Checklist of Bulgarian *Helotiales*

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Abstract. A checklist of 120 taxa of discomycetous fungi from the order *Helotiales* is presented (104 from seven families and 16 *Incertae Sedis*) in the paper. Data about their taxonomy, trophic affiliation and distribution across the country are supplied. Literature sources for each recorded taxon are indicated. One family (*Vibrisseaceae*), two genera (*Neofabraea, Vibrissea*) and two species (*Ciboria caucus*, *Mollisia cirsiicola*) are new for the country. Eight species are included in the *Red List of fungi in Bulgaria*.

Key words: Bulgaria, checklist, distribution, fungal diversity, *Helotiales*

Introduction

Complete data about the species diversity, distribution and ecology of discomycetous fungi from the order *Helotiales* in Bulgaria are still lacking in Bulgarian mycological literature. Only a list of species from *Helotiaceae* has been published so far (Dimitrova & Baral 2005). Publication of vol. 6 (Order *Helotiales*, E. Dimitrova) from *The Fungi of Bulgaria* series is forthcoming. It will include taxonomic and chorological data about 126 taxa belonging to the following four families: *Bulgariaceae, Helotiaceae, Hyaloscyphaceae* and *Leotiaceae* (according to Kirk & al. 2001).

This paper presents a summarized list of further 120 *Helotiales* discomycetes registered so far in Bulgaria. Of these, 104 belong to seven families of *Helotiales* and 16 are included in *Incertae Sedis*.

Eight *Helotiales* species have conservation value and are included in the *Red List of fungi in Bulgaria* (Gyosheva & al. 2006).

Materials and methods

The species are listed by their correct names, earlier names under which they were published in Bulgaria, literature sources, data about their distribution by floristic regions, substrata/hosts, and their trophic affiliation (Table 1).

Besides literature data, the article also includes data obtained from revision of the herbarium specimens of *Helotiales* stored in the Mycological collection of the Institute of Botany, Sofia (SOMF). Unpublished data are included too. They are put in Table 1 under their SOMF number.

Families, genera and species of the Bulgarian *Helotiales* are listed in Table 1 in alphabetical order. The system of the families and genera within the order follows Kirk & al. (2008), with the exception of genus *Pyrenopeziza*, which is accepted after Lumbsch & Huhndorf (2007). The authors' names of the taxa are abbreviated according to Kirk & Ansell (2004). Distribution of the taxa is given according to the floristic regions adopted in the *Flora of the PR Bulgaria* (Jordanov 1966). The ecological-trophic groups are presented after Arnolds (1981) and Gyosheva & Denchev (2000). Distribution of the species established on cultivated plants is marked "all over", according to *The Fungi of Bulgaria* (Fakirova 1991a). Doubtful records are not included in the article.

The conservation status of the fungi is indicated according to the *Red List of fungi in Bulgaria* (Gyosheva & al. 2006).

Table 1. Checklist of Bulgarian *Helotiales*.

No	Families/Species	Sources	Floristic region	Host	Substrate	Tropfic group
	Helotiales					
	Dermateaceae					
1.	*Belonopsis junciseda* (P. Karst.) Le Gal & F. Mangenot					HS
	Syn.: *Mollisia junciseda* P. Karst.	Aleksandrov 1971	**8**	*Juncus* sp.	dry stems	
2.	*Blumeriella jaapii* (Rehm) Arx	Bobev 2000	**all over**	*Cerasus avium* (cult.)	leaves	LeP
	Syn.: *Coccomyces hiemalis* B.B. Higgins	Velichkova-Sotirova 1979; Petrov 1969	**all over**	*C. avium; C. vulgaris* (cult.)	leaves	
3.	*Dermea cerasi* (Pers.) Fr.	Fakirova & Dimitrova 1999	**5**	**unknown**	rotten wood	LeP
4.	*D. molliuscula* (Schwein.) J.W. Groves	Fakirova 1991b	**6**	**unknown**	barked shed wood	LeP
5.	*D. piceina* J.W. Groves	Dimitrova 1997b, 1999	**14**	*Picea abies*	rotten branches	LeP
6.	*D. prunastri* (Pers.) Fr.					LeP
	Syn.: *Dermatea prunastri* Fr.	Kozarov 1909a; Ivanov 1923	**all over**	*Prunus domestica* (cult.)	dry twigs	
		Savov 1928	**all over**	*Armeniaca vulgaris* (cult.)	dry twigs	
7.	*Diplocarpon earlianum* (Ellis & Everh.) F.A. Wolf	Kacharmazov & al. 1976	**5, 15, 19**	*Fragaria* (cult.)	leaves & stems	HP
		Bobev 2000	**all over**	*F. ananassa* (cult.)	leaves	
8.	*D. mespili* (Sorauer) B. Sutton	Bobev 2000	**all over**	*Cydonia oblonga* (cult.); *Mespilus germanica* (cult.)	leaves, petioles & fruits	LeP
		Stancheva 2006c	**all over**	*C. oblonga*; *M. germanica*, *Pyrus sativa*	leaves	
	Syn.: *Fabraea maculata* (Lév.) G.F. Atk.	Hristov 1939; Videnov 1967; Ivanov 1928; Ivanov & Patev 1930a; Georgiev & Lazarov 1980	**all over**	*P. sativa*	leaves & fruits	
	Stigmatea mespili Sorauer	Ivanov 1928; Vanchikov 1943	**all over**	*C. oblonga*	leaves	
		Ivanov 1928	**all over**	*M. germanica*	leaves	
9	*D. rosae* F.A. Wolf	Hristova 1941; Vanchikov 1946; Anonymous 1956, 1957; Hristova & Aleksandrova 1959; Tanev 1981; Margina 1993; Bobev 2000	**all over**	*Rosa* (cult.)	leaves	HP
10.	*Drepanopeziza punctiformis* Gremmen	Dimitrova 1994b, 2001c	**16**	*Populus tremula*	wintered leaves	LeP
11.	*D. ribis* (Rehm) Höhn.					LeP
	Syn.: *Pseudopeziza ribis* Rehm ex Kleb.	Ivanov & Dimitrov 1923; Zaharieva 1977; Bobev 2000	**all over**	*Ribes* (cult.)	leaves	
12.	*D. salicis* (Tul. & C. Tul.) Höhn.	Dimitrova 1994a, 2001c	**16**	*Salix* sp.	wintered leaves	LeP
13.	*Fabraea astrantiae* (Ces.) Rehm	Klika 1926	**15**	*Astrantia major*	stems	LeP
14.	*Leptotrochila ranunculi* (Fr.) Schüepp					HP
	Syn.: *Fabraea ranunculi* (Fr.) Rehm	Atanasov & al. 1932	**8**	*Ranunculus auricomus*	leaves	
		Klika 1926	**15**	*R. repens*, *R. cassubicus*	leaves	
15.	*L. verrucosa* (Wallr.) Schüepp	Negrean & Denchev 2000	**1**	*Crucianella angustifolia*	leaves	HP
16.	*Mollisia amenticola* (Sacc.) Rehm	Dimitrova 2001a, 2002c	**8**	*Alnus glutinosa*	fallen cones	LeS
17.	*M. cinerea* (Batsch) P. Karst.	SOMF 26 213	**4**	**unknown**	rotten wood	LeS
		Dimitrova 2002b	**5, 16**	**unknown**	rotten wood	

Table 1. Continuation.

