



A preliminary checklist of Ascomycetous microfungi from Southern Uzbekistan

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Abstract

This study is an update of the available data concerning species of ascomycetous microfungi from Southern Uzbekistan. This revision is based on literature and herbaria records and recent field trips in the region. Currently, there are 333 species and 107 genera of ascomycetous microfungi known from region. Among these taxa *Anthostoma melanotes*, *Camarosporium mori*, *Cucurbitaria negundinis*, *C. rhamni*, *Gloeosporium populi-albae* are newly reported for ascomycetous mycota of Uzbekistan, while 26 microfungal species are new to the Southern region. The most frequently collected species of the genera are *Alternaria*, *Ascochyta*, *Cucurbitaria*, *Cytospora*, *Leptosphaeria*, *Mycosphaerella*, *Pleospora*, *Phyllosticta*, *Ramularia* and *Septoria* which are widely known for their cosmopolitan nature. The checklist includes details of the location and substrate on which they were encountered. This data will be useful in the compilation of ascomycetous microfungi biodiversity of Uzbekistan. This region, characterised by arid and semi-arid and dry forest and xerophytic plants provides an excellent opportunity to unravel the species diversity with the possibility of discovering many new species.

Key words – Ascomycetes – arid and semi-arid area – Central Asia – distribution – inventory – mycobiota – new records

Introduction

The territory of Southern Uzbekistan includes the Kashkadarya and Surkhandarya regions that are located in the south of Central Asia (Fig1). It borders in the north with the Samarkand and Bukhara regions of Uzbekistan, in the east with Tajikistan, in the west with Turkmenistan, and in the south Afghanistan. The southern boundary of the region runs along the Amu Darya River, which is the border between Uzbekistan and Afghanistan. Southern Uzbekistan covers 48,500 km² (18,800 sq miles). In the territory are a part of the Hissar Range and western slopes of the Pamir-Alay Mountains, which rich plant flora with ca. 2389 species of vascular plants (Norbobaeyva 2005). The territory falls in the Flora of Central Asian botanical region within the larger temperate Asia floral geographic region according to World Geographical Scheme for Recording Plant Distributions' system (Brummitt 2001).

The typically Central Asian composition of the Hissar-Alai mountain flora is expressed in predominance of Fabaceae (especially *Astragalus* spp.), Asteraceae (especially *Cousinia* spp.),

Brassicaceae, Poaceae, Lamiaceae, and various wild onions (*Allium* spp.). The characteristic Southern Uzbekistan vegetation types include coniferous woodland of juniper trees, ephemeroïd herb vegetation, and high alpine meadows, as well as unique fruit and relict nut forests with characteristic plants being pistachio, almond and other deciduous shrub and small trees. The desert and semi-desert landscapes of the north give way to middle and high mountains in the south and east. The highest point in Southern Uzbekistan is the peak of Hazrati Sultan in the Hissar mountain range (4643 m, 15,233 ft) in the Surkhandarya region. Southern Uzbekistan is located in the center of the Eurasian continent, far from the oceans, and neighbouring position of the deserts determine the continental climate with mild wet winters and hot dry summers (Lioubimtseva & Henebry 2009).

In contrast to the great number of publications dealing with the plant flora, few studies were carried out to document the fungi of Uzbekistan. Studies on microfungal biota of Uzbekistan were first started by Zaprometov (1926, 1928) and followed by Golovin (1947, 1949a,b, 1950); Kleiner (1958); Lebedeva (1958); Gaponenko (1959, 1965); Baymuratova (1963); Panfilova & Gaponenko (1963); Sagdullaeva (1965); Usmonov (1965); Axmedova (1966); Korbonskaya (1969); Kravcova (1969); Kirgizbaeva (1972); Kuchmi (1970); Eshonqulov (1973); Ibadov (1973); Gulyamova (1975); Ramazonova (1975); Shtok (1982); Zuparov (1984); fungal flora of Uzbekistan 1983-1997; Kamilov (1991); Khasanov (1992); Xolmurodov (1994); Sheraliev (2001); Solieva & Gafforov (2001, 2002a,b); Solieva et al. (2007); Gafforov (2002, 2003a,b, 2004, 2005a,b, 2007a,b, 2010, 2014, 2015); Gafforov & Solieva (2002a,b); Nuraliev et al. (2005, 2008); Gafforov & Yarasheva (2011); Gafforov & Tamotsu (2015); Gafforov et al. (2007, 2009, 2012, 2016). However, diversity of fungi in the part of Southern Uzbekistan has received little attention, especially in ascomycetous microfungi (Eshonqulov 1973, Solieva 1989, Nuraliev 1999, Nuraliev et al. 2006, Sheraliev 2001, Gafforov 2016a, b).

The checklists of fungi of several countries have been published or updated. However, no checklists of fungi have hitherto been published for Uzbekistan. The present list is concerned with only ascomycetous microfungi species from soil and some other substrates such as plants. Powdery mildews and larger fungi of ascomycetes are not included in the present list. Therefore, it should be mentioned here that, although the present study will add some new data to our information concerning the Ascomycota of Uzbekistan, this updated check-list must be considered as provisional awaiting supplementation. The purpose of this study is to provide a preliminary checklist of ascomycetous microfungi from this region.

Materials & Methods

A checklist of ascomycetous microfungal species recorded in the Southern Uzbekistan was based a compilation of literature data, specimens from Tashkent Mycological herbarium (TASM), and field survey specimen collection (Fig 1) in 2015-2016. Dried specimens were observed microscopically, and measured following standard methods. The ascomycetous specimens were identified using the relevant literature (Sutton 1980, Melnik 1997, 2000, Braun 1995, 1998, Fungal Flora of Uzbekistan 1989-1997, Braun et al. 2003, Verkley et al. 2004, Crous et al. 2006, Phillips et al. 2008, Crous 2009, Mugambi & Huhndorf 2009, Wikee et al. 2011, Zhang et al. 2012, Slippers et al. 2013, Gafforov 2015, Linaldeddu et al. 2016). Flowering host plant species were identified using "Central Asian Plant Classifier" (1968-1993) and "Flora of Uzbekistan" (1941-1962).

Fungal specimens collected in the field survey were deposited in Tashkent Mycological herbarium (TASM) of the Institute of Botany and Zoology. The specimens are listed under each ascomycetous fungus taxon in the Result and Discussion section. Names of collectors were abbreviated in initials: YG (Yusufjon Gafforov), YS (Yakut Solieva) and IM (Iliyor Mustafoev).

The databases Index Fungorum (<http://www.indexfungorum.org/Names/Names.asp>) and Mycobank (<http://www.mycobank.org/>) and The Plant List (<http://www.theplantlist.org/>) were consulted for current nomenclature and correct author names of fungi and host plants. Species names are listed alphabetically and data such as, hosts, substrate, and reference are provided. Fungi

not identified to the species level were not considered. New species are established based on recommendations outlined by Jeewon & Hyde (2016).



Figure 1 – Map of Southern Uzbekistan and route of mycological investigation

Results

Based on the compilation of literature data, re-checking of specimens in TASM and species collected in field sampling, a total of 333 species of ascomycetous microfungi belonging to 107 genera and 39 families were recorded in Southern Uzbekistan from 1973 to 2016. Among the microfungi illustrated here fourteen genera and 24 species have not been accommodated in specific families or order and therefore referred to as incertae sedis. Among the studied taxa *Anthostoma melanotes*, *Camarosporium mori*, *Cucurbitaria negundinis*, *C. rhamni*, *Gloeosporium populi-albae* are newly reported for ascomycetous mycota of Uzbekistan, and 26 microfungi are recorded for the first time in the study area. Novelty in distribution are indicated in the list. The order most represented in the study area is Pleosporales (132 species in 32 genera, 39.64%), followed by Capnodiales (80; 18; 24.02%), Botryosphaeriales (33; 8; 9.91%), Diaporthales (17; 7; 5.11%), Hypocreales (16; 4; 4.80%), Helotiales (14; 10; 4.20%), and other orders remaining are represented by twelve to five species each (Table 1). The most represented families are Mycosphaerellaceae (72; 16; 21.62%), Pleosporaceae (53; 7; 15.92%), Didymellaceae (24; 4; 7.21%), Phyllostictaceae (18; 2; 5.41%), Nectriaceae (16; 4; 4.80%), Phaeosphaeriaceae (13; 5; 3.60%) and other families include 9-10 species each (Table1). The genera with the highest number of recorded species are *Pleospora* (30 species, 9.01%), followed by *Septoria* (25; 7.51%), *Phyllosticta* (17; 5.11%), *Ramularia* (16; 4.80%), *Ascochyta* (15; 4.50%), *Mycosphaerella* (13; 3.90%), *Alternaria* (10; 3.00%), *Cucurbitaria* and *Leptosphaeria* (per 9; 2.70%), *Cytospora* (7; 2.10%); the other genera have 6-1 species (Table1). Although the ascomycetous microfungi of Southern Uzbekistan are diverse, most of the diversity is concentrated in relatively few orders, families, and genera (Table 1). The ten most diverse orders include 320 species in 98 genera, 96.10% of the total. The ten most diverse families have 234 species (70.27% of the total) in 48 genera. The ten most diverse genera include 151 species, 45.35% of the total. The most widespread ascomycetous microfungi in Southern Uzbekistan are *Alternaria scrophulariae*, *Cladosporium herbarum*, *Coniothyrium tamaricis*, *C. olivaceum*, *Cilioplea kansensis*, *Cytospora prunorum*, *C. salicis*, *Diplodia herbarum*, *D. malorum*, *Fusicolla merismoides*, *Fusarium poae*, *Gibberella fujikuroi*, *Marssonina populi*, *M. salicicola*, *Melasmia aceris-trifidi*, *Mycosphaerella graminicola*, *Ophiognomonia leptostyla*, *Phyllosticta platanoides*, *Pleospora chlamydospora*, *P. phaeocomoides*, *P. penicillus*, *P. subalpine*, *Polystigma rubrum*, *Rhytisma acerinum*, *Stemphylium herbarum*, *Stigmia carpophila*, *Strickeria circumclusa*, *Venturia radiosa*, *V. inaequalis*, *V. pyrina*.

Table 1 Number of ascomycetous species in the most representative orders, families and genera in the study area and percentages of total species number

<i>No</i>	<i>Order</i>	<i>Genera</i>	<i>spp</i>	<i>%</i>	<i>Family</i>	<i>Genera</i>	<i>spp.</i>	<i>%</i>	<i>Genera</i>	<i>spp.</i>	<i>%</i>
1	<i>Pleosporales</i>	32	132	39,64	<i>Mycosphaerellaceae</i>	16	72	21,62	<i>Pleospora</i>	30	9,01
2	<i>Capnodiales</i>	18	80	24,02	<i>Pleosporaceae</i>	7	53	15,92	<i>Septoria</i>	25	7,51
3	<i>Botryosphaeriales</i>	8	33	9,91	<i>Didymellaceae</i>	4	24	7,21	<i>Phyllosticta</i>	17	5,11
4	<i>Diaporthales</i>	7	17	5,11	<i>Phyllostictaceae</i>	2	18	5,41	<i>Ramularia</i>	16	4,80
5	<i>Hypocreales</i>	4	16	4,80	<i>Nectriaceae</i>	4	16	4,80	<i>Ascochyta</i>	15	4,50
6	<i>Helotiales</i>	10	14	4,20	<i>Phaeosphaeriaceae</i>	4	12	3,60	<i>Mycosphaerella</i>	13	3,90
7	<i>Incertae sedis</i>	8	12	3,60	<i>Valsaceae</i>	3	10	3,00	<i>Alternaria</i>	10	3,00
8	<i>Rhytismatales</i>	3	6	1,80	<i>Botryosphaeriaceae</i>	5	10	3,00	<i>Cucurbitaria</i>	9	2,70
9	<i>Phyllachorales</i>	5	5	1,50	<i>Leptosphaeriaceae</i>	1	9	2,70	<i>Leptosphaeria</i>	9	2,70
10	<i>Venturiales</i>	3	5	1,50	<i>Cucurbitariaceae</i>	1	9	2,70	<i>Cytospora</i>	7	2,10
	<i>Subtotal</i>	98	320	96,10	<i>Subtotal</i>	48	234	70,27	<i>Subtotal</i>	151	45,35
	<i>Other orders (6)</i>	9	13	3,90	<i>Other families (29)</i>	59	99	29,73	<i>Other genera (97)</i>	182	54,65
	<i>Total</i>	107	333	100,0	39	107	333	100,0	107	333	100,0

Checklist of species Ascomycetous microfungi from Southern Uzbekistan

In this study, the current classification schemes as proposed by Hyde et al (2013); Wijayawardene et al. (2014); Phillips (2016) and Maharachchikumbura et al. (2015, 2016) was used to assign species to the Dothideomycetes and Sordariomycetes respectively.

Ascomycota (Berk.) Caval. -Sm.

Pezizomycotina O.E. Erikss. & Winka

DOTHIDEOMYCETES *sensu* O.E. Erikss. & Winka

Dothideales Lindau

Sacotheciaceae Bonord.

SELENOPHOMA Maire

***S. poterii* (Fautrey)** Petr., Annales Mycologici 22(1/2): 136 (1924).

Host – *Sanguisorba minor* subsp. *balearica* (Bourg. ex Nyman) Muñoz Garm. & C. Navarro, Southern Uzbekistan: Qashqadaryo Region (QR), 10 June 1995, (Nuraliev 1999, listed as *Phoma poterii* Fautrey.)

Pleosporales Luttrell ex M.E. Barr

Amniculicolaceae Yin. Zhang et al.

MURISPORIA Y. Zhang bis, J. Fourn. & K.D. Hyde

M. rubicunda (Niessl) Yin. Zhang, J. Fournier & K.D. Hyde in Zhang et al., Studies in Mycology 64: 96 (2009).

Host – *Astracantha kuhitangi* (Nevski) Podlech, Surxondaryo Region (SR), 11 May 1985, (Solieva 1989, listed as *Pleospora rubicunda* Niessi.)

Didymosphaeriaceae Munk

DIDYMOSPHAERIA Fuckel

D. alhagi Szemb., Mater. Mikol. Fitopat. Ross. 1(4): 107 (1915).

Host – *Alhagi maurorum* Medik., QR: 23 April 1995 (Nuraliev 1998), 10 April 1996 (Nuraliev 1998).

D. conoidea Niessl, Österreichische botanische Zeitschrift 25(4): 202 (1875).

Hosts – *Ferula samarkandica* Korovin, QR: 10 June 1997 (Nuraliev 1999); SR: on *Ferula* sp., 05 July 1984 (Solieva 1989).

