erysiphaceae)
 // - 1979 . - **36**, 5. - C. 476-478.

. . . Erysiphaceae
 // . . . - 1979. - **36**, 6. - C. 586-590.
 . . . *Erysiphe moroczkovskii* W. Geluta -
 // . . . - 1980. - **37**, 2. - C. 53-
 56, 64.
 . . .
 (Erysiphaceae) // . . . - 1987. - **44**,
 5. - C. 55-58.
 . . . : . . .
 , 1989. - 256 .
 . . . *Sphaerotheca savulescui* Sandu (Ascomycota) -
 // . . . - 1998. - **55**, 6. - . 605-608.
 . . . *Golovinomyces cumminsianus* (U. Braun) Heluta
 (Erysiphales) // . . . - 1999. - **56**, 4. - C. 431-433.
 . . . (Erysiphales) // . . .
 . - 2000. - **57**, 5. - C. 552-560.
 . . . (Erysiphales)
 //
 . - 2005. - **56** (79). - . 93-109.
 . . . *Uncinula flexuosa* Peck -
 (Erysiphales) // . . . -
 2004. - **61**, 5. - . 17-25.
 . . . *Leveillula* G. Arnaud (Erysiphales):
 // . . . -
 2005. - **1**, 1. - . 105-116.
 . . . // « ».
 , . . . , 2001. - . 83-86.
 . . .
 // . . . - 1991. - **48**, 4. - . 68-71.
 . . . *Leveillula* Arnaud
 //1. . - 1988. - **41**, 10. - C. 816-821.
 . . . *Leveillula*
 Arnaud (Erysiphales) // . . . - 1989. - **46**, 2. - C. 56-59.

. // .
 . . . - 1988. - **45**, 6. - . 66-68.
 -
 // - 1992. - **49**, 6. - C. 50-54.

 (.) //
 - 2007. - **64**, 5. - C. 693-702.
 «
 ». - , 2002. - 40 .
 , 1987. - 279 .
 /
 - , 1977. - 304 .
 // - 1929.
 - **10**. - . 4-41.
 - //
 - 2005. - **39**, 6. - . 29-38.
 -
 // - - 2006. - 298. - . 12-19.
 - :
 - , 2007. - 23 .
 - //
 - 2005. - **11**, 2. - . 18-23.
 - : -
 , 2002. - 267 .
 //
 - 1928. - . 4. - . 193-200.
 - : - ,
 1952. - 172 .
 . 2. /
 . - : , 1994. - 246 .

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 . - : - « », 2002. - . 142-146.
 .. -
 « » //
 . - : - « »,
 2004. - . 73-74.
 / . - ::
 ., 1999. - 232 .
 / . . . - . - :: . . . ,
 1987. - 216 .
 .. *Scleroderma*
verrucosum (Vaill.) Pers. // . . .
 . - 1954. - **11**, 2. - . 63-74.
 .. - *Calvatia candida* (Rostk.)
 Hollos // . . . - 1955. - **12**, 1. - . 78-82.
 .. // . . . -
 1956. - **13**, 2. - . 68-77.
 . . *Polyporus rhizophilus* (Pat.) Sacc. i *Pleurotus eryngii* Fr. ex DC. var.
ferulae Lanzi -
 // . . . - 1957. - **14**, 2. - . 69-71.
 .. // . . .
 . . - 1959. - **16**, 6. - . 75-82.
 .. *Entoloma* // . . . - 1966.
 - **23**, 3. - . 79-85.
 ..
Beta trigyna Waldst. et Kit. (Chenopodiaceae) // . . .
 . . . - . . . - 2007. - 75 (98). - . 122-128.
 ..
 // . . . - 1990. - **47**, 6. - . 44-46.
 .. // . . . -
 :: - . - 1938. - . 149-157.
 .. «
 » (,) // . . . -
 1993. - **50**, 2. - . 57-65.