No	Families/Species	Sources	Floristic region	Host	Substrate	Tropfic group
		Dimitrova 2002c	**8**	*Betula pendula*;	fallen twig	
			8, 16	*Corylus avellana*	rotten wood	
		Aleksandrov 1968; Dimitrova 2002c	**8**	*Carpinus betulus*	rotten twigs	
		Dimitrova 2001b	**8**	*Fagus sylvatica*, *Quercus petraea*;	dead branch	
			16	*Quercus* sp.	dead branch	
		Dimitrova 2002b	**7**	*Prunus* sp.;	dead branch	
			8	*B. pendula*; *C. avellana*;	rotten branches	
				Q. sessiliflora	rotten wood	
		Hinkova 1958	**15**	*F. sylvatica*	rotten trunk	
		Hinkova & Fakirova 1970	**16**	*C. avellana*;	rotten twig	
				Quercus sp.	rotten wood	
		SOMF 21190	**8**	*Rubus idaeus*	dead twig	
		SOMF 20 817	**16**	**unknown**	rotten shed twig	
18.	**M. cirsiicola* Gremmen	SOMF 25 566	**8**	*Cirsium* sp.	decaying stems	HS
19.	*M. crumenuloides* Rehm	Hinkova 1954, 1955	**8**	*Pinus sylvestris*	rotten wood	LeS
20.	*M. discolor* (Mont.) W. Phillips	Dimitrova 1994b, 2002c	**8**	*Corylus avellana*	dead twigs & bark	LeS
21.	*M. hydrophila* (P. Karst.) Sacc.	Aleksandrov 1971	**8**	*Phragmites australis*	dry culms	HS
		Dimitrova 1997d	**11**	*Poaceae*	dry culm	
		Dimitrova 2006	**15**	**unknown**	herbaceous stem	
22.	*M. ligni* (Desm.) P. Karst.	Kuthan & Kotlaba 1989	**1**	*Tamarix* sp.	barked twig	LeS
		Dimitrova 2002b	**5**	**unknown**	barked shed branch	
		Dimitrova 2002c	**8**	*Betula pendula*	barked branch	
		Dimitrova 2001b, 2002b	**8**	*Fagus sylvatica*	barked branch	
		Dimitrova 2001c	**8**	*Salix* sp.	dead twigs	
		Hinkova & Fakirova 1970	**16**	**unknown**	rotten shed twig	
	Syn.: *M. lignicola* W. Phillips	Hinkova 1954, 1955	**8**	**unknown**	rotten shed wood	
23.	*M. melaleuca* (Fr.) Sacc.	Dimitrova 2002b	**5**	**unknown**	barked shed branch	LeS
			7	*Rosa* sp.	dead branches	
			8	*Fagus sylvatica*, *Pinus peuce*	barked branches	
		Dimitrova 2001b; SOMF 21 648	**8**	*F. sylvatica*	barked branches	
		Dimitova 1999	**8**	*P. peuce*	barked twig	
		Hinkova & Fakirova 1970; SOMF 21 176	**16**	**unknown**	barked shed wood	
24.	*M. nervicola* (Desm.) Gillet					Fd
	Syn.: *M. rabenhorstii* (Auersw.) Rehm	Hinkova & Fakirova 1970; Dimitrova 2001b	**16**	*Quercus* sp.	dry leaves	

Table 1. Continuation.

No	Families/Species	Sources	Floristic region	Host	Substrate	Tropfic group
25.	*M. palustris* (Roberge ex Desm.) P. Karst.	Dimitrova 2002b	**8**	*Juncus* sp.	decaying stem	HS
		Dimitrova 1998b	**15**	*Tussilago farfara*	dry stems	
26.	*M. ramealis* P. Karst.	Dimitrova 1995	**8**	*Rubus idaeus*	dry twigs	LeS
27.	*M. stictella* (Sacc. & Speg.) Sacc.	Hinkova 1954, 1955	**8**	**unknown**	rotten shed twig	LeS
28.	*M. ventosa* P. Karst.	Dimitrova 1997c	**8**	**unknown**	barked shed twig	LeS
29.	*M. vulgaris* (Fuckel) Rehm	Hinkova 1955; Aleksandrov 1969	**8**	*Pinus sylvestris*	bark & cones	S, LeS
		Dimirova 1999	**8, 15**	*Fagus sylvatica*	cupules	
		Dimitrova 2002b	**16**	**unknown**	rotten shed branch	
30.	*Neofabraea alba* (E.J. Guthrie) Verkley Syn.: *Pezicula alba* E.J. Guthrie	Trifonov 1974	**all over**	*Malus* (cult.)	twigs	LeS
31.	*Pezicula acericola* (Peck) Sacc.	Dimitrova 1997d	**11**	*Acer* sp.	dead branches	LeS
32.	*P. carpinea* (Pers.) Tul. ex Fuckel	Dimitrova 2001a, b	**5**	*Fagus sylvatica*	dead wood	LeS
33.	*P. corticola* (A. Jörg.) Nannf.	Trifonov 1974	**all over**	*Malus* (cult.)	bark	LeS
34.	*P. coryli* (Tul.) Tul. & C. Tul. Syn.: *Dermatea coryli* Tul.	Barzakov 1931	**8**	*Corylus avellana*	dry twig	LeS
35.	*Pseudopeziza calthae* (W. Phillips) Massee Syn.: *Fabraea rousseanana* Sacc. & E. Bommer	Klika 1926	**15**	*Caltha palustris*	stems	HP
36.	*P. medicaginis* (Lib.) Sacc.	Ivanov & Patev 1930b	**2, 6**	*Medicago sativa*	living leaves	HP
		Kovachevski 1955	**9**	*M. lupulina*	living leaves	
		Malkoff 1908	**18**	*M. sativa*	whole plants	
		Malkov 1905b, 1906b, 1907a; Malkoff 1908; Anonymous 1955; Markova 1976; Blazhev 1982; Georgiev & al. 1982; Blazhev & Nikolova 1990; Bobev 2000	**all over**	*M. sativa*	living leaves & stems	
37.	*P. trifolii* (Biv.) Fuckel	Dimitrova 2002b	**4**	*Trifolium repens*;	dry leaves	HP
			5	*Trifolium* sp.	dry leaves	
		Negrean & Denchev 2000	**5**	*T. angustifolium*; *T. scabrum*	living leaves	
		Savov 1928	**6**	*Trifolium* sp.	living leaves	
		Hinkova 1959	**15**	*T. pratense*	living leaves	
		Negrean & Denchev 2000	**17**	*T. strictum*	living leaves	
		Klika 1926; Ivanov 1928; Bobev 2000	**all over**	*Trifolium* sp.	living leaves	
38.	*Pyrenopeziza atrata* (Pers.) Fuckel Syn.: *Mollisia atrata* (Pers.) P. Karst.	Fakirova & Dimitrova 1999	**5**	*Salvia* sp.	decaying stem	HS, Fd
		Dimitrova 2006	**8**	*Angelica pančičii*	decaying stem	
		Dimitrova 1997d	**11**	*Castanea sativa*	coat spines	
		Dimitrova 1996a	**16**	*Arctium* sp.	dry stem	

Table 1. Continuation.