Coniothyriaceae W.B. Cooke

CONIOTHYRIUM Corda

C. ephedrae Golovin, Trudy Sredneazziatskogo gosuniversiteta, Biologicheski Nauki 14 (no. 5): 32 (1950).

Host – *Ephedra alata* Decne. SR: 23 May 1927 (Kirgizbaeva et al. 1997).

C. mororum Briosi & Farneti, Atti della Accademia Nazionale dei Lincei 10: 64 (1901).

Host – *Morus alba* L., SR: 13 April 1984 (Solieva 1989).

C. negundinis Tehon & E.Y. Daniels, Mycologia 17 (6): 243 (1925).

Host – *Acer pubescens* Franch., SR: 08 September 1985 (Solieva 1989).

C. olivaceum Bonord. Jahrbücher des Nassauischen Vereins für Naturkunde 23-24: 377 (1869).

Hosts – *Lonicera* sp. SR: 20 April 1986, YS029 (TASM), 27 August 2016, YG-ma39 (TASM); on *L. nummulariifolia* Jaub. & Spach, 19 April 1985, (Solieva, 1989, listed as *Coniothyrium olivaceum* var. *lonicerae-xylostei* Sacc.); on *Lonicera tatarica* L., 27.10.1985, (Solieva 1989).

C. tamaricis Oudem. Contrib Contributions à la flore mycologique des Pays-Bas 17: 257 (1901).

Hosts – *Tamarix laxa* Willd., SR: 12 May 2016, YG-S10 (TASM), YG-S2 (TASM), YG-S2-1 (TASM); on *Tamarix* sp., YG-S9 (TASM), YG-S9-1 (TASM); on *Tamarix florida* Bunge., 13 May 2016, YG-S23 (TASM), YG-S23-1 (TASM), 29 August 2016, YG-ma3 (TASM).

Note: First record for Southern Uzbekistan.

C. montagnei Castagne. Annales des Sciences Naturelles Botanique 12: 304 (1849).

Host – *Elaeagnus angustifolia* L. SR: 14 May 2016, YG-S68 (TASM), YG-S68-1 (TASM).

Note: First record for Southern Uzbekistan.

Coniothyrium sp.

***Coniothyrium* sp1.** Hosts – *Salix alba* L. SR: 14 May 2016, YG-S64 (TASM), YG-S64-1 (TASM); on *Salix* sp., 14 May 2016 (TASM); ***Coniothyrium* sp2.** Host – *Juniperus serawschanica*., SR: 15 May 2016, YG-S59 (TASM), YG-S59-1 (TASM); ***Coniothyrium* sp3.** Hosts – *Rosa hissarica*

Slobodov. SR: 13 May 2016, YG-S43-4 (TASM); on *Prunus bucharica* (Korsh.) B.Fedtsch. ex Rehder, 14 May 2016, YG-S79 (TASM); ***Coniothyrium* sp4**. Host – *Punica granatum* L. SR: 23 May 1948, YS032 (TASM).

Cucurbitariaceae G. Winter

CUCURBITARIA Gray

C. atraphaxis (Rehm) Vasyag., in Vasyagina, Byzova & Tartenova, Flora Sporovykh Rastenii Kazakhstana [Cryptogamic Flora of Kazakhstan], 12, Sumchatye. Griby Lokuloaskomitsety (Loculoascomycetes) (Alma-Ata): 240 (1987).

Host – *Atraphaxis frutescens* (L.) K.Koch, QR: 17 September 1996 (Nuraliev 1999).

C. astragali P. Karst. & Har., Revue Mycologique Toulouse 12(no. 48): 171 (1890).

Host – *Astragalus acmophylloides* Grossh. QR: 10 September 1995 (Nuraliev 1999).

C. ferulae Koshk., Novosti sistematici Nizniy Rasteniy 7: 178 (1970).

Host – *Ferula badrakema* Koso-Pol., QR: 10 September 1995 (Nuraliev 1999).

C. castaneae Sacc., Mycotheca veneti 120 (1873).

Host – *Morus alba* L., SR: 12 April 1984, (Solieva 1989, listed as *Cucurbitaria castaneae* subsp. *moricola* Sacc.).

C. coluteae (Rabenh.) Auersw., in Fuckel, Jahrbücher des Nassauischen Vereins für Naturkunde 23-24: 174 (1870) [1869-70].

Host – *Colutea buhsei* (Boiss.) Shap., QR: 10 May 1995 (Nuraliev 1999).

C. negundinis G. Winter, Hedwigia 25: 105 (1886).

Host – *Acer pentapomicum* Stewart ex Brandis. SR: 13 May 2016, YG-S50 (TASM).

Note: New record for mycobiota of Uzbekistan.

C. obducens (Schumach.) Petr., Annales Mycologici 25(3/4): 226 (1927).

Hosts – *Juglans regia* L., QR: 10 July 1997 (Nuraliev 1999, listed as *Strickeria obducens* (Schumach.) G. Winter, Rabenh.); on *Zygophyllum atriplicoides* Fisch. & C.A. Mey., SR: 02 July 1985 (Solieva 1989).

C. pruni-avium Allesch., Ber. bot. Ver. Landshut 10: 174 (1887).

Host – *Zygophyllum burcharicum* B. Fedtsch., SR: 18 May 1985 (Solieva 1989).

C. rhamnii (Nees) Fuckel, Jahrbücher des Nassauischen Vereins für Naturkunde 23-24: 174 (1870).

Host – *Ramnus* sp. SR: 12 May 2016, YG-S4-4 (TASM).

Note: New record for mycobiota of Uzbekistan.

***Cucurbitaria* sp.**

Host – *Rosa hissarica* Slobodov. SR: 13 May 2016, YG-S43-2 (TASM).

Genus with uncertain family position (incertae sedis)

PEYRONELLAEA Goid

P. obtusa (Fuckel) Aveskamp, Gruyter & Verkley, in Aveskamp, Gruyter, Woudenberg, Verkley & Crous, Studies in Mycology 65: 33 (2010).

Host – *Lepidium paniculatum* (Regel & Schmalh.) Al-Shehbaz, SR: 25 May 1989 (Solieva 1989, listed as *Physalospora malorum* Shear, N.E. Stevens & Wilcox).

Family with uncertain order position (incertae sedis)

Lophiostomataceae Sacc.

CILIOPLEA Munk

C. coronata (Niessl) Munk ex Crivelli, Ueber die Heterogene Ascomycetengattung Pleospora Rabh.; Vorschlag für eine Aufteilung (Diss. Eid genössischen Technischen Hochschule Zürich 7318): 172 (1983).

Hosts – *Astragalus pseudoborodinii* S.B.Ho, QR: 10 June 1996 (Nuraliev 1999); SR: on *A. subverticillatus* Gontsch., 14 May 1984 (Solieva 1989, listed as *Pleospora coronata* Niessl.).

C. kansensis (Ellis & Everh.) Crivelli, Ueber die Heterogene Ascomycetengattung Pleospora Rabh.; Vorschlag für eine Aufteilung (Diss. Eid genössischen Technischen Hochschule Zürich 7318): 174 (1983).

Hosts – *Lonicera* sp., SR: 24 April 1986 (Solieva 1989); QR: on *Ziziphora clinopodioides* Lam., 21 July 1995 (Nuraliev 1999, listed as *Pleospora kansensis* Ellis & Everh.); on *Dianthus uzbekistanicus* Lincz., 15 August 1996 (Nuraliev 1999); on *Lonicera tatarica* L., 21 July 1996, (Nuraliev 1999); on *Salix* sp., 24 August 1996 (Nuraliev 1999).

LOPHIOSTOMA Ces. & De Not.

L. compressum (Pers.) Ces. & De Not. [as 'compressa'], Comm. Soc. crittog. Ital. 1(fasc. 4): 219 (1863)

Host – *Astragalus plumbeus* (Nevski) Gontsch., SR: 24 May 1985 (Solieva 1989, listed as *Platystomum compressum* (Pers.) Trevis.).

SIGARISPORA Thambug. & K.D. Hyde

S. caulium (Fr.) Thambug., Wanasinghe, Kaz. Tanaka & K.D. Hyde, Index Fungorum 267: 1 (2015).

Host – *Astragalus subverticillatus* Gontsch., SR: 08 July 1986 (Solieva 1989, listed as *Lophiostoma simillimum* (P. Karst.) Sacc.).

Montagnulaceae M.E. Barr

PARACONIOTHYRIUM Verkley

P. fuckelii (Sacc.) Verkley & Gruyter, Studies in Mycology 75: 25 (2012).

Hosts – *Prunus* sp. SR: 15 May 2016, YG-S66 (TASM); on *Punica granatum* L., 07 June 1984 (Solieva 1989), 23 May 1985 (Solieva 1989, Nuraliev 1999 listed as *Coniothyrium fuckelii* Sacc.).

Diademaceae Shoemaker & C.E. Babc.

CLATHROSPORA Rabenh.

C. heterospora (De Not.) Wehm., World Monograph of the Genus Pleospora and its Segregates: 269 (1961).

Host – *Astragalus sulcatus* L., SR: 05 June 1985 (Solieva 1989).

C. permunda (Cooke) Berl., Nuovo Giornale Botanico Italiano 20: 194 (1888).

Hosts – *Silene guntensis* Schischk., SR: 08 July 1986 (Solieva 1989); on *Zoegea baldschuanica* C.Winkl., 08 June 1986 (Solieva 1989).

GRAPHYLLIUM Clem.

G. pentamerum (P. Karst.) M.E. Barr, Memoirs of the New York Botanical Garden 62: 42 (1990).

Hosts – *Euphorbia cyparissias* L., SR: (Solieva 1989); on *Calamagrostis anthoxanthoides* (Munro) Regel, 09 July 1986 (Solieva 1989); on *Phlomodites kaufmanniana* (Regel) Adylov, Kamelin & Makhm., June 1986 (Solieva 1989, listed as *Pleospora platyspora* Sacc.).

Didymellaceae Gruyter et al.

ASCOCHYTA Lib.

A. amaranthi Allesch., Fungi Bavarici Exsiccati 633 (1900).

Host – *Amaranthus* sp., SR: 17 July 1986 (Solieva 1989).

A. astragali Lebedeva, Notul. syst. Inst. cryptog. Horti bot. petropol. 1: 145 (1922).

Host – *Astragalus eximius* Bunge, SR: 17 July 1986 (Solieva 1989).

A. codonopsidis Schwarzman [as 'codonopsis'], in Byzova et al., Flora Sporovykh Rastenii Kazakhstana [Cryptogamic Flora of Kazakhstan], 5, Nesovershennje Grib. Fungi Imperfecti (Deuteromyeetes), 2. Sferopsidae-Sphaeropsidales (Alma-Ata): 275 (1968).

Host – *Codonopsis clematidea* (Schrenk) C.B.Clarke, SR: 08 July 1986 (Solieva 1989), 29 July 1987 (Solieva 1989).

A. convolvuli Lib., Plantae Cryptogamae, quas in Arduenna collegit Fasc. 1: no. 56 (1830).

Host – *Convolvulus arvensis* L., QR: 10 June 1997 (Nuraliev 1999).

A. ferulae Pat., Énum. Champ. Tunisie (Paris): 17 (1892).

Host – *Ferula kuhistanica* Korovin, QR: 21 April 1996 (Nuraliev 1999).

A. graminicola Sacc., Michelia 1 (no. 2): 127 (1878).

Host – *Elymus repens* (L.) Gould, SR: 08 June 1986 (Solieva 1989).

A. glycyrrhizae Vasyag., Botanicheskie Materialy Gerbariya Instituta Botaniki, Akademiya Nauk Kazakhskoï SSR 3: 91 (1964).

Host – *Glycyrrhiza glabra* L., QR: 10 June 1995 (Nuraliev 1999).

A. hieracii Lasch, Botanische Zeitung 6: 294 (1848).

Host – *Pilosella procera* (Fr.) F.W.Schultz & Sch.Bip., QR: 21 June 1997 (Nuraliev 1999).

A. hyperici Lasch, Botanische Zeitung 6: 294 (1848).

Host – *Hypericum scabrum* L., QR: 10 July 1995 (Nuraliev 1999), 24 June 1996 (Nuraliev 1999).

A. matricariae (Moesz & Smarods) Grove, British Stem- and Leaf-Fungi (Coelomycetes) (Cambridge) 1: 306 (1935).

Host – *Tripleurospermum disciforme* (C.A.Mey.) Sch.Bip., QR: 10 July 1995 (Nuraliev 1999).

A. rumicicola Vasyag., in Byzova et al., Flora Sporovykh Rastenii Kazakhstana [Cryptogamic Flora of Kazakhstan], 5, Nesovershennje Grib. Fungi Imperfecti (Deuteromyeetes), 2. Sferopsidae-Sphaeropsidales (Alma-Ata): 225 (1968).

Host – *Rumex maritimus* L., QR: 21 May 1995 (Nuraliev 1999).

A. silenes Ellis & Everh., Journal of Mycology 5 (3): 148 (1889).

Host – *Pleconax conoidea* Šourk., QR: 21 July 1996 (Nuraliev 1999).

A. sorghi Sacc., Nuovo Giornale Botanico Italiano 7: 302 (1875).

Host – *Sorghum halepense* (L.) Pers., SR: 07 June 1986 (Solieva 1989).

A. trifolii Bondartsev & Trusova, Zh. Bolêz. Rast. 7: 215 (1913).

Host – *Trifolium* sp., SR: 21 June 1987 (Solieva 1989).

A. woronowiana Siemaszko, Izv. Kavkaz. Muz. 12: 23 (1919) [1918].

Host – *Cullen drupaceum* (Bunge) C.H.Stirt., SR: 22 June 1987 (Solieva 1989).

CALOPHOMA Q. Chen & L. Cai

C. complanata (Tode) Q. Chen & L. Cai, Studies in Mycology 82: 194 (2015).

Host – *Ferula kelifi* Korovin, SR: 17 June 1987 (Solieva 1989, listed as *Phoma complanata* (Tode) Desm.).

PHOMA Fr.

Ph. astragali-alpini Oudem., Verslagen en mededeelingen der Koninklijke akademie van wetenschappen, ser. 32: 161 (1885).

Host – *Astragalus marguzaricus* Lipsky, SR: 07 July 1985, (Solieva 1989).

Ph. bupleuricola Gonz. Frag., Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales de Madrid 15: 687 (1917).

Host – *Bupleurum falcatum* subsp. *cernuum* (Ten.) Arcang., SR: 07 August 1985, (Solieva 1989).

Ph. consocians Naumov, Bull. angew. Bot. St. Petersburg 6 (3): 204 (1913).