1913 // . . . - 1915. - **8**, 8. - C. 929-960.
 // . . .
 - 1980. - **37**, 3. - . 73-78.
 // . . .
 - 1988. - **45**, 1. - . 54-56.
 « - »//
 « - ». - 2003. - **2**. - . 143-169.
 Xylariaceae.
 . . . 1.
 , 100- . . .
 . . . , 2005. - 259-263.
 // . . .
 , 2003. - . 19-28.
 " " " " . . .
 . . . , 1988. -
 187 .
 . . . Ascomycota s.l. : . . .
 . . . , 2002. - 241 .
 // : - .
 - (20-23 2001 ., -
 , « - »).
 - , 2001. - . 16.
 // . . .
 . . . - 2004. - **61**, 5. - . 44-53.
 // . . . - 1958. - **15**, 2. - C. 81-87.
 : - , 2003. - 278 .
 Erysiphaceae // . . .
 . . . - 1939. - 4. - C. 167-172.

..
 // .. - 1949. - **8**, .6. - .27-45.
 ..
 .. // .. - 1974. -
31, .3. - C. 317-321.
 .. (Myxomycota)
 « .. » // .. - 2006 . -
40, .2. - .101-107.
 .. // .. -
 2006 . - **40**, .3. - .218-230.
 .. «
 ». .. . - ., 2007. - 20 .
 .. (..) // ..
 . - 1999. - **56**, .3. - .314-317.
 .. (..)
 .) // .. - 2000. - **57**, .4. - .386-392.
 .. // ..
 . - 1988. - **45**, .6. - .36-39.
 ..
 // .. - 2000. - **6**, .1-2. - .7-14.
 .. (Erysiphaceae)
 // ..
 . - : .. , 1963. - .81-92.
 .. *Erysiphe* Link,
 // .. - 1974. - **31**, .5. - C. 656-659.
 .. (Erysiphaceae) //
 . - 1979. - **36**, .4. - C. 360-366.
 .. : ..
 , 1980. - 204 .
 ..
 // .. - 1991. - **48**, .4. - C. 65-68.
 ..
 // .. - 1973. - **30**, .1. - .111-113.

. 1.
 // . . . - 1975. - **32**, 2. -
 . 171-175.
 - :
 . . . , 1991. - 216 .
 //
 - , 1992. - . 451.
 -
 , 2001. - 264 .
 //
 - . - 1937. - . 2. - . 17-22.
 // - 1949. - **6**,
 3. - C. 63-65.
 //
 - 1951. - **8**, 2. - C. 47-51.
 -
 // - 1953 . - **10**, 3. - C. 62-66.

 // - 1953 . - **10**, 4. -
 C. 57-65.
 //
 - 1956. - **13**, 3. - C. 74-86.
 //
 - 1957. - **14**, 2. - C. 60-68.
 //
 - 1958 . - **15**, 2. - . 88-95.
 //
 - 1958 . - **15**, 3. - C. 74-82.
 // - 1927. -
16, 3-4. - C. 175-178.
 // - 1972. -
29, 4. - . 492 - 499.
 « . . . » //
 . - . : , 2003. - 8 .

1925 . - . : . - . , 1925. - 16 .
 . - . , 1987. - 222 . - . ,
 8885. - . 89.
 . : . . 1.
 . - . : , 1993. - 288 .
 (Aphylophorales Rea) // - .
 . « » (25-26 2007 . ,
 . . .) . - , 2007. - . 12-13.
 // . - . : . ,
 2003. - . 63-71.
 // . - . : . , 2003. - 143 .
 « - -
 »
 . - : . , 2005. - 170 .
 . - : . , 2003. - 92 .
 . - 1909-1910 . - , 1910. - 10 c.
 // . - 1979. - . 21. - . 79-87.
 / -
 . - : . , 1987. - 292 .
 // . - 1972. - 6, . 5. - . 391-393.
 //
 - 1932. - 3-4. - . 69-102.
 // . . - 1964. -
 . 22. - . 272-283.