No	Families/Species	Sources	Floristic region	Host	Substrate	Tropfic group
39.	*P. benesuada* (Tul.) Gremmen	Dimitrova 2002c	**8**	*Alnus glutinosa*;	dead twigs	LeS
			15	*A. incana*	dead twigs	
	Syn.: *Mollisia benesuada* (Tool.) W. Phillips	Aleksandrov 1969	**8**	*A. glutinosa*	rotten twigs	
		Dimitrova 1998a	**15**	**unknown**	dead shed twig	
40.	*P. bubakii* Klika	Klika 1926	**unknown**	*Dipsacus laciniatus*	dead stems	HS
41.	*P. carduorum* Rehm	Dimitrova 1996b	**8**	*Petasites hybridus*	dry petioles	HS
42.	*P. chamaenerii* Nannf.	Dimitrova 2001a	**16**	*Epilobium angustifolium*	dry stems	HS
43.	*P. commoda* (Roberge ex Desm.) Nannf.					Fd
	Syn.: *Mollisia viburnicola* (Berk. & Broome) W. Phillips	Dimitrova 1995	**8**	*Viburnum lantana*	wintered leaves	
44.	*P. compressula* Rehm	SOMF 21 515	**8**	*Cirsium appendiculatum*	dry stems	HS
		SOMF 21 335	**8**	*Doronicum* sp.	dry stems	
		SOMF 22 172	**8**	*Mentha* sp.	dry stems	
		SOMF 22 171	**8**	*Telekia speciosa*	dry stems	
		SOMF 21 518	**8**	*Geranium* sp.	dry stems	
		SOMF 21 658	**8**	*Verbascum* sp.	dry stems	
		SOMF 22 169	**15**	*Apiaceae*	dry stems	
		SOMF 21 638	**16**	*Helleborus odorus*	dry leaves	
		Dimitrova 1997c	**16**	*Ononis* sp.	dead stem	
		Dimitrova 2002b	**16**	*Trifolium* sp.	dead stem	
		Dimitrova 2006	**17**	*Cirsium* sp.	dry stems	
45.	*P. doronici* E.G. Dimitrova	Dimitrova 2002d	**15**	*Doronicum* sp.	dry stems	HS
46.	*P. ebuli* (Fr.) Sacc.	Dimitrova 2002b	**5**	*Sambucus ebulus*	dry leaves	Fd
		Dimitrova 1995	**8**	*S. nigra*	dry stems	LeS
		Dimitrova 1997d	**11**	*S. ebulus*	rotten stem	
47.	*P. foliicola* (P. Karst.) Sacc.	Dimitrova 1996b	**8**	*Helleborus odorus*	dry leaves	HS
		Dimitrova 2002b	**16**			
48.	*P. gentianae* (Pers.) Fuckel	SOMF 6 735	**8**	*Gentiana asclepiadea*	dry stems	HS
		Hruby 1931	**15**			
49.	*P. revincta* (P. Karst.) Gremmen	Dimitrova 2002a	**8**	*Filipendula ulmaria*	dry stem	HS
50.	*P. rubi* (Fr.) Rehm	Dimitrova 2002b	**5**	*Rubus* sp.	dead stems	HS
		Aleksandrov 1971	**8**	*R. idaeus*	dead stems	
		Hruby 1931	**15**	*R. idaeus*	dead stems	
	Geoglossaceae					
51.	*Geoglossum glabrum* Pers.	Barzakov 1928	**6**		soil	Hu
52.	*G. glutinosum* Pers.	Hinkova & Stoichev 1983	**18**		soil (among moss)	Hu
53.	*G. umbratile* Sacc.	Kuthan & Kotlaba 1989	**1**		soil	Hu
54.	*Geoglossum* sp.					Hu

Table 1. Continuation.

No	Families/Species	Sources	Floristic region	Host	Substrate	Tropfic group
	Syn.: *Thuemenidium* sp.	Aleksandrov 1971	**8**		peat	
55.	*Trichoglossum hirsutum* (Pers. : Fr.) Boud.					Hu
	Syn.: *Geoglossum hirsutum* Pers. : Fr.	Barzakov 1926; Aleksandrov 1970	**8**		peat moss	
	Hemiphacidiaceae					
56.	*Heyderia abietis* (Fr.) Link	Dimitrova 1999	**8, 17**	*Picea abies*	decaying needles	Ad, St
		Dimitrova 1998a; Dimitrova & Baral 2005	**15**	*Abies alba*	decaying needles	
	Syn.: *Mitrula abietis* Fr.	Vanev & Reid 1986	**5**	*P. abies*	decaying needles	
		Hinkova & al. 1979	**17**	*P. abies*	decaying needles	
57.	*H. cucullata* (Batsch) Bacyk & Van Vooren					Ad, St
	Syn.: *Mitrula cucullata* (Batsch) Fr.	Hinkova 1954, 1955	**8**	*Picea abies*	decaying needles	
58.	*H. pusilla* (Alb. & Schwein.) Link	Dimitrova & Baral 2005	**8**	*Pinus sylvestris*	fallen needles	Ad, St
		Aleksandrov 1969 (as *Mitrula abietis* Fr.)	**8**			
		Dimitrova 1995 [as *Heyderia abietis* (Fr.) Link]	**8**			
		Dimitrova 1999 (as *H. abietis*)	**8, 15**			
	Phacidiaceae					
59.	*Phacidium infestans* P. Karst.	Zashev 1949, 1953	**8, 17**	*Pinus sylvestris*	fallen needles	LeP
		Hinkova 1959; Dimitrova 1999; SOMF 8 741	**15**			
60.	*Ph. lacerum* Fr.	Kovachevski 1955	**17**	*P. sylvestris*	needles	LeP
61.	*Ph. plinthis* Fr.	Malkov 1907a; Malkoff 1908	**18**	*Scirpus lacustris*	whole plants	HP
	Rutstroemiaceae					
62.	*Lanzia echinophila* (Bull.) Korf.	SOMF 26 219, 25 542	**1, 2**	*Quercus* sp.	acorns	Fd
		SOMF 26 220	**11**	*Castanea sativa*	coat spines	
	Syn.: *Rutstroemia echinophila* (Bull.) Höhn	Kuthan & Kotlaba 1989; Dimitrova 2001b	**1**	*Q. cerris*	fallen acorns	
		Hinkova & Stoichev 1983	**11**	*C. sativa*	rotten cupules	
63.	*Rutstroemia bolaris* (Batsch : Fr.) Rehm	Aleksandrov 1968; SOMF 4 349; Dimitrova 2002c	**8**	*Carpinus betulus* L.	rotten branches	LeS
		Dimitrova 2002b	**16**	*C. betulus*	dry branches	
		Dimitrova 2002c	**8, 16**	*Carpinus* sp.	dead branches	
		Dimitrova 2002b, c	**17**	*C. orientalis*	dead branches	
		Gyosheva 1991; & Vassilev 1994 [as *Rutstroemia luteovirescens* (Roberge ex Desm.) W.L. White]	**7**	*C. betulus*	dry branches	
		Aleksandrov 1969	**8**	*Fagus sylvatica*	rotten twigs	
64.	*R. bulgarioides* (Rabenh.) P. Karst.	SOMF 25 347	**17**	*Picea abies*	rotten damp, cones	S
	Syn.: *Piceomphale bulgarioides* Rabenh.	Aleksandrov 1968	**8**	*P. abies*	rotten cones	
65.	*R. calopus* P. Karst.	Dimitrov 1983	**8**	**unknown**	not indicated	HS
		Dimitrova 1996a	**8**	*Geum rivale*	decaying leaves	
		Dimitrova 2002b	**8**	*Carex acuta*	decaying culms	
66.	*R. conformata* (P. Karst.) Nannf.	Aleksandrov 1971; Dimitrova 2002c	**8**	*Alnus glutinosa*	decaying leaves	Fd