Host – *Dianthus uzbekistanicus* Lincz., QR: 21 July 1996 (Nuraliev 1999).

Ph. hyperici Brunaud, Annales de la Société des Sciences Naturelles de la Charente-Inférieure 26: 30 (1889).

Host – *Hypericum scabrum* L., SR: 14 July 1986 (Solieva 1989),

Ph. medicaginis Malbr. & Roum., in Roumeguère, Fungi Selecti Galliae Exscati 37: no. 3675 (1886).

Host – *Medicago transoxana* Vassilcz., QR: 10 May 1996 (Nuraliev 1999, listed as *Ascochyta imperfecta* Peck.); SR: 07 July 1986 (Solieva 1989), 06 June 1985 (Solieva 1989).

Ph. tamaricina Thüm., Österreichische botanische Zeitschrift 27: 12 (1877).

Host – *Tamarix* sp., SR: 14 July 1987 (Solieva 1989).

Ph. zygophylli Szembel, Notul. syst. Inst. cryptog. Horti bot. petropol. 2: 111 (1923).

Host – *Zygophyllum burcharicum* B. Fedtsch., SR: 17 June 1987 (Solieva 1989).

PHOMATODES Q. Chen & L. Cai

Ph. nebulosa (Pers.) Q. Chen & L. Cai, Studies in Mycology 82: 191 (2015).

Host – *Datisca cannabina* L., QR: 24 July 1996 (Nuraliev 1999).

Massarinaceae Munk

HELMINTHOSPORIUM Link

H. velutinum Link, Mag. Gesellschaft Naturforschender Freunde zu Berlin 3(1-2): 10, tab. 1:9 (1809).

Host – *Cichorium intybus* L., QR: 21 May 1996 (Nuraliev 1999).

H. nadsonii Jacz., Microbiol. J. 9(1): 166 (1929).

Host – *Zea mays* L., QR: 28 July 1995 (Nuraliev 1999), 25 May 1995 (Nuraliev 1999).

STAGONOSPORA (Sacc.) Sacc.

St. meliloti (Lasch) Petr., Annales Mycologici 17(2/6): 66 (1920) [1919].

Host – *Trifolium repens* L., QR: 21 July 1995 (Nuraliev 1999).

Note: According the Quaedvlieg et al. (2013) *Stagonospora sensu stricto* were transferred to Massarinaceae from Phaeosphaeriaceae based on molecular evidence.

Leptosphaeriaceae M.E. Barr

LEPTOSPHAERIA Ces. & De Not.

L. convallariae (Fuckel) Sacc., Michelia 1: 38 (1877).

Host – *Convolvulus arvensis* L., SR: 03 March 1985 (Solieva 1989).

L. dianthi N.P. Golovina, Notul. syst. Sect. cryptog. Inst. bot. Acad. Sci. U.S.S.R. 12: 156 (1959).

Host – *Dianthus crinitus* subsp. *tetralepis* (Nevski) Rech.f., QR: 10 July 1995 (Nuraliev 1999).

L. doliolum (Pers.) Ces. & De Not., Commentario della Società Crittogamologica Italiana 1(fasc. 4): 234 (1863).

Host – *Dactylis glomerata* L., QR: 14 July 1996 (Nuraliev 1999).

L. euphorbiae Niessl, Hedwigia 13: 185 (1874).

Host – *Euphorbia* sp., SR: 12 July 1985 (Solieva 1989).

L. helminthospora Ces. & De Not., Schema di classificazione degli sferiacei: no. 88 (1863).

Host – *Seriphidium diffusum* (Krasch. ex Poljak.) Y.R.Ling., SR: 15 July 1987 (Solieva 1989).

L. longchampsii (Westend.) Sacc., Revue Mycologique Toulouse 7 (no. 26): 145 (1885).

Host – *Chondrilla leiosperma* Kar. & Kir. QR: 23 July 1995 (Nuraliev 1999).

L. lonicerina (P. Karst.) L. Holm, Symbolae Botanicae Upsalienses 14 (no. 3): 22 (1957).

Host – *Lonicera nummulariifolia* Jaub. & Spach. QR: 25 April 1986 (Gulyamova et al., 1990); SR: 10 May 1985 (Solieva 1989, Gulyamova et al. 1990, listed as *Melanomma lonicerinum* (P. Karst.) Sacc.).

L. plectrospora Feltgen, Vorstudien zu einer Pilz-Flora des Grossherzogthums Luxemburg II: 162 (1901).

Host – *Astragalus* sp., SR: 21 July 1987 (Solieva 1989).

L. viticola Fautrey & Roum., (1892).

Host – *Vitis vinifera* L., SR: 21 July 1987 (Solieva 1989).

PLENODOMUS Preuss

P. agnitus (Desm.) Gruyter, Aveskamp & Verkley, in Gruyter, Woudenberg, Aveskamp, Verkley, Groenewald & Crous, *Studies in Mycology* 75: 21 (2012).

Host – *Jurinea olgae* Regel & Schmalh., QR: 12 August 1995 (Nuraliev 1999, listed as *Leptosphaeria agnita* (Desm.) Ces. & De Not.).

Melanommataceae G. Winter

BICROUANIA Kohlm. & Volkm.-Kohlm.

B. maritima (P. Crouan & H. Crouan) Kohlm. & Volkm.-Kohlm., *Mycological Research* 94(5): 685 (1990).

Host – *Atraphaxis spinosa* L., QR: 10 September 1995 (Nuraliev 1999, listed as *Didymosphaeria maritima* (P. Crouan & H. Crouan) Sacc.).

Genus with uncertain family position (incertae sedis)

STEGONSPORIUM Corda

S. ephedrae Golovin Trudy Sredneaziatskogo gosuniversiteta, *Biologicheski Nauki* 14 (no. 5): 27 (1950).

Host – *Ephedra equisetina* Bunge. SR: 12 May 2016, YG-S25-3 (TASM), YG-S40-1 (TASM).

Note: First record for Southern Uzbekistan

^*S. mori* (Nomura) Sacc. & Trotter, *Sylloge Fungorum* 22: 1230 (1913).

Host – *Morus nigra* L. SR: 13 May 2016, YG-S22 (TASM).

Note: First record for Southern Uzbekistan

Stegonsporium sp.

Host – *Salix alba* L. SR: 14 May 2016, YG-S69 (TASM).

Pleosporaceae Nitschke

ALTERNARIA Nees

A. alternata (Fr.) Keissl., *Beihefte zum Botanischen Zentralblatt* 2 29: 434 (1912).

Host – *Bromus inermis* Leyss., QR: (Nuraliev 1999, listed as *Alternaria tenuis* Nees.).

A. brassicicola (Schwein.) Wiltshire, *Mycological Papers* 20: 8 (1947).

Host – *Verbena officinalis* L., QR: 14 July 1995 (Nuraliev 1999, listed as *Alternaria circinans* (Berk. & M.A. Curtis) P.C. Bolle.).

A. dianthicola Neerg., *Danish species of Alternaria & Stemphylium*: 190 (1945).

Hosts – *Ferula kuhistanica* Korovin, QR: 21 July 1995 (Nuraliev 1999); on *Scabiosa songarica*, 24 June 1996 (Nuraliev 1999).

A. infectoria E.G. Simmons, *Mycotaxon* 25(1): 298 (1986).

Host – *Galium humifusum* M.Bieb. SR: 12 July 1986 (Solieva 1989, listed as *Pleospora infectoria* Fuckel).

A. lunariae (Oudem. & C.J.J. Hall) E.G. Simmons, *Alternaria: an identification manual*: 677 (2007).

Host – *Zea Mays* L., QR: 24 May 1995 (Nuraliev 1999, listed as *Macrosporium lunariae* Oudem. & C.J.J. Hall.).

A. resedae Neerg., *Danish species of Alternaria & Stemphylium*: 150 (1945).

Host – *Cucumis sativus* L., QR: 08 June 1996 (Nuraliev 1999); on *Cucumis melo* L., 11 June 1996 (Nuraliev 1999).

A. porri (Ellis) Cif., *Journal of the Department of Agriculture of Porto Rico* 14(4): 30 (1930).

Host – *Heliotropium dasycarpum* Ledeb., QR: 10 July 1997 (Nuraliev 1999).

A. scrophulariae (Desm.) Rossman & Crous, in Rossman, Crous & Hyde, IMA Fungus 6(2): 509 (2015).

Hosts – *Centaurea virgata* subsp. *squarrosa* (Boiss.) Gugler., QR: 21 September 1999 (Nuraliev 1999, listed as *Pleospora scrophulariae* (Desm.) Höhn.); on *Centaurea scabiosa* subsp. *adpressa* (Ledeb.) Gugler., 10 May 1996 (Nuraliev 1999); on *Dactylis glomerata* L., 24 July 1995 (Nuraliev 1999 listed as *Pleospora vulgaris* Niessl), on *Prunus persica* (L.) Batsch, 10 September 1996 (Nuraliev 1999), on *Populus alba* L., 10 September 1996 (Nuraliev 1999), on *Cousinia* sp., 21 July 1997 (Nuraliev 1999).

A. senecionis Neerg., Danish species of Alternaria & Stemphylium: 201 (1946).

Host – *Cucurbita pepo* L., QR: 23 April 1995 (Nuraliev 1999).

A. tenuissima (Kunze) Wiltshire, Transactions of the British Mycological Society 18(2): 157 (1933).

Host – *Malus sieversii* (Ledeb.) M.Roem., QR: 12 June 1995 (Nuraliev 1999), 24 July 1994 (Nuraliev 1999); 10 September 1995 (Nuraliev 1999).

MACROSPORIUM Fr.

M. cladosporioides Transactions of the British Mycological Society 4: 799 (1857).

Host – *Rumex* sp., QR: 10 June 1995 (Nuraliev 1999).

M. iridis Cooke & Ellis, Grevillea 6 (no. 39): 87 (1878).

Host – *Cucumis sativus* L., QR: 18 June 1996 (Nuraliev 1999).

NEOCAMAROSPORIUM Crous & M.J. Wingf.

N. calvescens (Fr. ex Desm.) Ariyaw. & K.D. Hyde, in Ariyawansa, Thambugala, Manamgoda, Jayawardena, Camporesi & Saranyaphat, Fungal Diversity 71: 120 (2015).

Host – *Eremurus stenophyllus* (Boiss. & Buhse) Baker, SR: 20 April 1987 (Solieva 1989, listed as *Pleospora calvescens* (Fr. ex Desm.) Tul. & C. Tul.).

PLEOSPORA Rabenh. ex Ces. & De Not.

P. ambigua (Berl. & Bres.) Wehm., Mycologia 43(1): 42 (1951).

Host – *Rosa canina* L., QR: 10 June 1995 (Nuraliev 1999).

P. anceps Berl. & Sacc., Bulletin of the Société royale de botanique de Belgique 28: 17 (1889).

Host – *Atraphaxis seravschanica* Pavlov, SR: 16 July 1987 (Solieva 1989).

P. androsaces Fuckel, Jahrbücher des Nassauischen Vereins für Naturkunde. 29-30: 19 (1875) [1877].

Hosts – *Dianthus ugamicus* Vved., QR: 21 July 1996 (Nuraliev 1999, listed as *Pyrenophora androsaces* (Fuckel) Sacc.); on *Cousinia umbrosa* Bunge, 21 April 1996 (Nuraliev 1999).

P. asperulae Pass., Nuovo Giornale Botanico Italiano 7: 257 (1875).

Host – *Asperula pauciflora* Tschern., SR: July 1986 (Solieva 1989).

P. bardanae Niessl, Verh Naturforsch Ver Brünn Verhandlungen 14: 178 (1876).

Host – *Alhagi* sp., QR: 10 July 1996 (Nuraliev 1999).

P. brachyspora (Niessl) Petr., Annalen des Naturhistorischen Museums in Wien 50: 445 (1940).

Host – *Haplophyllum bucharicum* Litv., SR: 09 July 1986 (Solieva 1989).

P. davatchii Esfand., Sydowia 4(1-6): 12 (1950).

Host – *Capparis spinosa* L., SR: 09 July 1986 (Solieva 1989).

P. dianthi De Not., Sfer. Ital.: 74 (1863).

Host – *Dianthus ugamicus* Vved., QR: 21 June 1994 (Nuraliev 1999).

P. dichromotricha (Speg.) Wehm., Mycologia 45(3): 401 (1953).

Host – *Vitis vinifera* L., SR: 21 May 1986 (Solieva 1989), 17 July 1986 (Solieva 1989), 11 April 1984 (Solieva 1989).

P. chlamydospora Sacc., Michelia 2: 139 (1880).

Hosts – *Jurinea olgae* Regel & Schmalh., QR: 12 August 1995 (Nuraliev 1999); on *Lepidium paniculatum* (Regel & Schmalh.) Al-Shehbaz, 03 August 1985 (Solieva 1989); SR: on *Silene guntensis* Schischk., 17 May 1986 (Solieva 1989); *Rhamnus* sp., 12 May 2016, YG-S4-1 (TASM).
 Note: This species occurs in various plant substrates in the study area.

P. comata Niessl, Verh Naturforsch Ver Brünn Verhandlungen 10: 182 (1872).
 Host – *Astragalus subverticillatus* Gontsch., SR: 03 May 1984 (Solieva 1989).

P. coluteicola Gonz. Frag., Trabajos del Museos Nacional de Ciencias Naturales Serie Botanica 12: 15 (1917).
 Host – *Astracantha kuhitangi* (Nevski) Podlech, SR: 09 July 1986 (Solieva 1989), 16 July 1986 (Solieva 1989).

P. helvetica Niessl, Verh Naturforsch Ver Brünn Verhandlungen 14: 191 (1876).
 Host – *Euphorbia* sp., SR: 09 May 1985 (Solieva 1989).

P. herniariae Fuckel, Hedwigia 3: 160 (1864).
 Host – *Cousinia coronata* Franch., SR: 21 April 1986 (Solieva 1989).

P. hungarica (Moesz) Wehm., World Monograph of the Genus Pleospora and its Segregates: 72 (1961).
 Host – *Atraphaxis seravschanica* Pavlov, SR: 21 July 1984 (Solieva 1989).

P. leptosphaerioides Sacc. & Therry 1882.
 Host – *Jurinea olgae* Regel & Schmalh., QR: 10 April 1995 (Nuraliev 1999).

P. lespedezae I. Miyake, Saccardo Sylloge Fungorum XXIV: 1032.
 Host – *Onobrychis* sp., QR: 10 July 1995 (Nuraliev 1999).