... // ... « ... :
 » (... , 22 ... 2001 ...) . - ... , 2001 . - . 37-43 .
 ... : // ... :
 ... , 2003 . - . 73-92 .
 ... // ... - ... - ...
 1907 . - 41 . - . 45-96 .
 ... // ... - ... - ...
 (1909) 1910 . - 43 . - . 202-241 .
 2 . - ... :
 ... , 1916 . - . 121-251 .
 ... // - 1999 . - **56** , 6 . -
 . 593-596 .
 ... (Aphylophorales s.l.) -
 // - 2000 . - **57** , 5 . - . 594-600 .
 ... //
 . - 2000 . - **34** , 4 . - . 1-9 .
 ... // - 2001 . - **58** , 5 . - . 564-575 .
 ... // - 2002 . - **36** , 3 . - . 14-18 .
 ... (Agaricales s.l.,
 Lycoperdales) // - 2003 . - **60** ,
 2 . - . 138-145 .
 ... // - 2004 . - **38** , 6 . - . 45-52 .
 ... *Coprinus* (Pers.: Fr.) Gray . I . //
 - 2004 . - **61** , 6 . - . 41-51 .

. . . // . . . - 2005 . - **39**, . 2. - . 34-40.

. . . // :

. . . - :

-2, 2005 . - 56 (79). - . 69-92.

. . . *Flammulaster*, *Phaeomarasmius* *Simocybe* (Cortinariaceae)

// . . . - 2006. - **40**, . 4. - . 285-293.

. . . // . . . - 1997 . - **54**, 6.

- . 575-145.

. . . // . . . - 1997 . - **31**,

. 5. - . 44-51.

. . . -

: . . . , 1985. - 224 .

. . . // . . . -

1991. - **48**, 1. - . 34-41.

. . .

Pezizales // . . . - 1999. - **33**, . 6. - . 376-379.

, / . . .

. . . , 1985. - 167 .

. . . « » - :

. . . - , 1999. - 150 .

- / . . . - :

, 1980. - 85 .

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» (. . . , 1979). -

, 1979. - . 35-37.

. . . -

// . . . - 1992. - **49**, 6. - . 5-13.

. . . (*Carpinus betulus* L.)

// . . . - 1963. - **20**, 4. - . 73-79.

Gibberella Sacc. // - 1976. - **33**, 2.
 - . 156.

 // - 1992. - **49**, 1. - . 44-47.
 - :
 , 1980. - 224 .
 - : ,
 1991. - 88 .
 -
 : , 1986. - 364 .
 " " " " -
 / , - :
 - , 1997. - 576 .
 ,
 // - VI .
 2. - , 1971. -
 . 133-136.
 , -
 // - 1972. - **29**, 4. - . 522-525.

 // ,
 . - : , 1974 . - . 67-69.
 Aphyllophorales //
 - 1974 . - **31**, 6. - . 728-732.
 // .
 - - 1916. - **61**. - . 149-168.
 // .
 - 1873. - **2**, . 1. - . 1-291.
 " " " " -
 « » // - .
 - 2002. - 16 (28). - . 48-51.

. -
 // - 1980 . - **37**, 2. -
 . 57-59.
 « » //
 . - 1980 . - **37**, 6. - . 80-82.
 (Uredinales)
 « » // - 2005 . -
62, 4. - . 495-499.
 //
 :
 - - 2005 . - 56(79). - . 110-116.
 (Uredinales)
 // - 2007. -
64, 4. - . 575-580.
 « » () //
 - 1994. - **51**, 2/3. - . 202-207.
 « » //
 - 1993. - **50**, 1. - . 44-51.

 // - 1987. - **44**, 4. - . 70-75.

 - : , 1998. - 280 .
 //
 - 1913. - **46**. - . 1-16.
 *Grifola frondosa* (Fr.) S. Gray
 // - 2005. - **62**, 1. - . 87-90.
 -
 //
 :
 , 1992. - . 30-39.
 // - 1998. -
 8. - . 4-5.

... // ... 1.
 - : , 2005. - . 37-41.
 ... // ...
 - . - 2002. - 551. - . 222-227.
 ...
 « ... » // - . - « ... » (6-9
 « 2005 .. « ... » ,
 ,) . - : , 2005. - . 24-25.
 ...
 - //
 . ().