Table 1. Continuation.

No	Families/Species	Sources	Floristic region	Host	Substrate	Tropfic group
67.	*R. elatina* (Alb. & Schwein.) Rehm	Vanev & Reid 1986	**5**	*Picea abies*	rotten trunk	LeS
68.	*R. firma* (Pers.) P. Karst.	Aleksandrov 1969	**8**	*A. glutinosa*	rotten branches	LeS
		SOMF 6 941	**8**	*Quercus* sp.	rotten branches	
	Syn.: *Poculum firmum* (Pers.) Dumont	Hinkova & Fakirova 1970; Dimitrova 2001b, 2002b	**16**	*Quercus* sp.	rotten branches	
		Dimitrova 2002b	**8**	*Fagus sylvatica*	rotten branches	
69.	*R. rosarum* Velen.	Aleksandrov 1968	**8**	*Rosa* sp.	rotten twigs	HS
	Sclerotiniaceae					
70.	*Botryotinia fuckeliana* (de Bary) Whetzel	Vanev 1988	**izk. sreda**	*Vitis vinifera* (cult.)	fruits	HP
		Bobev 2000	**all over**	*Helianthus anuus* (cult.);	whole plant	
				Arachis hypogaea (cult.)	whole plant	
	Syn.: *Sclerotinia fuckeliana* (de Bary) Fuckel	Savov 1923	**2**	*V. vinifera*	friuts	
		Savov 1928	**9, 15, 18**	*Allium cepa* (cult.);	bulbs	
				H. annuus	stem's base	
		Hristov 1939	**2, 19**	*A. cepa*	bulbs & stems	
		Ivanov & Patev 1927	**2, 20**	*A. cepa*;	bulbs & stems	
			6	*H. annuus*	stem's base	
		Vanchikov 1947	**all over**	*Begonia* sp. (hort.);	leaves	
				Brassica oleracea var. *capitata* (cult.);	heart & leaves	
				Capsicum annuum. (cult.);	stems	
				Cucumis sativus (cult.)	friuts	
		Stancheva 2001, 2006f	**all over**	*Brassica rapa* var. *oleifera* (cult.)	whole plant	
		Stancheva 2006b	**all over**	seed fruit trees	fruits & flowers	
		Stancheva 2006e	**all over**	*Persica vulgaris* (cult.);	fruits	
				Armeniaca vulgaris (cult.)	fruits	
71.	*B. globosa* N.F. Buchw.	Hinkova 1960	**15**	*Allium ursinum*	stems	HP
72.	*B. porri* (J.F. H. Beyma) Whetzel	Kovachevski 1969	**all over**	*Allium sativum* (cult.)	stems & bulbs	HP
		Elenkov 2003	**all over**	*Allium* spp.	stems & bulbs	
	Syn.: *Sclerotinia porri* J.F.H. Beyma	Anonymous 1993	**all over**	*Tulipa* (hort.)	stems & bulbs	
73.	*B. ricini* (G.H. Godfrey) Whetzel					HP
	Syn.: *Sclerotinia ricini* G.H. Godfrei	Vanev 1960, 1964	**all over**	*Ricinus communis* (cult.)	seeds	
74.	*Ciboria amentacea* (Balb.) Fuckel	Hinkova 1954, 1955, 1965; Aleksandrov 1968, 1969	**8**	*Alnus glutinosa*	fallen catkins	Fd
		Hinkova & Aleksandrov 1971	**16**			
75.	*C. aschersoniana* (Henn. & Plöttn.) Whetzel	Dimitrova 1995	**8**	*Poaceae*	dry culms	HS
76.	*C. batschiana* (Zopf) N.F. Buchw.	Dimitrova 2001b	**1, 8**	*Quercus* sp.	acorns	CS
	Syn.: *Sclerotinia pseudotuberosa* (Rehm) Rehm	Stefanov 1953	**1**	*Quercus* sp.	acorns	
		Dimitrov 1935	**8**	*Quercus* sp.	acorns	
77.	*C. bulgarioides* (Rabenh.) Baral	Dimitrova 2002b	**8**	*Abies alba*	fallen cones	S

Table 1. Continuation.