P. magnusiana Berl., Icones fungorum (Abellini) 2(1): 15 (1895).
 Host – *Atraphaxis seravschanica* Pavlov, SR: 03 July 1984 (Solieva 1989), 07 May 1985 (Solieva 1989).

P. rudis Berl., Nuovo Giornale Botanico Italiano 20: 45 (1888).
 Hosts – *Astragalus* sp., QR: 11 June 1995 (Nuraliev 1999); on *Pennisetum orientale* Rich., 28 May 1996 (Nuraliev 1999), 08 July 1995 (Nuraliev 1999); SR: on *Cousinia coronata* Franch., 20 April 1986 (Solieva 1989).

P. orbicularis Auersw., Österreichische botanische Zeitschrift 18: 274 (1868).
 Host – *Aulacospermum dichotomum* (Korovin) Klyuikov, Pimenov & V.N.Tikhom., SR: 19 August 1987 (Solieva 1989).

P. penicillus Fuckel, Jahrbücher des Nassauischen Vereins für Naturkunde 27-28: 23 (1874) [1873-74].
 Hosts – *Centaurea bruguierana* subsp. *belangeriana* (DC.) Bornm., QR: 21 June 1997 (Nuraliev 1999); SR: on *Rhaponticum repens* (L.) Hidalgo, 09 July 1986 (Solieva 1989, listed as *Pleospora media* Niessl), 18 June 1986 (Solieva 1989), on *Astracantha kuhitangi* (Nevski) Podlech, 07.1985-1987 (Solieva 1989).

P. punctata Wehm., Lloydia 9: 214 (1946).
 Hosts – *Chondrilla phaeocephala* Rupr., QR: 23 July 1995, (Nuraliev 1999); SR: on *Astracantha kuhitangi* (Nevski) Podlech, 22 May 1985 (Solieva 1989).

P. phaeocomoides (Sacc.) G. Winter, Rabenhorst's Kryptogamen Flora von Deutschland, Oesterreich und der Schweiz. Zweite Auflage (Leipzig) 1.2: 513 (1886).
 Hosts – *Achillea arabica* Kotschy, QR: 21 June 1996 (Nuraliev 1999); SR: on *Zygophyllum burcharicum* B. Fedtsch., 05-07.1985-1986 (Solieva 1989); on *Juniperus polycarpus* var. *seravschanica* (Kom.) Kitam., 12 May 2016, YG-S36 (TASM).

P. subalpina E. Müll., Sydowia 5(3-6): 274 (1951).
 Hosts – *Astragalus patentivillosus* Gontsch., 05.1984 (Solieva 1989), SR: on *A. plumbeus* (Nevski) Gontsch., 07.1985 (Solieva 1989), on *Perovskia scrophulariifolia* Bunge, 07.1986 (Solieva 1989).

P. tragacanthae Rabenh., Nova Hedwigia 16: 118 (1877).
 Hosts – *Astragalus* sp., QR: 10 May 1997 (Nuraliev 1999); SR: on *Cousinia coronata* Franch., 20 April 1986 (Solieva 1989, listed as *Pyrenophora tragacanthae* (Rabenh.) Sacc.).

P. tomentosa Wehm., Lloydia 9: 213 (1946).

Host – *Ziziphora pamiroalaica* Juz., QR: 21 June 1996, (Nuraliev 1999).
P. turkestanica Rehm, *Annales Mycologici* 9(4): 369 (1911).
Host – *Cynodon dactylon* (L.) Pers., SR: 14 July 1986 (Solieva 1989), 21 July 1986 (Solieva 1989).
P. uzbekistanica Babushk. & Salieva, *Mikologiya i Fitopatologiya* 23(1): 10 (1989).
Host – *Silene guntensis* Schischk., SR: 08 July 1986 (Babushkina and Solieva 1989).
P. valesiaca (Niessl) E. Müll., *Sydowia* 5(3-6): 269 (1951).
Host – *Carex physodes* M.Bieb., QR: 10 May 1996 (Nuraliev 1999).
P. vitis-viniferae Frolov, *Novosti Sistematiki Nizshikh Rastenii* 7: 186 (1970).
Host – *Vitis vinifera* L., QR: 12 September 1996 (Nuraliev 1999); 16 August 1997 (Nuraliev 1999);
SR: 21 July 1986 (Solieva 1989).

PYRENOPHORA Fr.

P. graminea S. Ito & Kurib., *Journal of the Faculty of Agriculture, Hokkaido Imperial University* 29: 85-123 (1931).
Host – *Hordeum* sp., QR: 15 April 1996 (Nuraliev 1999, listed as *Helminthosporium gramineum* Rabenh. ex Schltdl.).
P. raetica (E. Müll.) Crivelli, *Ueber die Heterogene Ascomycetengattung Pleospora Rabh.; Vorschlag für eine Aufteilung* (Diss. Eid genössischen Technischen Hochschule Zürich 7318): 121 (1983)
Host – *Chondrilla juncea* L., QR: 21 June 1996 (Nuraliev 1999, listed as *Pleospora raetica* E. Müll.).
P. pellita (Fr.) Sacc., *Sylloge Fungorum* (Abellini) 2: 280 (1883).
Hosts – *Cichorium intybus* L., QR: 24 August 1995 (Nuraliev 1999); on *Cullen drupaceum* (Bunge) C.H.Stirt., 21 July 1995 (Nuraliev 1999, listed as *Pleospora pellita* (Fr.) Rabenh.).
P. phlei (E. Müll.) Crivelli, *Ueber die Heterogene Ascomycetengattung Pleospora Rabh.; Vorschlag für eine Aufteilung* (Diss. Eid genössischen Technischen Hochschule Zürich 7318): 122 (1983).
Host – *Phlomoides kaufmanniana* (Regel) Adylov, Kamelin & Makhm., SR: 04.1985 (Solieva 1989, listed as *Pleospora phlei* E. Müll.); 19 May 1987 (Solieva 1989).
P. polytricha Sousa da Câmara, *Boletim de Agricultura Lisboa* 2(1): 23 (1936).
Host – *Bupleurum falcatum* subsp. *cernuum* (Ten.) Arcang., SR: 08 July 1985 (Solieva 1989).
P. tritici-repentis (Died.) Drechsler, *Journal of agricultural research, Washington* 24(8): 667 (1923)
Host – *Kuhitangia popovii* Ovcz., SR: 08 July 1986 (Solieva 1989, listed as *Pleospora trichostoma* (Fr.) Fuckel.).

STEMPHYLIUM Wallr.

S. botryosum Wallr., *Flora Cryptogamica Germaniae (Norimbergae)* 2: 300 (1833).
Host – *Convolvulus hamadae* Petrov, QR: 14 June 1996 (Nuraliev 1999).
S. herbarum E.G. Simmons, *Sydowia* 38: 291 (1986).
Hosts – *Cichorium intybus* L., QR: 24 September 1995 (Nuraliev 1999, listed as *Macrosporium commune* Rabenh.); on *Dianthus uzbekistanicus* Lincz., 10 September 1996 (Nuraliev 1999); 21 July 1996, (Nuraliev 1999), on *Cousinia polycephala* Rupr., 07 June 1996 (Nuraliev 1999); on *Trichodesma incanum* (Bunge) A. DC., 24 May 1995 (Nuraliev 1999), 21 April 1996 (Nuraliev 1999); SR: on *Astragalus subverticillatus* Gontsch., 09 July 1985 (Solieva 1989, listed as *Pleospora herbarum* (Pers.) Rabenh.), on *Lindelofia macrostyla* (Bunge) Popov, 09 July 1986 (Solieva 1989); on *Perovskia atriplicifolia* Benth., 10 July 1985; on *Ferula kuhistanica* Korovin, 08 July 1986 (Solieva 1989); on *Lepidium paniculatum* (Regel & Schmalh.) Al-Shehbaz, 20 July 1985 (Solieva 1989), on *Morus alba* L., 24 May 1985 (Solieva 1989).
Note: The species widespread in the area and occurs on various dead plants.
S. pyriforme Bonord. [as 'piriforme'], *Handbuch der allgemeinen Mykologie* 83 (1851).
Host – *Dipsacus dipsacoides* (Kar. & Kir.) V.I.Botsch., QR: 12 September 1997 (Nuraliev 1999).

ULOCLADIUM Preuss

U. consortiale (Thüm.) E.G. Simmons, *Mycologia* 59(1): 84 (1967).

Hosts – *Setaria viridis* (L.) P.Beauv., QR: 10 July 1995 (Nuraliev 1999); on *Hordeum bulbosum* L., 24 May 1996 (Nuraliev 1999, listed as *Stemphylium ilicis* Tengwall).

U. lanuginosum (Harz) E.G. Simmons, *Mycologia* 59(1): 80 (1967).

Host – *Centaurea iberica* Trevir. ex Spreng., QR: 21 July 1995 (Nuraliev 1999, listed as *Stemphylium lanuginosum* Harz.).

Note: According Woudenberg et al. (2013) the most of *Ulocladium* species to synonymy under *Alternaria* genus. However, we think that two species should be done molecular and morphological studies. Therefore, we did not synonymize of the species from Uzbekistan

Phaeosphaeriaceae M.E. Barr

HENDERSONIA Berk.

H. dianthicola Keissl., *Annalen des Naturhistorischen Museums in Wien* 35: 24 (1922)

Host – *Dianthus uzbekistanicus* Lincz., QR: 21 July 1997 (Nuraliev 1999, listed as *Hendersonia dianthi* Bubák.).

H. halimodendri Jacz., *Bulletin de la Société mycologique de France* 38(4): 208 (1922).

Host – *Halimodendron halodendron* (Pall.) Voss, QR: 24 May 1995 (Nuraliev 1999).

H. polygoni Rabenh., *Bot. Ztg.* 9: 455 (1851).

Host – *Polygonum coriarium* Grig., SR: 04 June 1985 (Solieva 1989), 24 April 1986 (Solieva 1989).

H. pyricola Sacc., *Fungi venet. nov. vel. Crit., Sér. 2*: 311 (1875).

Host – *Cydonia oblonga* Mill., QR: 10 June 1994 (Nuraliev 1999).

H. stipae-pennatae Fautrey, *Revue Mycologique Toulouse* 11(no. 43): 134 (1889).

Hosts – *Stipa hohenackeriana* Trin. & Rupr., QR: 10 September 1996 (Nuraliev 1999); SR: on *Stipa* sp., 14 July 1986 (Solieva 1989).

OPHIOBOLUS Riess

O. acuminatus (Sowerby) Duby, *Klotzschii Herbarium Vivum Mycologicum, Editio novo. Century: no. 57* (1855).

Host – *Astragalus lasiosemius* Boiss., QR: 16 July 1996 (Nuraliev 1999).

PHAEOSPHAERIA I. Miyake

Ph. caricinella (P. Karst.) O.E. Erikss., *Arkiv før Botanik* 6 (4-5): 414 (1967).

Host – *Astragalus humilis* M.Bieb. QR: 10 July 1995 (Nuraliev 1999, listed as *Leptosphaeria vagans* P. Karst.).

Ph. herpotrichoides (De Not.) L. Holm, *Symbolae Botanicae Upsalienses* 14(no. 3): 115 (1957).

Host – *Poa* sp., SR: 12 July 1986 (Solieva 1989, listed as *Leptosphaeria herpotrichoides* De Not.).

Ph. lycopodina (Mont.) Hedjar., *Sydowia* 22(1-4): 78 (1969).

Host – *Elytrigia* sp., QR: 10 July 1995, (Nuraliev 1999, listed as *Leptosphaeria lycopodina* (Mont.) Sacc.).

Ph. microscopica (P. Karst.) O.E. Erikss., *Arkiv før Botanik* 6 (4-5): 426 (1967).

Hosts – *Bromus paulsenii* Hack., SR: 06 July 1985 (Solieva 1989, listed as *Leptosphaeria microscopica* P. Karst.); on *Calamagrostis anthoxanthoides* (Munro) Regel, 06 July 1985 (Solieva 1989).

Ph. nigrans (Roberge ex Desm.) L. Holm, *Symbolae Botanicae Upsalienses* 14(no. 3): 112 (1957).

Host – *Stipa richteriana* Kar. & Kir., SR: 09 July 1986 (Solieva 1989, listed as *Leptosphaeria nigrans* (Roberge ex Desm.) Ces. & De Not.).

SPHAERELLOPSIS Cooke

S. filum (Biv.) B. Sutton, *Mycological Papers* 141: 196 (1977).

Host – *Cotoneaster* sp., SR: 09 July 1987 (Solieva 1989, listed as *Darluca filum* (Biv.) Castagne).

Teichosporaceae M.E. Barr

CHAETOMASTIA (Sacc.) Berl.

Ch. clavigera (Cooke & Ellis) Huhndorf, Memoirs of the New York Botanical Garden 79: 23 (1996).

Substrate: On unknown twigs in water. QR: 19 April 1968 (Glyamova et al., 1990, listed as *Leptosphaeria clavicarpa* Ellis & Everh)

Botryosphaeriales C.L. Schoch et al.

Botryosphaeriaceae Theiss. & Syd.

BOTRYOSPHAERIA Ces. & De Not.

B. sarmentorum A.J.L. Phillips, J. Luque & A. Alves, Mycologia 97 (2): 522 (2005).

Host – *Rosa hissarica* Slobodov. SR: 13 May 2016, YG-S31-3 (TASM).

Note: First record for Southern Uzbekistan.

Botryosphaeria sp.

Host – *Alhagi maurorum* Medik., QR: 10 September 1995 (Nuraliev 1999, listed as *Guignardia alhagi* Bubák); SR: on *Alhagi pseudoalhagi*, 13 May 2016, YG-S24-1 (TASM).

Note: – Presently, species of *Guignardia* are synonymized with 24 different genera. Our specimen is morphologically similar to *Botryosphaeria* species by hyaline to greenish, 1-celled, guttulate, smooth-walled of ascospores. Therefore, this species transfer was done. So far, no molecular study has been done for this taxon from Uzbekistan. It is different from another species in the genus *Botryosphaeria*. We think that this species will be sp nova from arid and semi-arid region.

DIPLODIA Fr.

D. astragali Golovin, Trudy Sredneaziatskogo gosuniversiteta, Biologicheski Nauki 14(no. 5): 36 (1950).

Hosts – *Astragalus marguzaricus* Lipsky, SR: 07 July 1986 (Solieva 1989); on *Astragalus sulcatus* L., 07 July 1984 (Solieva 1989).

D. mori Berk., The London journal of Botany 6: 325 (1847).

Host – *Morus nigra* L. SR: 13 May 2016, YG-S22-2 (TASM); 17 May 2016, YG-S22 (TASM).