 // - . «
 » (, 26-28 2001 .) . - , 2001. - 105-107.
 *Phellinus robustus*
 (P. Karst.) Bourd. et Galz. f. *robiniae* Bond. //
 - 2006. - . 3, 729. - C.
 ..
 // VII . . - (, 1982). - : .
 , 1982. - . 254.
 .. « ... » ()
 // . . . - 1983. - 40, 3. - . 92-97.
 ..
 // . . . - 1984. - 41, 4. - . 64-67.
 ..
 // . . . - 1986. - 43, 3. -
 . 99-102.
 ..
 // . . « ... » -
 » . - , 1999. - . 200-201.

- Ainsworth & Bisby's Dictionary of the Fungi*. Edition 9 / P.M. Kirk, P.F. Cannon, J.C. David and J.A. Stalpers. – Oxon, Wallingford: CAB International, 2001. – 655 p.
- Akulov A.Yu., Usichenko A.S., Leontyev D.V., Yurchenko E.O., Prydyuk n.P.* The checklist of aphyllorphoid fungi of Ukraine // *Mycena* (special issue). – 2002. – **2**, 2. – P.1–56.
- Ale-Agha N., Braun U., Feige B., Jage H.* A new powdery mildew disease on *Aesculus* spp. introduced in Europe // *Cryptogamie, Mycologie*. – 2000. – **21**, 2. – P. 89–92.
- Amano K.* Host range and geographical distribution of the powdery mildew fungi. – Tokyo: Japan Scientific Societies Press, 1986. – 741 p.
- Andrianova T.V.* Septoria, Ramularia, Cercospora anamorphic complexes of *Mycosphaerella* genus in Ukraine // Simpozionul na ional de Micologie. Edi ia a XVII. Referate (Suceava, Romania; 18–21 August 2005). – Suceava, 2005. – P. 13–14.
- Andrianova T.V.* Diversity of horse chestnut (*Aesculus hippocastanum* L.) anamorphic leaf pathogens: monitoring in Ukraine // XV Congress of European Mycologists (Saint Petersburg, Russia, September 16–21, 2007). – Abstracts. – St. Petersburg: TREEART LLC, 2007. – P. 111–112.
- Arendholz W. R., Raitviir A.* A new species of Hyaloscyphaceae on needles of *Picea* (Pinaceae) // *Mycotaxon*. – 1988. – **32**, 1. – . 353–364.
- Bolay A.* L'o dium des marroniers envahit la Suisse // *Revue Suisse de Viticulture Arboriculture Horticulture*. – 2000. – **32**, 6. – S. 311–313.
- Borszchcow El.* Ein Beitrag zur Pilzflora der Provinz Czernigoff // *Bull. Acad. Imp. Sci. St.-Petersb.* – 1868. – **13**. – S. 219–245.
- Boyle H., Braun U.* First record of *Leveillula helichrysi* from Germany, including the first description of its anamorph // *Mycol. Balcanica*. – 2005. – **2**, 2. – P. 179–180.
- Braun U.* Miscellaneous notes on the Erysiphaceae (I) // *Feddes Repertorium*. – 1980. – **91**, 7–8. – P. 439–444.
- Braun U.* Descriptions of new species and combinations in *Microsphaera* and *Erysiphe* (IV) // *Mycotaxon*. – 1983. – **18**, 1. – P. 113–129.
- Braun U.* A monograph of the Erysiphales (powdery mildews). – Berlin; Stuttgart: J. Cramer, 1987. – 700 p.
- Braun U.* Some critical notes on the classification and the generic concept of the Erysiphaceae // *Schlechtendalia*. – 1999. – **3**. – P. 48–54.