No	Families/Species	Sources	Floristic region	Host	Substrate	Tropfic group
78.	**C. caucus* (Rebent.) Fuckel	Dimitrova 2001c [as *Ciboria amentacea* (Balb.) Fuckel]	**8**	*Salix alba*	fallen catkins	Fd
79.	*C. coryli* (Schellenb.) N.F. Buchw.	Dimitrov 1983	**8**	*Corylus avellana*	fallen catkins	Fd
		Dimitrova 2002c	**8, 16**			
	Syn.: *Sclerotinia coryli* Schellenb.	Hinkova 1954, 1955; Aleksndrov 1969	**8**			
		Hinkova & Fakirova 1970	**16**			
80.	*C. rufofusca* (O. Weberb.) Sacc.	Dimitrova 1998a, 1999	**15**	*Abies alba*	cone scales	S
81.	*Ciboria* sp.	Aleksandrov 1969	**8**	*Alnus glutinosa*	fallen cones	CS
82.	*C. viridifusca* (Fuckel) Höhn.	Dimitrova 2002c	**14**	*A. glutinosa*	fallen cones	CS
83.	*Dumontinia tuberosa* (Bull.) L.M. Kohn	SOMF 16 222	**15**		soil	HP
	Syn.: *Sclerotinia tuberosa* (Hedw.) Fuckel	Hinkova 1962	**2**		soil	
		Aleksandrov 1968	**8**		soil	
84.	*Encoelia fascicularis* (Alb. & Schwein.) P. Karst.	Dimitrova 2001a, c	**10**	*Populus alba*	dead branches	LeP
85.	*E. furfuracea* (Roth) P. Karst.	Dimitrova 1998b	**8, 16**	**unknown**	rotten shed wood	LeP
86.	*E. glaberrima* (Rehm) Kirschst.	Kuthan & Kotlaba 1989; Dimitrova 2002c	**1**	*Corylus avellana*	rotten twigs	LeP
87.	*Monilinia cydoniae* (Schellenb.) Whetzel	Bobev 2000, 2007; Stancheva 2006a	**all over**	*Cydonia oblonga* (cult.)	fruits, leaves, flowers	LeP
	Syn.: *Sclerotinia cydoniae* Schellenb.	Ivanov 1921; Savov 1923; Hristov 1938; Dzhurkova 1942; Anonymous 1955; Kotetsov 1968; Tafradzhiyski & Angelov 1979				
88.	*M. fructicola* (G. Winter) Honey	Ilieva 1992	**6**	*Vitis vinifera* (cult.); *Fragaria* (cult.)	fruits	LeP
			10	*Ficus carica* (cult.)	stems & fruits	
89.	*M. fructigena* Honey Syn.: *Monilia fructigena* (Pers.) Pers.; *Sclerotinia fructigena* Aderh.; *S. fructigena* (Pers.) J. Schröt.; *Stromatinia fructigena* (J. Schröt.) Boud.	in Addenda	**all over**	fruit trees	fruits, flowers, twigs	LeP
90.	*M. laxa* (Aderh. & Ruhland) Honey Syn.: *Monilia cinerea* Bonard.; *Sclerotinia laxa* Aderh. & Ruhland	in Addenda	**all over**	fruit trees	fruits, flowers, twigs	LeP
91	*M. linhartiana* (Prill. & Delacr.) N.F. Buchw.					LeP
	Syn.: *Sclerotinia linhartiana* Prill. & Delacr.	Ivanov 1928; Ivanov & Patev 1930a	**6**	*Cydonia oblonga* (cult.)	fruits	
	Monilia linhartiana Sacc.	Ivanov & Patev 1930b	**5, 9**			
		Naidenov 1915	**all over**			
92.	*M. mespili* (Woronin) N.F. Buchw.	Bobev 2000	**all over**	*Mespilus germanica* (cult.)	leaves & fruits	LeP
	Syn.: *Sclerotinia mespili* Schellenb.	Ivanov 1928; Hristov 1938	**all over -limited**			
	Stromatinia mespili (Woronin) N.F. Buchw.	Savov 1923	**2**			
93.	*Sclerotinia arachidis* Hanzawa	Dimitrov 1958	**3, 6, 10**	*Arachis hypogaea* (cult.)	whole plant	HP
		Georgiev & al. 1986	**all over**			
		Vitanova 2008	**all over**			

Table 1. Continuation.

No	Families/Species	Sources	Floristic region	Host	Substrate	Tropfic group
94.	*S. cepa* Berk. & M.A. Curtis	Savov 1928; Ivanov & Patev 1930a	**all over**	*Allium cepa*, *A. sativum* (cult.)	bulbs & stems	HP
95.	*S. cinerea* (Bonord.) J. Schröt.	in Addenda	**all over**	fruit trees	fruits	LeP
96.	*S. coryli* Schellenb.	Hinkova 1955; Aleksandrov 1969	**8**	*Corylus avellana*	wintered catkins	LeP
		Hinkova & Fakirova 1970	**16**			
97.	*S. minor* Jagger	Hristova 1947; Mihailova 1983; Encheva & Dimitrov 2008; Bobev 2000	**all over**	*Helianthus annuus* (cult.)	whole plant	HP
		Yankulov & Mihailova 1960	**15**	*Valeriana officinalis* (cult.); *Polemonium coeruleum* (hort.)	stems	
		Dimitrova 2002b	**8**	*Caltha palustris*	decaying petioles	
		SOMF 20 785	**8**	*Poaceae*	dry culms	
		Hristova 1947	**15**	*Chrysanthemum cinerariaefolium* (hort.)	whole plant	
		Kovachevski 1941	**all over**	*Lactuca sativa* (cult.)	leaves	
		Bobev 2000	**all over**	*V. officinalis*	stems	
98.	*S. ricini* G.H. Godfrey	Vanev 1960	**all over**	*Ricinus communis* (cult.)	stems & fruits	HP
99.	*S. sclerotiorum* (Lib.) de Bary	In Addenda	**all over**	cultivated plants	stems, leaves, fruits, etc.	HP
		Rodeva & Gabler 2009	**2, 6, 7, 18**	*Carum carvi*	stems & leaves	
		Yankulov & Mihailova 1960	**15**			
		Kovachevski 1955	**6**	*Cichorium intybus*	stems	
		Yankulov & Mihailova 1960	**15**	*Leuzea carthamoides*	stems	
		Kovachevski 1955	**6**	*Meliotus alba*	stems & leaves	
		Bubak 1903; Hristov 1932	**4**	*Pulmonaria officinalis*	stems & leaves	
		Margina 2000	**no data**	*Salvia sclarea*	stem & leaves	
		Hinkova & Aleksandrov 1971	**16**	deciduous shrubs	stems & leaves	
		Bobev 2000	**all over**	*Valeriana officinalis*; *Papaver* spp.	stems & stem base	
	Syn.: *S. libertiana* Fuckel	In Addenda				
100.	*Sclerotinia* sp.	Hristov 1928	**all over**	*Morus* (cult.)	fruits	LeP
		Hristov 1943	**all over**	*Papaver somniferum* (cult.)	pods & seeds	HP
101.	*S. trifoliorum* Erikss.	Atanasov 1927; Ivanov & Patev 1930a, b	**all over**	*Medicago sativa* (cult.)	stems, leaves & stem base	HP
		Bobev 2000	**all over**	*Medicago* spp.	stem base	
102.	*Stromatinia gladioli* (Drayton) Whetzel					HP
	Syn.: *Sclerotinia gladioli* Drayton	Hristova 1947	**6**	*Gladiolus* (hort.)	leaves, stems & bulbs	
		Bobev 2000	**all over**	*Gladiolus* spp.		
		Aleksandrova 1972; Nikolova & Tafradzhiyski 1984	**all over**	*Freesia* (hort.)	leaves, stems & bulbs	
103.	*S. laxa* (Ehrenb.) Naumov	Savov 1923	**2**	*Armeniaca vulgaris* (cult.)	fruits	LeP

Table 1. Continuation.