D. herbarum (Corda) Lév., Annales des Sciences Naturelles Botanique 5: 292 (1846).

Hosts – *Spiraea hypericifolia* L. SR: 21 May 2016, YG-S14 (TASM); QR: on *Ferula ugamica* Korovin, 24 May 1996 (Nuraliev 1999).

D. lonicerae Fuckel, Jahrbücher des Nassauischen Vereins für Naturkunde. 23-24: 141 (1870) [1869-70].

Host – *Lonicera nummulariifolia* Jaub. & Spach, SR: 10 July 1986 (Solieva 1989).

D. malorum Fuckel, Rhenani Exsiccati Cent. XVI-XVIII 17-18: 174, Fung. Rhen.no 1706 (1866).

Host – *Malus niedzwetzkyana* Dieck ex Koehne. SR: 21 May 2016, YG-S07 (TASM).

D. populina Fuckel, Jahrbücher des Nassauischen Vereins für Naturkunde. 23-24: 170 (1870) [1869-70].

Host – *Populus pruinosa* Schrenk., QR: 10 July 1995 (Nuraliev 1999).

D. salicina Lév., Annales des Sciences Naturelles Botanique 5: 292 (1846).

Host – *Salix acutifolia* Willd. SR: 08 May 2016, YG-S02 (TASM).

DOTHIORELLA Sacc.

D. sarmentorum (Fr.) A.J.L. Phillips, J. Luque & A. Alves, Mycologia 97: 522. 2005.

Host – *Rosa ecae* Aitch. SR: 07 May 2016, YG-S01 (TASM).

Note: First record Southern Uzbekistan.

LASIODIPLODIA Ellis & Everh.

L. theobromae (Pat.) Griffon & Maubl., Bulletin de la Société mycologique de France 25: 57 (1909).

Host – *Allium* sp., QR: 15 July 1995 (Nuraliev 1999, listed as *Diplodia natalensis* Pole-Evans.).

SPHAEROPSIS Lév.

S. astragali Höhn., Annalen des Naturhistorischen Museums Wien 20: 5 (extr.) (1905).

Host – *Astragalus* sp., SR: 09 July 1987 (Solieva 1989).

Phyllostictaceae Fr.

PHYLLOSTICTA Pers.

Ph. acerina Allesch, Rabenhorst's Kryptogamen-Flora, Pilze - Fungi Imperfecti 1(7): 751 (1903).

Hosts – *Acer pubescens* Franch. SR: 11 August 2015, IM0006 (TASM); on *Acer platanoides* subsp. *turkestanicum* (Pax) P.C. DeJong, 21 June 1987 (Solieva 1989).

Ph. ampellicida (Engelm.) Aa, Studies in Mycology 5: 28 (1973)

Host – *Vitis vinifera* L., SR: 06 May 1984 (Solieva 1989, listed as *Phoma uvicola* Berk. & M.A. Curtis

Ph. berberidis Westend., Bulletin de l'Académie Royale des Sciences, des Lettres et des Beaux Arts de Belgique Ser. 2, 2 (7): 567 (1857).

Host – *Berberis* sp. SR: 11 August 2015, IM3 (TASM).

Ph. brunellae Ellis & Everh., Proceedings of the Academy of Natural Sciences of Philadelphia 46: 355 (1894).

Host – *Prunella vulgaris* L., QR: 24 July 1995 (Nuraliev 1999).

Ph. centaureae Siemaszko, Arch. Nauk. Biol. Towarz. Nauk. Warszaw. 1(14): 29 (1923).

Host – *Cyanus depressus* (M.Bieb.) Soják, QR: 09 June 1996 (Nuraliev 1999).

Ph. cirsii Desm., Annales des Sciences Naturelles Botanique, sér. 38: 31 (1847).

Host – *Cirsium arvense* (L.) Scop., QR: 24 June 1997 (Nuraliev 1999).

Ph. crataegicola Sacc., Sylloge Fungorum (Abellini) 3: 6 (1884).

Host – *Crataegus pseudoheterophylla* subsp. *turkestanica* (Pojark.) K.I.Chr., SR: 15 July 1987 (Solieva 1989).

Ph. cruenta (Fr.) J. Kickx f., Mém. Acad. R. Sci. Lett. Arts. Brux. 23: 22 (1849).

Host – *Polygonatum sewerzowii* Regel., QR: 24 July 1996 (Nuraliev 1999).

Ph. farfarae Sacc., Nuovo Giornale Botanico Italiano 8(4): 302 (1874).

Host – *Tussilago farfara* L., SR: 24 July 1987 (Solieva 1989).

Ph. ferulae Zaprom., Materialy po mikoflore Srednej Azii 2(11): 43 (1928).

Host – *Ferula kuhistanica* Korovin, SR: 08 July 1987 (Solieva 1989).

Ph. eremuri Kalymb., Trudy Instituta Botanicheskogo Akademii Nauk Kazakhskoi SSSR 13: 280 (1962).

Host – *Eremurus* sp., SR: 18 June 1987 (Solieva 1989).

Ph. kenimaechia Golovin, Trudy Sredneaziatskogo gosuniversiteta, Biologicheski Nauki 14 (no. 5): 29 (1950).

Host – *Ferula kuhistanica* Korovin, SR: 21 June 1987 (Solieva 1989).

Ph. ligulariae Togashi & Katsuki, Kyushu Agricultural Research 7: [unnumbered sep.] (1950).

Host – *Ligularia thomsonii* (C.B. Clarke) Pojark., SR: 21 June 1986 (Solieva 1989).

Ph. platanoides Sacc., Michelia 1 (4): 360 (1878).

Host – *Acer* sp. SR: 13 August 2015, IM25 (TASM), IM26 (TASM), 12 August 2015, IM16 (TASM).

Ph. salviae Hollós, Mathem. Természettud. Közlem. Magg. Tudom. Akad. 35(1): 48 (1926).

Host – *Salvia* sp., SR: 17 July 1987 (Solieva 1989).

Ph. trifolii Richon, Catalogue raisonné des champignons qui croissent dans le département de la Marne: 356 (1889).

Host – *Trifolium repens* L., SR: 17 April 1984 (Solieva 1989), 19 April 1984 (Solieva 1989).

Ph. vincae-majoris Allesch., Rabenhorst's Kryptogamen Flora von Deutschland, Oesterreich und der Schweiz. Zweite Auflage (Leipzig) 1(6): 155 (1898).

Host – *Vinca erecta* Regel & Schmalh., SR: 18 April 1985 (Solieva 1989).

Genus with uncertain family position (*incertae sedis*)

CAMAROSPORIUM Schulzer

C. alhagi Koshk. & Frolov, Mikoflora Podgornoi Raviniy Kopetdaga i Tsentral'nykh Karakumov [Mycoflora of the mountainous plains of Kopet Dagh and Central Kara Kum] (Ashkhabad): 132 (1973).

Host – *Alhagi pseudalhagi* (M. Bieb.) Desv. ex B. Keller & Shap., SR: 13 May 2016, YG-S24-2 (TASM).

Note: First record for Southern Uzbekistan.

C. mori (Kalchbr.) Schulzer, Verhandlungen der Zoologisch-Botanischen Gesellschaft Wien 20: 649 (1870)

Host – *Morus nigra* L. SR: 09 October 2016, YG-ma5 (TASM).

Note: New record for mycobiota of Uzbekistan

C. elongatum (Fr.) Wijayaw. & K.D. Hyde [as 'elongata'], in Wijayawardene, Hyde, Bhat, Camporesi, Schumacher, Chethana, Wikee, Bahkali & Wang, Cryptogamie Mycologie 35(2): 183 (2014).

Host – *Robinia pseudoacacia* L., QR: 21 June 1994 (Nuraliev 1999, listed as *Cucurbitaria elongata* (Fr.) Grev.).

C. phragmitis Brunaud, Revue Mycologique Toulouse 8(no. 31 ('30')): 142 (1886).

Host – *Phragmites australis* (Cav.) Trin. ex Steud., SR: 10 July 1987 (Solieva 1989).

C. salsolicola Woron. [as 'salsolicolum'], Izvstiya Kavkazkiy Muzey 9: 19 (1915).

Host – *Salsola dendroides* Pall., SR: 11 July 1986 (Solieva 1989).

Capnodiales Woron.

Cladosporiaceae Nann.

CLADOSPORIUM Link

C. atroseptum Pidopl., Fungus flora of coarse fodder: 268 (1953).

Host – *Bromus* sp., QR: 12 June 1995 (Nuraliev 1999)

C. brunneum Corda, Icones fungorum (Prague) 1: 15 (1837).

Host – *Populus* sp., QR: 11 October 1996 (Nuraliev 1999), 24 July 1997 (Nuraliev 1999).

C. epiphyllum (Pers.) Nees, System der Pilze und Schwämme: 67 (1817)

Substrate: Gray-brown soil. QR: 1975 (Kirgizbaeva et al., 1997).

C. typharum Desm., Pl. crypt. exsicc. 1: no. 304 (1834).

Host – *Typha angustifolia* L., QR: 24 April 1996 (Nuraliev 1999, listed as *Heterosporium typharum* (Desm.) Cooke & Masee.).

C. fasciculare Fr., Systema Mycologicum 3(2): 370 (1832).

Hosts – *Allium sativum* L., QR: 10 May 1995 (Nuraliev 1999); on *Allium* sp., 21 July 1997 (Nuraliev 1999).

C. herbarum (Pers.) Link, in Willdenow, Gesellschaft Naturforschender Freunde zu Berlin 8: 37 (1816) [1815].

Hosts – *Haplophyllum acutifolium* (DC.) G.Don, QR: 14 September 1996 (Nuraliev 1999); on *Astragalus* sp., 17 April 1997 (Nuraliev 1999); on *Glycyrrhiza glabra* L., 15 June 1995 (Nuraliev 1999); on *Ferula kuhistanica* Korovin, 21 June 1995 (Nuraliev 1999).

C. ovorum Pidopl. & Deniak, in Pidoplichko, Fungus flora of coarse fodder: 272 (1953).

Host – *Cousinia coronata* Franch., QR: 24 July 1996 (Nuraliev 1999).

HETEROSPORIUM Klotzsch ex Cooke

H. graminum Rostr., Plantepatologi: 607 (1902).

Host – *Hordeum vulgare* L., QR: 14 July 1997 (Nuraliev 1999).

Mycosphaerellaceae Lindau

CERCOSPORA Fresen.

C. medicaginis Ellis & Everh., Proceedings of the Academy of Natural Sciences of Philadelphia 43: 91 (1891).

Host – *Medicago transoxana* Vassilcz., QR: 10 June 1997 (Nuraliev 1999).

DIDYMARIA Corda

D. hedysari N.P. Golovina, Dokladi Akademi Nauk Uzbekskiy SSR 2: 54 (1960).

Host – *Hedysarum songoricum* Bong., QR: 04 June 1995 (Nuraliev 1999).

FUSICLADIELLA Höhn.

F. aronici (Sacc.) Höhn., Berichte der Deutschen Botanischen Gesellschaft 37: 155 (1919).

Host – *Cirsium turkestanicum* (Regel) Petr., QR: 24 July 1996 (Nuraliev 1999, listed as *Fusicladium aronici* Sacc.).

MYCOSPHAERELLA Johanson

M. asteroma (Fr.) Lindau, Révision des Champignons tant supérieurs qu'inférieurs trouvés jusqu'à ce jour dans la Pays-Bas, Tom. II: Phycomycètes, Pyrenomycètes 2: 208 (1897).

Host – *Polygonatum sewerzowii* Regel., QR: 10 July 1996 (Nuraliev 1999).

M. aliena (Pass.) Tomilin, Opredelitel' Gribov roda Mycosphaerella Johans: 270 (1979).

Host – *Rhaponticum repens* (L.) Hidalgo, QR: 21 May 1996 (Nuraliev 1999); 10 July 1995 (Nuraliev 1999).

M. crassa (Auersw.) Lindau, Hilfsbuch für das Sammeln der Ascomyceten: 86 (1903).

Host – *Populus euphratica* Oliv., QR: 24 June 1995 (Nuraliev 1999).

M. ferulae (Maffei) Koshk., in Koshkelova, Frolov & Dzhuraeva, Mycological Papers 123: 203 (1970).

Host – *Ferula* sp., SR: 21 April 1984 (Solieva 1989).

M. lonicerae (DC) Wint.,

Host – *Lonicera* sp., QR: 21 June 1996 (Nuraliev 1999).

M. graminicola (Fuckel) J. Schröt., Kryptogamen-Flora von Schlesien (Breslau) 3.2(3): 340 (1894) [1908].

Hosts – *Elymus hispidus* (Opiz) Melderis, QR: 24 April 1996 (Nuraliev 1999, listed as *Septoria graminum* Desm.); on *Stipagrostis pennata* (Trin.) De Winter, 12 September 1995 (Nuraliev 1999).

M. glycyrrhizae Lebedeva, Mater. Mikologiya i Fitopatologiya 5(3): 2 (1922).

Host – *Glycyrrhiza glabra* L., SR: 05 July 1986 (Solieva 1989).

M. menthae (Lambotte & Fautrey) Rehm, Annales Mycologici 4(5): 409 (1906)

Host – *Mentha longifolia* (L.) L., QR: 10 April 1997 (Nuraliev 1999); 21 June 1994 (Nuraliev 1999).

M. millegrana (Cooke) J. Schröt., Kryptogamen-Flora von Schlesien (Breslau) 3.2(3): 334 (1894).

Host – *Cichorium intybus* L., QR: 27 April 1996 (Nuraliev 1999, listed as *Cercospora microsora* Sacc.).

M. hyperici (Auersw.) Starbäck, Kungliga Svenska vetenskapsakademiens handlingar 3 15(no. 2): 9 (1889).

Host – *Hypericum scabrum* L., QR: 21 August 1996 (Nuraliev 1999); 10 July 1997 (Nuraliev 1999).

M. circumvaga (Desm.) Vesterg., Botaniska notiser 125 (1902).

Host – *Medicago sativa* L., QR: 21 July 1994 (Nuraliev 1999).

M. tassiana (De Not.) Johanson, Öfvers. K. Svensk. Vetensk. -Akad. Förhandl. 41 (no. 9): 167 (1884) [1884-1885].

Hosts – *Zea mays* L., QR: 10 May 1995 (Nuraliev 1999), 21 July 1996 (Nuraliev 1999); on *Hordeum bulbosum* L., 10 May 1995 (Nuraliev 1999, listed as *Cladosporium graminum* Corda.).