- Braun U., Takamatsu S. Phylogeny of *Erysiphe*, *Microsphaera*, *Uncinula* (Erysipheae) and *Cystotheca*, *Podosphaera*, *Sphaerotheca* (Cystothecaceae) inferred from rDNA ITS sequences – Some taxonomic consequences // *Schlechtendalia*. – 2000. – **4**. – P. 1–33.
- Braun U., Shishkoff N., Takamatsu S. Phylogeny of *Podosphaera* sect. *Sphaerotheca* subsect. *Magnicellulatae* (*Sphaerotheca fuliginea* auct. s. lat.) inferred from rDNA ITS sequences – a taxonomic interpretation // *Schlechtendalia*. – 2001. – **7**. – P. 45–52.
- Chao A., Shen T.J. Non-parametrical estimation of Shannon's Index of diversity when there are unseen species in sample // *Environmental and ecological statistics*. – 2003. – **V. 10**. – P. 429–443.
- Dennis R. W. G. *British Ascomycetes*. 3rd ed. – Vaduz: J. Cramer, 1978. – 485 p.
- Eriksson O.E. Outline of Ascomycota. – 2006. – *Myconet* **12**. – P. 1–82.
- Eriksson O.E., Winka K. Supraordinal taxa of Ascomycota. – 1997. – *Myconet* **1**. – P. 1–16.
- Fungi of Ukraine*. A Preliminary Checklist / Eds Minter D.W., Dudka I.O. – Surrey: CAB International, 1996. – 361 p.
- Garbowski L. Grzybki pasorzytnicze okolic Smily z.Kijowskiej // *Pamiętnik Fizjogr., Botanica*. – 1922. – **26**, 2. – S. 1–11.
- Gilbert H.C., Martin G.W. Myxomycetes found on the bark of living trees // *Univ. Iowa Stud. nat. Hist.* – 1933. – **15**. – P. 3–8.
- Global Biodiversity Assessment*. – Cambridge: Univ. Press, 1995. – 1140 p.
- Härkönen M., Ukkola T. Conclusions on Myxomycetes completed over twenty-five years from 4793 moist chamber cultures // *Stapfia*. – 2000. – **155**. – P. 105–112.
- Hawksworth D.L. The numbers of fungi, their significance in ecosystem function, conservation, and importance to man // *Journal of Applied Microbiology*. – 1991. – **48**, 5. – P. 5–13.
- Huhndorf S.M., Miller A.N., Fernández F.A. Molecular systematics of the Sordariales: the order and the family Lasiosphaeriaceae redefined // *Mycologia*. – 2004. – **96**(2). – P. 368–387.
- Ing B. *The Myxomycetes of Britain and Ireland. An identification Handbook*. – Slough: The Richmond Publ. Co. Ltd., 1999. – 374 p.
- Ju Y.-M., Rogers J.D. A revision of the genus *Hypoxyton* // *Mycologia Memoirs*, no. 20. APS Press: St. Paul, 1996. – 365 p.

- Ju Y.-M., Rogers J. D., San Martín F. A revision of the genus *Daldinia* // Mycotaxon. – 1997. – **61**. – P. 243–293.
- Krupa J. Zapiski mykologiczne przewaznie z okolic Lwowa i z Karpat Stryjskich // Spraw. Kom. fizjogr. – 1889. – **23**. – S. 141–169.
- Majewski T. Analiza geograficzna flory Uredinales Polski // Acta mycol. – 1978. – **14**, z. 1/2. – S. 13–107.
- Nag Raj T.R., DiCosmo F. Genera coelomycetum. XXII. *Amphiciliella*, *Choa natiara* anam. gen. nov., *Ciferriella*, *Collonaemella*, *Cymbothyrium*, *Melanostroma*, *Phialophorophoma*, and *Thyrsidina* // Can. J. Bot. – 1984. – Vol. 62, 4. – P. 709–721.
- Namysłowski B. Sluzowce i grzyby Galicyi i Bukowiny // Pamietnik Fizyogr. – 1914. – **22**. – S. 1–151.
- Nannenga-Bremekamp N.E. A Guide to Temperate Myxomycota. – Bristol: Biopress Ltd., 1991. – 410 p.
- Novozhilov Yu.K., Schnittler M., Zemlianskaia I.V. Biogeographical and ecological patterns of Myxomycete distribution in arid regions of Eurasia // XV Congress of European Mycologists (Saint Petersburg, Russia, September 16–21, 2007). – Abstracts. – St. Petersburg: TREEART LLC, 2007. – P. 138–139.
- Pitek M. *Erysiphe flexuosa*, a new for Poland powdery mildew causing disease of *Aesculus hippocastanum* // Phytopathol. Pol. – 2002. – **24**. – P. 67–71.
- Prydiuk M.P. New records of *Pholiotina* species in Ukraine // Czech Mycol. – 2006. – **58** (3–4). – P. 273–285.
- Prydiuk M.P. New records of *Conocybe* species from Ukraine. I. The sections *Mixtae* and *Pilosellae* // Czech Mycol. – 2007. – **59** (1). – P. 25–38.
- Prydiuk M.P. New records of *Conocybe* species from Ukraine. II. The section *Conocybe* // Czech Mycol. – 2007b. – **59** (1). – P. 39–50.
- Rogers J.D., Ju Y.-M., Watling R., Whalley A.J.S. A reinterpretation of *Daldinia concentrica* based upon a recently discovered specimen // Mycotaxon. – 1999. – **72**. – P. 507–519.
- Sandu-Ville C., Mititiuc M., Iacob V. Citeva micronicete noi din Romania // Studii si Cercetari Biologie, Ser. Bot. – 1968. – **20**, 1. – P. 3–7.
- Stephenson S.L. Distribution and ecology of myxomycetes in temperate forests I. Patterns of occurrence in the upland forests of south-western Virginia // Canad. J. Bot. – 1988. – **66**. – P. 2187–2207.