No	Families/Species	Sources	Floristic region	Host	Substrate	Tropfic group
	Vibrisseaceae					
104.	*Vibrissea decolorans* (Saut.) A. Sánchez & Korf					LeS
	Syn.: *Belonopsis decolorans* (Saut.) Rehm	Aleksandrov 1968	**8**	*Crataegus monogyna*	dry twigs	
		Dimitrova 2001c	**8**	*Salix* sp., *S. lapponum*	dead branches	
	Incertae sedis					
105.	*Calloria neglecta* (Lib.) B. Hein					HS
	Syn.: *Calloria fusarioides* (Berk.) Fr.	Aleksandrov 1968	**8**	*Urtica dioica*	dead stems	
106.	*Chlorociboria strobilina* (Alb. & Schwein.) Seaver	Dimitrova 1999	**8, 15**	*Abies alba*	cone scales	S
		Dimitrova 1996a, 1999	**17**	*Pinus sylvestris*	cone scales	
107.	*Eupropolella vaccinii* (Rehm) Höhn.					HS
	Syn.: *Sphaeropezia vaccinii* Rehm	Hinkova 1960	**15**	*Vaccinium vitis-idaea*	dead leaves	
108.	*Graddonia coracina* (Bres.) Dennis	Dimitrova 2002a	**8**	*Fagus sylvatica*	rotten branches	LeS
109.	*Micraspis strobilina* Dennis	Dimitrova 1998b, 1999	**16**	*Pinus sylvestris*	rotten cones	S
110.	*Mitrula paludosa* Fr.	Dimcheva & al. 1992; Dimitrova 1999	**15**	*P. sylvestris*	decaying needles	Ad, St
	Syn.: *Mitrula phalloides* (Bull.) Chevall.	Hinkova 1954, 1955	**8**	*Picea abies*	decaying needles, cones & twigs	
111.	*Naevala perexiuga* (Roberge ex Desm.) K. Holm & L. Holm	Fakirova 1993; Dimitrova 2001b	**6**	*Quercus* sp.	dead leaves	Fd
	Syn.: *Naevia minutissima* (Auersw.) Rehm	Dimitrova 2006	**16**	*Quercus* sp.	dead leaves	
112.	*Pirottaea brevipila* (Roberge ex Desm.) Boud.	Dimitrova 1997a [as *Belonopsis asteroma* (Fuckel) Aebi]	**8**	*Centaurea* sp.	dry stems	HS
		Dimitrova 1998a	**15**	*Doronicum* sp.	dry stems	
113.	*Tapesia fusca* (Pers.) Fuckel	Dimitrova 2002b	**5**	**unknown**	wet shed branches	LeS
		Aleksandrov 1969	**8**	*Alnus glutinosa*	rotten twigs	
		Aleksandrov 1971	**8**	*Populus nigra*	dead wood	
		Dimitrova 2002c	**8, 15**	*A. glutinosa*	dead twigs	
		Dimitrova 2002c	**8**	*Betula pendula*; *Carpinus betulus; Corylus avellana*	dead wood & branches	
		Dimitrova 2001c	**8**	*Salix lapponum*	dead wood	
		Dimitrova 2001c	**8**	**unknown**	barked shed branch	
		Dimitrova 1997d	**11**	*C. avellana*	dead twigs	
		Dimitrova 1998a	**15**	*A. glutinosa*	dead branches	
		Hinkova & Fakirova 1970	**16**	*Fagus sylvatica*; *C. avellana*; *Acer campestre*	dead branches	
		Dimitrova 2001b, 2002b	**16**	*F. sylvatica*	dead branches	
114.	*T. lividofusca* (Fr.) Rehm	Dimitrova 2002c	**8**	*Betula pendula*	dead wood	LeS
		Aleksandrov 1968	**8**	*Carpinus betulus*; *Corylus avellana*	rotten twigs	
		Dimitrova 2002b, c	**7, 8**	*C. betulus*	dead branches	

Table 1. Continuation.

No	Families/Species	Sources	Floristic region	Host	Substrate	Tropfic group
		Aleksandrov 1969	**8**	*Alnus glutinosa*; *Fagus sylvatica*	bark & rotten branches	
		Dimitrova 2002c	**8**	*A. glutinosa; C. avellana*	dead branches	
		Dimitrova 2001b	**8, 16**	*F. sylvatica*	dead branches	
		Dimitrova 2001b	**16**	*Quercus* sp.	dead wood	
		Dimitrova 2002b	**16**	*F. sylvatica*	rotten branch	
		Hinkova & Aleksandrov 1971	**16**	**unknown**	rotten shed twig	
	Syn.: *T. melaleucoides* Rehm	Aleksandrov 1969	**8**	*A. glutinosa*	rotten twigs	
		Aleksandrov 1968	**8**	*B. pendula*; *C. betulus*; *Rubus idaeus*	rotten twigs	
115.	*T. rosae* (Pers.) Fuckel	Dimitrova 2002b	**5**	*Rosa* sp.	dry twigs	LeS
		Aleksandrov 1968	**8**	*Rosa* sp.; *Rubus* sp.	rotten twigs	
		Dimitrova 2002b	**16**	*Crataegus* sp.	bark	
		Hinkova & Fakirova 1970	**16**	*C. monogyna*; *Rosa* sp.	rotten twigs	
116.	*T. rosae* var. *prunicola* (Fuckel) W. Phillips					LeS
	Syn.: *Tapesia prunicola* Fuckel	Aleksandrov 1968	**8**	*Prunus* sp.	rotten twig	
		Dimitrova 2002b	**8**	*Pyrus pyraster*	dead branches	
117.	*T. strobilicola* (Rehm) Sacc.	Dimitrova 1997d, 1999	**11**	*Pinus nigra*	bark	S
		Dimitrova 2002b	**16**	*P. sylvestris*	fallen cones	
118.	*Trochila craterium* (DC.) Fr.	Dimitrova 1997d	**11**	*Hedera helix*	dead leaves	Fd
		Dimitrova 1997c	**17**			
		Stoykov & Assyov 2009	**1, 4, 5, 6, 11, 14, 17**			
119.	*T. ilicina* (Nees : Fr.) Courtec.	Pencheva & al. 2009	**6**	*Ilex aquifolium*	fallen leaves	Fd
		Stoykov & Assyov 2009	**11**	*I. aquifolium*		
			20	*I. colchica*		
120.	*T. laurocerasi* (Desm.) Fr.	Stoykov & Assyov 2009	**6, 20**	*Laurocerasus officinalis*	fallen leaves	Fd

Legend. Ecological-trophic groups (ETG); Saprotrophic fungi: **Ad** – needle debris saprotrophs; **Fd** – leaf debris saprotrophs; **S** – cone saprotrophs; **CS** – fruit saprotrophs; St – litter saprotrophs; **LeS** – wood saprotrophs; **HS** – herbs saprotrophs; **Hu** – humus saprotrophs; Parasitic fungi: **LeP** – wood parasites; **HP** – herbs parasites; **cult.** – cultivate plant; hort. – ornamental plant.