M. vitis-viniferae Tomilin, Opredelitel' Gribov roda Mycosphaerella Johans: 268 (1979).

Host – *Vitis vinifera* L., SR: 26 June 1987 (Solieva 1989, listed as *Mycosphaerella vitis* (Fuckel) J. Schröt.).

POLYTHRINCIUM Kunze

P. trifolii Kunze, in Kunze & Schmidt, Mykologische Hefte (Leipzig) 1: 14 (1817).

Host – *Trifolium pratense* L., QR: 10 April 1995 (Nuraliev 1999).

RAMULARIA Unger

R. arvensis Sacc., Michelia 2(no. 8): 548 (1882).

Host – *Potentilla pedata* Willd. ex Hornem., QR: 24 May 1995 (Nuraliev 1999), 10 July 1997 (Nuraliev 1999).

Note: This species is widespread in Northeast Uzbekistan (Gafforov 2015).

R. acris Lindr., Acta Societatis pro Fauna et Flora Fennica 23 (no. 3): 14 (1902) [1901-1902].

Host – *Ranunculus amurensis* Kom., QR: 24 May 1996 (Nuraliev 1999).

R. cirsii Allesch., Berichte des Botanischen Vereins Landshut 12: 7 (1892).

Host – *Cirsium turkestanicum* (Regel) Petr., QR: 10 July 1995 (Nuraliev 1999).

R. didyma Unger, Exanth. Pflanzen (Wien): 169 (1833).

Host – *Ranunculus bulbosus* L., QR: 10 April 1994 (Nuraliev 1999, listed as *Didymaria didyma* (Unger) Pound.).

R. lanosa (Jacz.) U. Braun, Monogr. Cercospora, Ramularia Allied Genera (Phytopath. Hyphom.) 2: 76 (1999).

Host – *Echinops tschimganicus* B.Fedtsch., QR: 14 June 1994 (Nuraliev 1999, listed as *Ovularia lanosa* Jacz.).

R. rhabdospora (Berk. & Broome) Nannf., in Lundell & Nannfeldt, Fungi Exsiccati Suecici 39-40: 32 (1950).

Host – *Plantago lanceolata* L., QR: 10 June 1995 (Nuraliev 1999, listed as *Ramularia plantaginis* Ellis & G. Martin).

R. rubi (Bubák) Karak., Fungi Imperfecti Parasitici (Hyphomycetes): 139 (1937).

Host – *Rubus caesius* L., QR: 14 May 1994 (Nuraliev 1999), 21 August 1996 (Nuraliev 1999).

R. ovata Fuckel, Jahrbücher des Nassauischen Vereins für Naturkunde. 23-24: 362 (1870).

Host – *Salvia virgata* Jacq., QR: 10 June 1996 (Nuraliev 1999, listed as *Ovularia ovata* (Fuckel) Sacc.), 21 April 1997 (Nuraliev 1999).

R. phyteumatis Sacc. & G. Winter, in Saccardo, Michelia 2(no. 8): 548 (1882).

Host – *Asyneuma argutum* (Regel) Bornm., QR: 12 July 1995 (Nuraliev 1999), 10 August 1996 (Nuraliev 1999).

R. pratensis Sacc., Michelia 2(no. 8): 550 (1882).

Host – *Rumex acetosa* L., QR: 12 April 1995 (Nuraliev 1999).

R. psoraleae Ellis & Everh., Proceedings of the Academy of Natural Sciences of Philadelphia 46: 376 (1894).

Host – *Cullen drupaceum* (Bunge) C.H.Stirt., QR: 10 June 1994 (Nuraliev 1999).

R. salviae Bondartsev, Mater. mikol. obsléd. Ross. 5: 8 (1921).

Host – *Salvia austriaca* Jacq., QR: 21 July 1995 (Nuraliev 1999), 12 June 1997 (Nuraliev 1999).

R. silenicola C. Massal., Mém. Accad. Agricolt. Arti Commerc. Verona, Ser. 3 65: 110 (1889).

Host – *Silene tachtensis* Franch., QR: 21 July 1996 (Nuraliev 1999).

R. taraxaci P. Karst., Nova Hedwigia 23(1): 7 (1884).

Host – *Tussilago farfara* L., QR: 24 July 1996 (Nuraliev 1999).

R. ziziphorae Panf. & Gapon., Jubilee Vol. Tech. Fukushi: 158 (1963).

Host – *Ziziphora pedicellata* Pazij & Vved., QR: 05 August 1996 (Nuraliev 1999).

R. variabilis Fuckel, Jahrbücher des Nassauischen Vereins für Naturkunde. 23-24: 361 (1870) [1869-70].

Host – *Verbascum songaricum* Schrenk, QR: 15 June 1995 (Nuraliev 1999), 10 June 1994 (Nuraliev 1999).

SPHAERULINA Sacc.

S. hyperici (Roberge ex Desm.) Verkley, Quaedvl. & Crous, Studies in Mycology 75 (1): 298 (2013).

Host – *Hypericum perforatum* L., QR: 24 June 1995 (Nuraliev 1999, listed as *Septoria hyperici* Roberge ex Desm.).

OVULARIA Sacc.

O. monosporia (Westend.) Pound & Clem., Minnesota Botanical Studies 1(Bulletin 9): 653 (1896).

Host – *Rumex paulsenianus* Rech. f., QR: 14 May 1995 (Nuraliev 1999).

O. cousiniae Golovin, Trudy Sredneaziatskogo gosuniversiteta, Biologicheski Nauki 15 (no. 5): 18 (1950).

Host – *Cousinia pentacanthoides* Juz. ex Tscherneva, QR: 21 July 1996 (Nuraliev 1999).

PASSALORA Fr.

P. fulva (Cooke) U. Braun & Crous, in Crous & Braun, Mycosphaerella and its anamorphs: 1. Names published in Cercospora and Passalora: 453 (2003).

Host – *Allochrusa gypsophiloides* (Regel) Schischk., QR: 21 July 1997 (Nuraliev 1999, listed as *Cladosporium fulvum* Cooke).

PHACELLIUM Bonord.

Ph. vossianum (Thüm.) U. Braun, Nova Hedwigia 50(3-4): 511 (1990).

Host – *Carduus pycnocephalus* subsp. *cinereus* (M.Bieb.) P.H.Davis, QR: 16 July 1995 (Nuraliev 1999, listed as *Ovularia vossiana* (Thüm.) Sacc.).

PSEUDOCERCOSPORA Speg.

P. cavarae (Sacc. & D. Sacc.) Deighton, Mycological Papers 140: 141 (1976).

Host – *Glycyrrhiza glabra* L., QR: 20 June 1997 (Nuraliev 1999, listed as *Cercospora cavarae* Sacc. & D. Sacc.).

P. latens (Ellis & Everh.) Y.L. Guo & X.J. Liu, Mycosystema 2: 236 (1989).

Host – *Cullen drupaceum* (Bunge) C.H.Stirt., QR: 10 June 1997 (Nuraliev 1999, listed as *Cercospora latens* Ellis & Everh.).

P. vitis (Lév.) Speg., Anales del Museo Nacional de Historia Natural Buenos Aires 20 (13): 438 (1910).

Host – *Vitis vinifera* L., QR: 10 July 1996 (Nuraliev 1999).

PSEUDOCERCOSPORELLA Deighton

P. astragali (Rostr.) U. Braun, Nova Hedwigia 47(3-4): 348 (1988).

Host – *Astragalus krauseanus* Regel, QR: 25 June 1997 (Nuraliev 1999).

RHABDOSPORA (Durieu & Mont.) Sacc.

Rh. salsolae Kalymb., in Byzova et al., Flora Sporovykh Rastenii Kazakhstana [Cryptogamic Flora of Kazakhstan], 5, Nesovershennye Griby - Fungi Imperfecti (Deuteromycetes) 3. Sphaeropsidales (Alma-Ata): 374 (1970)

Host – *Suaeda* sp., SR: 23 May 1927 (Kirgizbaeva et al. 1997).

Rh. ephedrella Golovin, Trudy Sredneaziatskogo gosuniversiteta, Biologicheski Nauki 14(no. 5): 42 (1950).

Host – *Ephedra strobilacea* Bunge. SR: 23 May 1927 (Kirgizbaeva et al. 1997).

SEPTOCYLINDRIUM Sacc.

S. viride (Corda) Sacc., Sylloge Fungorum (Abellini) 4: 227 (1886).

Host – *Alhagi maurorum* Medik., QR: 21 July 1995 (Nuraliev 1999).

SEPTORIA Sacc.

S. acerella Sacc., Sylloge Fungorum (Abellini) 3: 479 (1884).

Host – *Acer pentapomicum* Stewart ex Brandis. SR: 27 June 1986 (Solieva 1989),

S. agriophylli Gapon., in Muzafarov (Ed.), Biologiya, Ekologiya, Geografiya Sporovykh Rastenii Srednei Azii [Biology, Ecology and Geography of Sporebearing Plants of Central Asia]: 179 (1971).

Host – *Elymus hispidus* (Opiz) Melderis., QR: 12 July 1994 (Nuraliev 1999).

S. agropyri Ellis & Everh., Proceedings of the Academy of Natural Sciences of Philadelphia 45: 163 (1893).

Host – *Elymus repens* (L.) Gould., QR: 24 May 1996 (Nuraliev 1999).

S. ampelina Berk. & M.A. Curtis, Grevillea 3 (25): 9 (1874).

Hosts – *Ampelopsis vitifolia* (Boiss.) Planch. SR: 14 July 1986, YS027 (TASM); on *Ampelopsis vitifolia* (Boiss.) Planch., 14 July 1986 (Solieva 1989).

S. acerella Sacc., Sylloge Fungorum 3: 479 (1884).

Host – *Acer regelii* Pax. SR: 03 July 1986, YS030 (TASM).

Note: First record for Southern Uzbekistan.

S. acetosae Oudem., Hedwigia 33: 20 (1894).

Host – *Rumex aquaticus* L., QR: 21 May 1996 (Nuraliev 1999).

S. alhagi Szemb. [as 'alhaginis'], Mater. Mikologiya i Fitopatologiya 1(1): 33 (1915).

Host – *Alhagi maurorum* Medik., QR: 04 September 1994 (Nuraliev 1999), 21 July 1997 (Nuraliev 1999).

S. apocyni Khokhr., Inst. New Bast Raw Material Vaskhnil, Leningrad, Nr.1 1: 127-140 (1933).

Host – *Apocynum* sp., SR: 18 June 1987 (Solieva 1989).

S. bromi Sacc., Michelia 1(no. 2): 194 (1878).

Host – *Bromus japonicus* Thunb., QR: 04 July 1997 (Nuraliev 1999).

S. caricis Pass., Funghi Parm. Septor.: no. 135 (1879).

Host – *Carex physodes* M.Bieb., QR: 12 May 1996 (Nuraliev 1999).

S. crataegi J. Kickx Flore Cryptogamique des Flandres 1: 433 (1867).

Crataegus azarolus var. *pontica* (K.Koch) K.I.Chr., QR: 12 May 1995 (Nuraliev 1999).

S. convolvuli Desm., Annales des sciences naturelles Botanique, sér. 2 17: 108 (1842).

Host – *Convolvulus arvensis* L., QR: 21 July 1995 (Nuraliev 1999).

S. delphinella Sacc., Michelia 2(no. 7): 347 (1881).

Host – *Delphinium brunonianum* Royle, QR: 10 September 1996 (Nuraliev 1999).

S. glomerata Jørst., Skrifter Norske Videnskaps Akademi i Oslo 24: 40 (1967).

Host – *Dactylis glomerata* L., QR: 14 August 1995 (Nuraliev 1999).

S. ferulicola Melnik, Novosti Sistemiki Nizshikh Rastenii 2: 154 (1965).

Host – *Ferula kuhistanica* Korovin, QR: 24 May 1995 (Nuraliev 1999, listed as *Septoria ferulae* Zaprom.).

S. fraxini Desm. Plantes cryptogames du Nord de la France: no. 1086 (1840).

Host – *Fraxinus raibocarpa* Regel. SR: 15 July 1987, YS002 (TASM).

S. lamiicola Sacc., Sylloge Fungorum (Abellini) 3: 538 (1884).

Host – *Lamium album* L., QR: 24 May 1995 (Nuraliev 1999).

S. maydis Schulzer & Sacc., Nova Hedwigia 23: 110 (1884).

Host – *Zea Mays* L., QR: 10 June 1995 (Nuraliev 1999).

S. melissae Desm., Annales des Sciences Naturelles Botanique, sér. 3 20: 87 (1853).

Host – *Melissa officinalis* L., QR: 24 August 1997 (Nuraliev 1999).

S. hordei Jacz., Opredelitel' Gribov, 2 Fungi Imperfecti (Petrograd): 104 (1917).
Host – *Hordeum bulbosum* L., QR: 10 June 1995 (Nuraliev 1999), 24 August 1997 (Nuraliev 1999).

S. phragmitis Sacc., Michelia 1(no. 2): 195 (1878).

Host – *Phragmites australis* (Cav.) Trin. ex Steud., QR: 21 July 1995 (Nuraliev 1999).

S. polygonorum Desm., Annales des Sciences Naturelles Botanique, sér. 2 17: 108 (1842).

Host – *Polygonum coriarium* Grig., QR: 21 June 1995 (Nuraliev 1999), 10 July 1994 (Nuraliev 1999), 14 May 1996 (Nuraliev 1999).

S. scabiosicola Desm., Annales des Sciences Naturelles Botanique, sér. 3 20: 96 (1853).

Host – *Salvia lilacinocoerulea* Nevski, QR: 21 April 1997 (Nuraliev 1999).

S. secalis Prill. & Delacr., Bulletin de la Société mycologique de France 5: 125 (1889).

Host – *Secale cereale* L., QR: 21 July 1996 (Nuraliev 1999).

S. serebriankowii Sacc., Annales Mycologici 9(3): 252 (1911).

Host – *Astracantha bactriana* (Bunge) Podlech, QR: 10 May 1997 (Nuraliev 1999).

STIGMINA Sacc.

^*S. carpophila* (Lév.) M.B. Ellis, Mycological Papers 72: 56 (1959).

Host – *Prunus bucharica* (Korsh.) B.Fedtsch. ex Rehder. SR: 11 August 2015, IM0003, (TASM), 13 May 2016, YG-S16-1 (TASM), YG-S34, (TASM).

Note: First record for Southern Uzbekistan and the species most often found infecting *Prunus bucharica* in mountain areas.

S. platani (Fuckel) Sacc., Michelia 2(no. 6): 22 (1880).

Host – *Phlomis salicifolia* Regel, QR: 21 June 1995 (Nuraliev 1999), 10 September 1997 (Nuraliev 1999).