- Stephenson S.L., Kalyanasundaram I., Lakhanpal T.* A comparative biogeographical study of myxomycetes in the mid-Appalachians of eastern north America and two regions of India // *J. Biogeogr.* – 1993. – Vol. **20**. – P. 645–657.
- Sukhomlyn M.M., Triskiba S.D.* Diversity of Basidiomycota in the “Sviaty gory” national nature park // XIV CEM abstracts: XIV Congress of European Mycologists (Katsiveli, Yalta, Crimea, Ukraine, 22–27 Sept. 2003). – 2003. – P. 91.
- Svrček M.* Species novae generis *Dasyscyphus* S.F. Gray (Discomycetes) e montibus Tatry, Slovakiae // *Česká Mycol.* – 1967. – R. **21**, 2. – S. 64–68.
- Usichenko A.S.* Distribution of aphylophoroid fungi taxa in different areas of Ukraine // Abstracts of XIV Congress of European Mycologists (Katsiveli, Yalta, Crimea, Ukraine, 22–27 September 2003). – Kiev: ST DRUK, 2003. – P.93.
- Voityuk S., Heluta V., Nevo E.* *Neoerysiphe cumminsiana* (Erysiphales, Eumycota), a new powdery mildew fungus in Israel // *Flora Mediterranea.* – 2004. – **14**. – P. 267–273.
- Voytyuk S.O., Heluta V.P., Wasser S.P., Nevo E.* Genus *Neoerysiphe* in Israel: species composition, host range and distribution // *Mycotaxon.* – 2006. – **97**. – P. 247–256.
- Wólczanska A., Muleńko W.* Climatic changes and the spread of Erysiphales // XIV CEM abstracts. XIV Congress of European Mycologists (Katsiveli, Yalta, Crimea, Ukraine, 22–27 September 2003). – 2003. – P. 60–61.
- Wróblewski A.* Zapiski grzyboznawcze z okolic Zaleszczyk // *Sprawozd. Kom. fizyogr.* – 1912. – **46**, 2. – S. 21–27.
- Zimmermannová-Pastiráková K., Pastirák M.* *Erysiphe flexuosa* – a new species of powdery mildew for Slovakia // *Biologia (Bratislava).* – 2002. – **57**, 4. – P. 437–440.
- Zimmermannová-Pastiráková K., Adamska I., Blaszkowski J., Bolay A., Braun U.* Epidemic spread of *Erysiphe flexuosa* (north American powdery mildew of horse-chestnut) in Europe // *Schlechtendalia.* – 2000. – **8**. – P. 39–45.

. . . , . . . , . . . , . . . ,
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