Results

The checklist includes 120 taxa (119 species, 1 variety), 16 of which have unclear position (*Incertae Sedis*). The other 104 species belong to seven families of the order *Helotiales*: *Dermateaceae* (50 species), *Geoglossaceae* (5), *Hemiphacidiaceae* (3), *Phacidiaceae* (3), *Rutstroemiaceae* (8), *Sclerotiniaceae* (34), *Vibrisseaceae* (1). The taxa belonging to 36 genera are presented according to the species diversity as follow: the genus *Mollisia* includs the greatest number of species (15 species), followed by *Pyrenopeziza* (13), *Ciboria* (9), *Sclerotinia* (9), *Rutstroemia* (7), *Monilia* (6), etc.

One registered family (*Vibrisseaceae*) is new to the country. New to the country are also two genera (*Neofabraea* H.S. Jacks and *Vibrissea* Fr.) and two species (*Ciboria caucus* and *Mollisia cirsiicola* asterisked in Table 1). New localities and new substrates are listed for 12 *Helotiales* species already published in Bulgaria.

The *Addenda* presents data about four species, dangerous and economically important plant pathogens, belonging to the families *Sclerotiniaceae*: *Monilinia fructigena*, *M. laxa*, *Sclerotinia cinerea*, and *S. sclerotiorum*. They develop on the different parts of their hosts (leaves, stems, flowers, fruits, etc.) and cause grave diseases. In Bulgaria they have been found on many cultivated plants (fruits, vegetables, industrial, medical, and ornamental), as well as on a lot of wildings. Owing to the great number of hosts, the data about cultivated plants are given in the *Addenda*.

Eight species are of conservation significance and have been entered in the *Red List of fungi in Bulgaria* (Gyosheva & al. 2006). They are listed in the following categories: **Critically Endangered (CR)** – four species (*Geoglossum glutinosum, G. umbratille, Mitrula paludosa, Rutstroemia calopus*), **Endangered (EN)** – three species (*Botryotinia globosa, Graddonia coracina, Trichglossum hirsutum*), **Vulnerable (VU)** – one species (*Rutstroemia bulgarioides*).

Depending on the substrate, cup-fungi of the order *Helotiales* have been divided into 10 ecological-trophic groups (Table 1): **Saprotrophic fungi:** needle debris saprotrophs (Ad) – four species; leaf debris saprotrophs (Fd) – 13 species; cone saprotrophs (S) – seven species; fruit saprotrophs (CS) – three species; litter saprotrophs (St) – four species; wood saprotrophs (LeS) – 26; herbs saprotrophs (HS) – 20; and humus saprotrophs (Hu) – five species. **Parasitic fungi**: wood parasites (LeP) – 25 species; and herbs parasites (HP) – 21. Eight fungal species have been registered on several different substrata and are included in more than one trophic group: *Heyderia abietis, H. cucullata, H. pusilla* and *Mitrula paludosa* – Ad, St; *Mollisia vulgaris* – S, LeS; *Sclerotinia* sp. – LeP, HP; *Pyrenopeziza atrata* – HS, Fd; *P. ebuli* – Fd, LeS.

Addenda

1 (89) *Monilinia fructigena* Honey

Amygdalus communis L. – Bobev 2000; *Armeniaca vulgaris* L. – Bobev 2000.
Cerasus avium (L.) Moenh; *Cydonia oblonga* Mill. – Bobev 2000.
Malus domestica Borkh. – Bobev 2000.
Persica vulgaris Mill. – Bobev 2000; *Prunus domestica* L. – Bobev 2000; Borovinova 2006; *Pyrus sativa* Lam. & DC. – Bobev 2000.
Seed fruit trees – Stancheva 2006a, b.

Syn. *Monilia fructigena* (Pers.) Pers.

Armeniaca vulgaris – Hristov & Hristova 1936; Stancheva 2006e.
Cerasus avium – Malkov 1903; Anonymous 1956, 1957; Vanev 1963; *Cydonia oblonga* – Kozarov 1907; Bobev 2000.
Malus domestica – Malkov 1903, 1905a, b, 1906a, b, 1907a, 1908; Kozarov 1907, 1908, 1909a, b; Dospevski 1910; Ivanov 1921, 1924, 1928; Ivanov & Patev 1925, 1927, 1930b; Radoslavov 1923; Savov 1927, 1928; Hristov 1938; Anonymous 1955, 1956, 1957; Vanev 1963.
Persica vulgaris Mill. – Hristov & Hristova 1936; Stancheva 2006e; *Prunus cerasifera* Ehrh. – Hristov 1934; *P. cerasifera* var. *pissardii* (Carr.) Schneider – Hristov 1934; *P. domestica* – Malkov

1903, 1905a, 1906a, b, 1907a, 1908, Malkoff 1905b; Gechev 1906; Hristov 1934; *P. insititia* L. – Hristov 1934; *P. hortulana* L. – Hristov 1934; *P. salicina* Lindl. – Hristov & Hristova 1936; *P. spinosa* L. – Hristov 1934; *Pyrus sativa* – Malkov 1903, 1905b, 1906b, 1908; Kozarov 1907, 1908; Dospevski 1910; Ivanov 1924; Savov 1927, 1928; Vanev 1963.

Vitis vinifera L. – Vanev 1963.

Fruit trees – Malkov 1907b; Grigoriev 1923; Ivanov 1923; Borovinova 2000; Stancheva 2006a.

Syn. *Stromatinia fructigena* (J. Schröt.) Boud.

Malus domestica – Savov 1923, 1925, 1928; Ivanov & Patev 1925.

Pyrus sativa – Savov 1923, 1925, 1928; Ivanov & Patev 1925, 1930a.

Syn. *Sclerotinia fructigena* (Pers.) J. Schröt.

Malus domestica – Radoslavov 1923.

Prunus domestica – Ivanov 1923, 1924.

Vitis vinifera L. – Vanev 1963.

Syn. *S. fructigena* Aderh.

Amygdalus communis L. – Hristov 1938; *Armeniaca vulgaris* – Hristov 1938.

Cerasus avium – Hristov 1938; *C. vulgaris* Mill. – Hristov 1938; *Chaenomeles japonica* (Thunb.) Lindl. – Hristov 1938; *Cydonia oblonga* – Hristov 1938.

Fragaria vesca L. – Hristov 1938.

Malus baccata (L.) Borkh. – Hristov & Hristova 1940; *M. domestica* – Savov 1927, 1928; Ivanov 1928; Ivanov & Patev 1927, 1930b; Hristov 1938; Anonymous 1955, 1956, 1957; Vanev 1963.

Persica vulgaris –Hristov & Hristova 1936, 1940; Hristov 1938; *P. vulgaris* var. *nucipersica* – Hristov & Hristova 1939; *Prunus cerasifera* – Hristov 1938; *P. domestica* – Ivanov 1924; Hristov 1938; *P. insititia*, *P. salicina*, *P. spinosa* – Hristov 1938; *Pyrus baccata* L. – Hristov & Hristova 1940; *P. sativa* –Ivanov & Patev 1927, 1930a; Ivanov 1928; Savov 1927, 1928; Hristov 1938.