Venturiales Yin. Zhang et al.

Venturiaceae E. Müll. & Arx ex M.E. Barr

VENTURIA De Not.

V. radiosa (Lib.) Ferd. & C.A. Jørg., Skovtraernes Sygdomme 1: 125 (1938).

Hosts – *Populus talassica* Kom. SR: 28 May 1948, YS039, (TASM), YS040, (TASM); on *Populus* sp., 19 August 2016, YG-ma043-1 (TASM); *Populus tadshikistanica* Kom., QR: 24 June 1995 (Nuraliev 1999, listed as *Fusicladium radiosum* (Lib.) Lind.).

Note: This pathogen infects *Populus* species starting in spring to November.

V. pyrina Aderh., Landwirtschaftliche Jahrbucher 25: 875 (1896).

Hosts – *Pyrus korchynsyi* Lit. SR: 19 March 1948, YS 278 (TASM, listed as *Fusicladium pyrorum* (Lib.) Fuckel.); on *Pyrus bucharica* Lit., 19 March 1948, YS 277 (TASM).

Note: The species is widespread and heavily infects the host plants in genera of *Pyrus*.

V. inaequalis (Cooke) G. Winter, Hedwigia: 81 (1897).

Hosts – *Malus* sp. SR: 14 May 2016, YG-S007 (TASM, listed as *Fusicladium pomi* (Fr.) Lind.), YG-S007-1 (TASM); on *Malus sieversii* (Ledeb.) M.Roem; QR: 24 April 1996 (Nuraliev 1999, listed as *Fusicladium dendriticum* (Wallr.) Fuckel.).

Note: The species is widespread and heavily infects the leaves and fruits of cultivated and wild *Malus*.

PHAEOSPHAERELLA P. Karst.

Ph. tamaricis (Hollós) Tomilin, Opredelitel' Gribov roda Mycosphaerella Johans: 285 (1979).

Host – *Tamarix* sp., SR: 15 July 1986 (Solieva 1989, listed as *Mycosphaerella tamaricis* (Hollós) Kurbans.).

LASIOBOTRYS Kunze

L. lonicerae (Fr.) Kunze, Mykologische Hefte 88 (1823).

Host – *Lonicera* sp. June 1948 (Gulyamova et al., 1990)

Genus with uncertain order position (incertae sedis)

Polystomellaceae Theiss. & H. Syd.

DOTHIDELLA Speg.

D. juniperi (Desm.) Höhn., *Annales Mycologici* 16 (1/2): 174 (1918).

Host – *Juniperus polycarpus* var. *seravschanica* (Kom.) Kitam., SR: 02 May 1984 (Solieva 1989, listed as *Phoma juniperi* (Desm.) Sacc.), 02 July 1986 (Solieva 1989).

D. ulmi (C.-J. Duval) G. Winter, *Rabenhorst's Kryptogamen Flora von Deutschland, Oesterreich und der Schweiz. Zweite Auflage (Leipzig)* 1.2: 904 (1886).

Host – *Ulmus* sp., QR: 10 July 1998 (Nuraliev 1999).

Families with uncertain order position (incertae sedis)

Genus with uncertain family position (incertae sedis)

ASTEROMELLA Pass. & Thüm.

A. personatae (Allesch.) H. Ruppr., *Sydowia* 13 (1-6): 13 (1959).

Host – *Cousinia leucantha* Bornm. & Sint., QR: 10 June 1997 (Nuraliev 1999, listed as *Phyllosticta personatae* Allesch.).

PSEUDOPLEOSPORA Petr.

P. ruthenica Petr., *Annales Mycologici* 17 (2/6): 84 (1920) [1919]

Host – *Celtis caucasica* Willd., QR: 21 April 1996 (Nuraliev 1999, listed as *Pleospora ruthenica* (Petr.) Petr.).

ZYMOSEPTORIA Quaedvl. & Crous

Z. tritici (Desm.) Quaedvl. & Crous, in Quaedvlieg, Kema, Groenewald, Verkley, Seifbarghi, Razavi, Mirzadi Gohari, Mehrabi & Crous, *Persoonia* 26: 67 (2011).

Host – *Triticum aestivum* L., QR: 10 July 1994 (Nuraliev 1999, listed as *Septoria tritici* Desm.).

SORDARIOMYCETES O.E. Erikss. & Winka

Diaporthales Nannf.

Diaporthaceae Höhn. ex Wehm.

DIAPORTHE Nitschke

D. ambigua Nitschke, *Pyrenomycetes Germanici* 2: 311 (1870).

Host – *Prunus* sp., QR: 10 May 1995 (Nuraliev 1999, listed as *Phomopsis velata* (Sacc.) Traverso).

Note: Recently studied show that several new *Diaporthe* species were found on *Prunus* plants (Dissanayake et al 2017). We didn't find the specimens in the TASM herbarium for re-examination and we think that the species should be new pathogen of *Diaporthe* species from arid region. It is necessary to conduct molecular studies in Uzbekistan.

D. demissa Sacc., *Atti della Società Veneziana-Trentina-Istriana di Scienze Naturali* 4: 110 (1875).

Host – *Medicago transoxana* Vassilcz., QR: 10 May 1996 (Nuraliev 1999, listed as *Phoma vulgaris* Sacc.); SR: *Medicago* sp., 07 May 1886 (Solieva 1989).

D. occulta (Fuckel) Nitschke, *Pyrenomycetes Germanici* 2: 266 (1870).

Host – *Pseudoclasia sarawschanica* Botsch., QR: 21 April 1996 (Nuraliev 1999).

***Diaporthe* sp.**

Host – *Plantago major* L., SR: 06 July 1987 (Solieva 1989, listed as *Phomopsis plantaginis* Kurbans.).

Note: According to the rules International Code of Nomenclature for algae, fungi and plants (Maharachchikumbura et al. 2015, Rossman et al. 2015) this species transferred to genus *Diaporthe*. We did not find the specimens in the TASM and not re-examination of the specimen that is why we listed as *Diaporthe* sp.

Coniochaetales Huhndorf et al.
Coniochaetaceae Malloch & Cain

CONIOCHAETA (Sacc.) Cooke

C. ligniaria (Grev.) Cooke, Grevillea 16 (78): 37 (1887).

Host – dried branch of *Populus* sp. SR: June 1956 (Gulyamova et al. 1990).

Gnomoniaceae G. Winter

ASTEROMA DC.

A. medusula Durieu & Mont., Expl. Sci. Alg., Fl. Algér. 1: 609 (1848) [1846-49].

Host – *Ferula kuhistanica* Korovin, QR: 21 September 1996 (Nuraliev 1999).

OPHIOGNOMONIA (Sacc.) Speg.

O. leptostyla (Fr.) Sogonov, Studies in Mycology 62: 62 (2008).

Host – *Juglans regia* L. SR: 10 September 2016, YG-Om6 (TASM), YG-Om7 (TASM).

Note: First record for Southern Uzbekistan.

Schizoparmaceae Rossman, D.F. Farr & Castl.

PILIDIELLA Petr. & Syd.

P. diplodiella (Speg.) Crous & Van Niekerk, in Van Niekerk, Groenewald, Verkley, Fourie, Wingfield & Crous, Mycological Research 108(3): 293 (2004).

Host – *Vitis vinifera* L., QR: 10 September 1996 (Nuraliev 1999, listed as *Coniothyrium diplodiella* (Speg.) Sacc.).

Valsaceae Tul. & C. Tul.

CYTOSPORA Ehrenb.

C. aurora Mont., Annales des Sciences Naturelles Botanique 1: 347 (1834).

Host – *Salix interior* Rowlee. SR: 14 May 2016, YG-S107 (TASM), YG-S107-1 (TASM).

Note: First record for Southern Uzbekistan and first record on *Salix interior* in Uzbekistan.

C. ceratophora (Tul. & C. Tul.) Sacc., Michelia 1 (5): 519 (1879).

Host – *Prunus bucharica* (Korsh.) B.Fedtsch. ex Rehder. SR: 14 May 2016, YG-S92 (TASM), YG-S92-1 (TASM), YG-S79-1 (TASM).

Note: First record for Southern Uzbekistan

C. flavovirens (Sacc.) Grove, Bulletin of miscellaneous information, Kew: 358 (1923).

Host – *Rosa fedtschenkoana* Regel, QR: 10 July 1995 (Nuraliev 1999), 20 September 1996 (Nuraliev 1999), 24 July 1997 (Nuraliev 1999).

C. hippophaës Thüm., Fungi australia exsiccata: no. 282 (1872).

Host – *Elaeagnus rhamnoides* (L.) A.Nelson. SR: 13 May 2016, YG-S77 (TASM), YG-S77-1 (TASM).

Note: First record for Southern Uzbekistan

C. populina (Pers.) Rabenh., Kryptogamen-Flora von Deutschland (Leipzig) 1: 148 (1844).

Hosts – *Acer pubescens* Franch. SR: 14 May 2016, YG-S98 (TASM); QR: on *Rubus* sp., 24 July 1996 (Nuraliev 1999, listed as *Cytospora ambiens* Sacc.).

Note: First record on *Acer pubescens* in Uzbekistan

C. prunorum Sacc. & P. Syd., *Annales Mycologici* 2 (2): 191 (1904).

Hosts – *Prunus* sp. SR: 15 May 2016, YG-S72 (TASM), YG-S72-1 (TASM), YG-S66-1 (TASM), 14 May 2016, YG-S63, (TASM), YG-63-1 (TASM); on *Prunus cerasifera* Ehrh., 14 May 2016, YG-S65 (TASM), YG-S65-1 (TASM); on *Prunus persica* (L.) Batsch; QR: 14 July 1995 (Nuraliev 1999), 04 June 1996 (Nuraliev 1999).

Note: This widespread pathogen species damages many host species of *Prunus*.

C. salicis (Corda) Rabenh., *Kryptogamenflora*: 564 (1903).

Hosts – *Salix interior* Rowlee. SR: 13 May 2016, YG-S26 (TASM), YG-S26-1 (TASM), 15 May 2016, YG-S67 (TASM), YG-S67-1 (TASM); on *Salix alba* L., 14 May 2016, YG-S106 (TASM), YG-S106-1 (TASM); on *Salix* sp. 14 May 2016, YG-S109-2 (TASM), YG-S109 (TASM); on *Salix daphnoides* Vill. 29 August 2016, YG-ma44 (TASM); QR: on *Salix songarica* Andersson 30 June 1994 (Nuraliev 1999), 24 May 1995 (Nuraliev 1999).

Note: This pathogen species is record in various species of *Salix*.

Cytospora sp.

Host – *Acer pubescens* Franch. SR: 14 May 2016, YG-S98-3 (TASM).

VALSA Adans.

V. ambiens (Pers.) Fr., *Summa vegetabilium Scandinaviae* 2: 412 (1849).

Host – *Elaeagnus rhamnoides* (L.) A.Nelson. SR: 15 May 2016, YG-S77-2 (TASM).

Note: First record for study area. It occurs on various in host plants in Uzbekistan

V. salicina (Pers.) Fr., *Summa vegetabilium Scandinaviae* 2: 412 (1849).

Host – *Salix* sp. SR: 14 May 2016, YG-S109-3 (TASM).

Note: This first record for Southern Uzbekistan.

LEUCOCYTOSPORA (Pers.) Höhn.

L. translucens (Sacc.) Höhn., *Mitteilungen des Botanischen Instituts der Technischen Hochschule Wien* 5: 55 (1928).

Host – *Salix* sp., QR: 24 August 1995 (Nuraliev 1999, listed as *Cytospora translucens* Sacc.).

Glomerellales Chadev. ex Réblová et al.

Glomerellaceae Locq. ex Seifert & W. Gams

COLLETOTRICHUM Corda

C. dematium (Pers.) Grove, *The London journal of Botany* 56: 341 (1918).

Host – *Dianthus ugamicus* Vved., QR: 21 June 1995 (Nuraliev 1999, listed as *Vermicularia dematium* (Pers.) Fr.)

Genus with uncertain order position (incertae sedis)

Plectosphaerellaceae W. Gams et al.

VERTICILLIUM Nees

V. dahliae Kleb., *Mycologisches Centralblatt* 3: 66 (1913).

Host – *Gossypium hirsutum* L., QR: June 1994-1997 (Nuraliev 1999).

Phyllachorales M.E. Barr

Phyllachoraceae Theiss. & H. Syd.

PHYLLACHORA Nitschke ex Fuckel

Ph. graminis (Pers.) Fuckel, *Jahrbücher des Nassauischen Vereins für Naturkunde* 23-24: 216 (1870) [1869-70]

Host – *Festuca gigantea* (L.) Vill., QR: 02 June 1996 (Nuraliev 1999).

STIGMATULA (Sacc.) Syd. & P. Syd.

S. astragali (Lasch) P.F. Cannon, Mycopathologia 135(1): 65 (1996).

Host – *Astragalus* sp., QR: 10 August 1996 (Nuraliev 1999).

TELIMENELLA Petr.

T. gangraena (Fr.) Petr., Sydowia 1(1-3): 79 (1947).

Host – *Poa bulbosa* L., SR: 23 July 1986 (Solieva 1989).

POLYSTIGMA DC.

P. rubrum (Pers.) DC., Flore française 6: 164 (1815).

Hosts – *Prunus spinosissima* (Bunge) Franch. SR: 10 August 2015, IM0001 (TASM), 11 August 2015, IM0002 (TASM), 13 August 2015, IM32 (TASM); on *P. erythrocarpa* (Nevski) Gilli. 13 May 2016, YG-S39 (TASM); on *P. bucharica* (Korsh.) B.Fedtsch. ex Rehder. SR: 24 March 1948, YS305 (TASM); QR: on *P. domestica* L., 22 July 1995 (Nuraliev 1999).

Note: This species widespread on *Prunus* species, especially *P. spinosissima*. It infects 70 % of *P. spinosissima* individuals in mountain of Southern Uzbekistan.

Hypocreales Lindau

Nectriaceae Tul. & C. Tul.

GIBBERELLA Sacc.

G. avenacea R.J. Cook, Phytopathology 57: 735 (1967).

Host – *Hordeum vulgare* L., SR: (Sheraliev 2001, listed as *Fusarium avenaceum* (Fr.) Sacc.).

G. baccata (Wallr.) Sacc., Michelia 1 (no. 3): 317 (1878).

Hosts – *Malva neglecta* Wallr., *Hyoscyamus niger* L., QR: (Sheraliev 2001, listed as *Fusarium lateritium* Nees); SR: *Xanthium strumarium* L., (Sheraliev 2001).