Fruit trees – Grigoriev 1923; Ivanov 1923; Gospodinov 1957; Karova 1970.

2 (90) *M. laxa* (Aderh. & Ruhland) Honey

Amygdalus communis L. – Bobev 2000; *Armeniaca vulgaris* – Ivanova 2006; Stancheva 2006e; Bobev 2000.

Cerasus avium – Bobev 2000; *C. vulgaris* – Borovinova & Milenkov 2002.

Persica vulgaris – Stancheva 2006e; Bobev 2000; *Prunus domestica* – Bobev 2000; Borovinova 2006.

Seed fruit tree – Borovinova 2000; Stancheva 2006a, b.

Syn. *Monilia cinerea* Bonord.

Armeniaca vulgaris – Kozarov 1908; Malkov 1905a; Malkov & Dospevski 1908; Dospevski 1910; Ivanov 1921.

Cerasus avium – Malkov 1903; Kozarov 1908, 1909a, b; *C. vulgaris* – Malkoff 1905b, 1908; Malkov1906b, 1907a; Kozarov 1909a; Dospevski 1910.

Prunus domestica – Malkoff 1905b; Malkov 1906b, 1907a; Kozarov 1907, 1908, 1909a, b; Dospevski 1910; Ivanov 1921.

Syn. *Sclerotinia laxa* Aderh. & Ruhland

Armeniaca vulgaris – Kozarov 1909a, b; Ivanov 1923, 1928; Savov 1925, 1927, 1928; Ivanov & Patev 1925, 1930b; Hristov 1938; Iliev 1953a, b; Iliev & Ivanov 1960.

Cerasus avium – Hristov 1938; Anonymous 1955; *C. vulgaris* – Hristov 1938; Anonymous 1955; *Cydonia oblonga* – Hristov 1938.

Malus domestica – Hristov 1938; Anonymous 1955; Gospodinov 1957.

Persica vulgaris – Ivanov & Patev 1930a; Hristov 1938; *Prunus cerasifera*, *P. domestica*, *P. insititia*, *P. salicina*, *P. spinosa* – Hristov 1938; *Pyrus sativa* – Hristov & Hristova 1936, 1939; Hristov 1938; Gospodinov 1957.

Fruit trees – Karova 1970, 1976; Kotev 1970.

3 (95) *Sclerotinia cinerea* (Bonord.) J. Schröt.

Amygdalus communis – Ivanov 1923; Ivanov & Patev 1930b; *Armeniaca vulgaris* – Savov 1927; Ivanov & Patev 1927.

Cerasus avium – Savov 1923; Ivanov 1923; Ivanov & Patev 1930b; *C. vulgaris* – Savov 1923; Ivanov 1923.

Persica vulgaris – Ivanov 1923; Ivanov & Patev 1927; Savov 1927; *Prunus cerasifera* – Ivanov & Patev 1930b; *P. domestica* – Ivanov 1923, 1928; Savov 1923, 1927, 1928; Ivanov & Patev 1927, 1930a, b; Hristov 1934; *P. insititia* – Hristov 1934.

Fruit trees – Ivanov & Patev 1927, 1930a, b; Ivanov 1928.

4 (99) *S. sclerotiorum* (Lib.) de Bary

Allium cepa L. – Bobev 2000;

Beta vulgaris L. – Vanchikov 1947; Bobev 2000; *Brassica napus* L. var. *oleifera* DC. – Vanchikov 1947; Bobev 2000; *B. oleracea* L. var. *capitata* L. – Kovachevski 1938; Vanchikov 1947; Anonymous 1955.

Calendula officinalis L. – Bobev 2000; *Cannabis sativa* L. – Vanchikov 1947; *Capsicum annuum* L. – Kovachevski 1938; Bobev 2000; *Chrysanthemum cinerariaefolium* Vis. – Hristova 1947; *Citrulus vulgaris* Schrad. – Vanchikov 1947; Bobev 2000; *Cucumis melo* L. – Vanchikov 1947; Bobev 2000; *C. sativus* L. – Kovachevski 1938; Vanchikov 1947; Elenkov 1957; Bobev 2000; *Cucurbita pepo* L. – Bobev 2000.

Dahlia spp. – Bobev 2000; *Daucus carota* L. var. *sativus* Hoffm. – Vanchikov 1947; Anonymous 1955; Bobev 2000.

Freesia Ecklon ex Klatt – Bobev 2000.

Gloxinia Regel – Batalova 1967; Mirkova 1993; *Glycine hispida* (Mönch) Maxim. – Bobev 2000.

Helianthus annuus L. – Hristov 1932, 1934; Encheva & Dimitrov 2008; Vanchikov 1947; Anonymous 1955, 1956; Gospodinov 1957; Mihailova 1983; Ivanov & al. 1989; Ivanov & al. 1990; Shindarova & al. 1990; Shindarova & al. 1991; Shindarova 1992; Bobev 2000.

Iris spp. – Bobev 2000.

Lactuca sativa L. – Kovachevski 1941; Vanchikov 1947; Bobev 2000; *Linum usitatissimum* L. – Vanchikov 1947; Bobev 2000; *Lycopersicon esculentum* Mill. – Kovachevski 1938; Vanchikov 1947; Anonymous 1956; Bobev 2000; Loginova & Neshev 2006.

Morus alba L. – Hristov 1930, 1931, 1939; *Morus* spp. – Hristov 1928, 1930, 1932; Bobev 2000.

Nicotiana tabacum L. – Atanasov 1930; Hristov 1932; Vanchikov 1947; Ivancheva-Gabrovska & al. 1978; Bobev 2000.

Paeonia spp. – Bobev 2000; *Papaver somniferum* L. – Vanchikov 1947; *Pelargonium* sp. – Anonymous 1955; *Phaseolus vulgaris* L. – Vanchikov 1947; Anonymous 1957; Bobev 2000.

Sesamum indicum L. – Bobev 2000; *Solanum melongena* L. – Bobev 2000; *S. tuberosum* L. – Vanchikov 1947; Bobev 2000; *Soja hispida* Moench – Georgiev 2007.

Tuberosa Heister ex Fabricius – Mirkova 1993.

Vicia faba L. – Bobev 2000.

Grain beans – Stancheva 2006d.

Syn. *S. libertiana* Fuckel

Beta vulgaris – Kozarov 1908; *Brassica napus* var. *oleifera* – Gechev 1906.

Helianthus annuus –Savov 1925, 1928; Ivanov 1928; Ivanov & Patev 1930b; Anonymous 1930.

Morus alba L., *Morus* sp. – Hristov 1928, 1930.

Nicotiana tabacum – Anonymous 1921; Ivanov 1921, 1922, 1928; Ivanov & Patev 1927; Savov 1927, 1928.

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