G. gordonii C. Booth, The Genus *Fusarium*: 177 (1971).

Host – *Cucumis melo* L., *Lycopersicon esculentum* Mill., QR: (Sheraliev 2001, listed as *Fusarium heterosporum* Nees & T. Nees); SR: (Sheraliev 2001).

G. fujikuroi (Sawada) Wollenw., Zeitschrift für Parasitenkunde 3: 514 (1931).

Hosts – *Sisymbrium loeselii* L., *Capsella bursa-pastoris* (L.) Medik., *Prunus avium* (L.) L., QR: (Sheraliev 2001, listed as *Fusarium moniliforme* J. Sheld.); SR: on *Solanum melongena* L., *Cucumis sativus* L., (Sheraliev 2001).

G. intricans Wollenw., Fusaria autographica delineata 3: no. 810 (1930).

Hosts: *Sorghum halepense* (L.) Pers., QR: (Sheraliev 2001, listed as *Fusarium gibbosum* Appel & Wollenw.), *Cynodon dactylon* (L.) Pers., *Plantago lanceolata* L., (Sheraliev 2001, listed as *Fusarium gibbosum* Appel & Wollenw.); SR: *Zea Mays* L., (Sheraliev 2001).

G. pulicaris (Kunze) Sacc., Michelia 1 (no. 1): 43 (1877).

Hosts – *Morus nigra* L., *Solanums* sp., QR: (Sheraliev 2001, listed as *Fusarium sambucinum* Fuckel); SR: on *Prunus persica* (L.) Batsch, (Sheraliev 2001, listed as *Fusarium sambucinum* var. *minus* Wollenw.).

G. zeae (Schwein.) Petch, Annales Mycologici 34(3): 260 (1936).

Hosts – *Morus alba* L., QR: (Sheraliev 2001, listed as *Fusarium graminearum* Schwabe).

FUSICOLLA Bonord.

F. merismoides (Corda) Gräfenhan, Seifert & Schroers, in Gräfenhan, Schroers, Nirenberg & Seifert, Studies in Mycology 68: 101 (2011).

Hosts – *Malva neglecta* Wallr., *Arachis hypogaea* L., QR: (Sheraliev 2001, listed as *Fusarium merismoides* Corda); SR: on *Solanum tuberosum* L., *Cucumis sativus* L., (Sheraliev 2001, listed as *Fusarium merismoides* Corda).

FUSARIUM Link

- F. poae*** (Peck) Wollenw., in Lewis, Maine Agr. Exp. Sta. Bul. 219: 256 (1913).
Hosts – *Morus nigra* L., *Solanum americanum* Mill., QR: (Sheraliev 2001, listed as *Fusarium sporotrichiella* var. *poae* (Peck) Bilaï); SR: on *Triticum aestivum* L., (Sheraliev 2001, listed as *Fusarium sporotrichiella* var. *poae*)
- F. culmorum*** (Wm.G. Sm.) Sacc., Sylloge Fungorum (Abellini) 10: 726 (1892).
Host – *Zea Mays* L., SR: (Sheraliev 2001).
- F. incarnatum*** (Desm.) Sacc., Sylloge Fungorum (Abellini) 4: 712 (1886).
Hosts – *Convolvulus arvensis* L., QR: (Sheraliev 2001, listed as *Fusarium semitectum* Berk. & Ravenel); SR: on *Allium cepa* L., (Sheraliev 2001, listed as *Fusarium semitectum*).
- F. lactis*** Pirota, Arch. Labor. Bot. Critt. Univ. Pavia 2 & 3: 316 (1879).
Host – *Citrullus lanatus* (Thunb.) Matsum. & Nakai, SR: (Sheraliev 2001, listed as *Fusarium moniliforme* var. *lactis* (Pirota) Bilaï).
- F. oxysporum*** Schldt., Flora Berolinensis, Pars secunda: Cryptogamia: 106 (1824).
Hosts – *Cucumis sativus* L., *Plantago major* L., QR: (Sheraliev 2001); SR: on *Cucumis melo* L., *Gossypium hirsutum* L., (Sheraliev 2001).
- F. redolens*** Wollenw., Phytopathology 3(1): 29 (1913).
Hosts – *Dianthus caryophyllus* L., *Gossypium barbadense* L., QR: (Sheraliev 2001); SR: (Sheraliev 2001).
- F. solani*** (Mart.) Sacc., Michelia 2(no. 7): 296 (1881).
Hosts – *Solanum americanum* Mill., *S. melongena* L., QR: (Sheraliev 2001, listed as *Fusarium javanicum* Koord., Verh. K.); SR: on *Hyoscyamus niger* L., (Sheraliev 2001, listed as *F. javanicum* var. *radicicola* Wollenw.).

RECTIFUSARIUM L. Lombard, Crous & W. Gams

- R. ventricosum*** (Appel & Wollenw.) L. Lombard & Crous, in Lombard, van der Merwe, Groenewald & Crous, Studies in Mycology 80: 229 (2015).
Hosts – *Prunus persica* (L.) Batsch, QR: (Sheraliev 2001, listed as *Fusarium solani* var. *argillaceum* (Fr.) Bilaï); SR: on *Medicago sativa* L., *Morus alba* L., (Sheraliev 2001, listed as *Fusarium solani* var. *argillaceum*).

Sordariales Chad. ex D. Hawksw. & O.E. Erikss.

Chaetomiaceae G. Winter

CHAETOMIUM Kunze

- Ch. comatum*** (Tode) Fr., Systema Mycologicum 3: 253 (1829).
Substrate: soil. QR: 15 August 1962 (Gulyamova et al. 1990).
- Ch. indicum*** Corda, Icones fungorum hucusque cognitorum 4: 38, t. 8:104 (1840).
Substrate: soil. QR: 15 August 1962 (Gulyamova et al. 1990).
- Ch. globosum*** Kunze ex Fr., Systema Mycologicum 3: 255 (1829)
Substrate: soil. QR: 15 August 1962 (Gulyamova et al. 1990, listed as *Chaetomium olivaceum* Cooke & Ellis).
- Ch. spirale*** Zopf, Nova Acta Academiae Caesareae Leopoldino-Carolinae Germanicae Naturae Curiosorum 42 (5): 275 (1881).
Substrate: soil. QR: August 1962 (Gulyamova et al. 1990).

Lasiosphaeriaceae Nannf.

BOMBARDIA (Fr.) P. Karst.

- B. fasciculata*** Fr., Summa vegetabilium Scandinaviae 2: 389 (1849).
Substrate: Unknown rotting wood. QR: July 1975 (Gulyamova et al. 1990).

Xylariales Nannf.

Diatrypaceae Nitschke

ANTHOSTOMA Nitschke

A. melanotes (Berk. & Broome) Sacc., Sylloge Fungorum (Abellini) 1: 294 (1882).

Host – *Lonicera humilis* Kar. & Kir., - SR: 15 May 2016, YG-S103 (TASM), YG-S103-1 (TASM).

Note: New record for mycobiota of Uzbekistan.

Chaetosphaeriales Huhndorf et al.

Chaetosphaeriaceae Réblová et al.

DENDROPHOMA Sacc.

D. punicina Sacc., Rabenhorst's Kryptogamen Flora von Deutschland, Oesterreich und der Schweiz. Zweite Auflage (Leipzig) 1(6): 409 (1901).

Host – *Punica granatum* L., SR: 20 June 1985 (Solieva 1989).

Amphisphaeriales D. Hawksw. & O.E. Erikss.

Phlogicylindriaceae Senan. & K.D. Hyde

AMPHISPHAERELLA Henn.

A. xylostei (Pers.) Rulamort, Bulletin de la Société Botanique du Centre-Ouest, Nouv.sér. 17: 192 (1986).

Host – *Lonicera microphylla* Willd. ex Schult. SR: 07 May 2016, YG-49-2 (TASM).

Note: First record for Southern Uzbekistan.

MONOGRAPHELLA Petr.

M. nivalis (Schaffnit) E. Müll., Revue de Mycologie, 41 (1): 132 (1977).

Host – *Zea Mays* L., SR: (Sheraliev 2001, listed as *Fusarium nivale* Ces. ex Berl. & Voglino).

Genus with uncertain order position (incertae sedis)

Genus with uncertain family position (incertae sedis)

STRICKERIA Körb.

S. atraphaxis Kravtzev [as 'atraphaxidis'], in Schwarzman & Kravtzev, Trudy Inst. Bot. Akad. nauk Kazakh SSR 9: 18 (1961).

Host – *Atraphaxis spinosa* L., SR: 24 October 1967 (Gulyamova et al. 1990).

S. cerasi Feltgen, Vorstudien zu einer Pilzflora des Grossherzogthums Luxemburg. Nachträge II: 197 (1901).

Host – *Cerasus amygdaliflora* Nevski. SR: 13 May 2016, YG-S19-1 (TASM).

Note: First record for Southern Uzbekistan

S. circumclusa (De Not.) Cook, Grevillea 16 (78): 53 (1887).

Hosts – *Lonicera microphylla* Willd.ex Schult. SR: 13 May 2016, YG-S49 (TASM); on *Lonicera nummulariifolia* Jaub. & Spach., 14 May 2016, YG-S93-1 (TASM).

Note: First record for Southern Uzbekistan

S. ephedrae Golov., Trudy Sredneaziatskogo gos.universiteta, Biologicheski Nauki 14 (5): 8 (1950).

Host – *Ephedra equisetina* Bunge. SR: YG-S40 (TASM).

Note: First record for Southern Uzbekistan

S. megastega (Ellis & Everh.) Kuntze Revisio generum plantarum 3 (2): 534 (1898).

Hosts – *Crataegus pseudoheterophylla* subsp. *turkestanica* (Pojark.) K.I.Chr., QR: 16 June 1996 (Nuraliev 1999); SR: 20 July 1987 (Solieva 1989).

LEOTIOMYCETES O.E. Erikss. & Winka

Rhytismatales M.E. Barr ex Minter
Rhytismataceae Chevall.

MELASMIA Lév.

M. aceris-trifidi Sawada, Report of the Department of Agriculture Government Research Institute of Formosa 86: 155 (1943).

Hosts – *Acer tataricum* subsp. *semenovii* (Regel & Herder) A.E.Murray. SR: 11 August 2016, IM0005 (TASM), 13 May 2016, YG-S32 (TASM); on *Acer pubescens* Franch., 20 August 2016, YG-ma9 (TASM); on *Acer* sp., 13 August 2015, IM20 (TASM); on *Acer pentapomicum* Stewart ex Brandis., 13 May 2016, YG-S50-2 (TASM); 25 August 2016, YG-ma28 (TASM).

Note: First record for the study area. This species heavily infects leaves of various species of *Acer* in mountains of Southern Uzbekistan. This fungal disease damaged leaves of about 50% of maple trees there

M. loniceræ Jacz, Fungi Rossica Exsicata, no. 346.: no. 346 (1900).

Hosts – *Lonicera* sp. SR: 25 August 2016, YG-ma28 (TASM).

Note: First record for study area. It is heavily infecting 20 % of leaves of *Lonicera* sp.

M. punctata Sacc. & Roum., Michelia 2 (8): 632 (1882).

Host – *Acer platanoides* subsp. *turkestanicum* (Pax) P.C.DeJong. SR: 15 July 1987, YS025 (TASM).

Note: This species first recored in 1987 by Solieva, however we failed to find it on *Acer* spp. in the study area.

LEPTOSTROMA Fr.

L. herbarum (Fr.) Link, Handbuck zur Erkennung der Nutzbarsten und am Häufigsten Vorkommenden Gewächse 3: 345 (1833).

Host – *Salix excelsa* S.G.Gmel., SR: 19 May 1948 (Kirgizbaeva et al. 1997).

RHYTISMA Fr.

R. acerinum (Pers.) Fr., Kongliga Svenska Vetenskapsakademiens Handlinger 39: 104 (1818).

Host – *Acer pubescens* Franch. SR: 14 May 2016, YG-S100 (TASM), YG-S100-1 (TASM).

Note: First record for Southern Uzbekistan.

R. xylostei Naumov, Bulletin de la Société Mycologique de France 30: 425 (1915).

Host – *Lonicera nummulariifolia* Jaub. & Spach. SR: 07 September 1986, YS001 (TASM).

Helotiales Nannf.

Helotiaceae Rehm

HETEROPATELLA Fuckel

H. umbilicata (Pers.) Grove, The London journal of Botany 56: 319 (1918).

Host – *Asperula paniculata* Bunge, SR: 09 July 1986 (Solieva 1989).

SPORONEMA Desm.

S. phacidioides Desm., Annales des Sciences Naturelles Botanique, sér. 38: 172, 182 (1847).

Host – *Medicago sativa* L., QR: 10 July 1994 (Nuraliev 1999).

TRICLADIUM Ingold

T. splendens Ingold, Transactions of the British Mycological Society 25 (4): 385 (1942).

Host – *Alnus glutinosa* (L.) Gaertn., QR: 21 July 1995 (Nuraliev 1999).

Dermateaceae Fr.

DREPANOPEZIZA (Kleb.) Jaap

D. salicis (Tul. & C. Tul.) Höhn., Hedwigia 62: 54 (1920).

Host – *Salix* sp., QR: 14 June 1994 (Nuraliev 1999, listed as *Pseudopeziza salicis* (Tul. & C. Tul.) Potebnia).

GLOEOSPORIUM Desm. & Mont.

G. populi-albae Desm., Bulletin de la Société Botanique de France 4: 799 (1857).

Host – *Populus alba* L. SR: 10 September 2016, YG-Om3 (TASM), YG-Om4 (TASM).

Note: New record for mycobiota of Uzbekistan.

MARSSONINA Magnus

M. populi (Lib.) Magnus, Hedwigia 45: 88 (1906).

Host – *Populus alba* L. SR: 21 August 2016, YG-ma01 (TASM); 10 September 2016, YG-Om1 (TASM), YG-Om2 (TASM).

Note: First record for study area. Usually the pathogen is widespread and it starts developing on summer and fall season in Uzbekistan.

M. rosae (Lib.) Died., Kryptogamen-Flora der Mark Brandenburg 9 (5): 830 (1915).

Host – *Rosa* sp. SR: 11 August 2016, IM0004 (TASM).

Note: First record for Southern Uzbekistan.

M. salicicola (Bres) Magn., Hedwigia 45: 88 (1906).

Hosts – *Salix* sp. SR: 11 August 2016, IM29 (TASM), IM35 (TASM), IM31 (TASM), 21 August 2016, YG-ma43 (TASM); on *Salix alba* L., 21 August 2016, YG-ma043 (TASM), 29 August 2016, YG-ma1, (TASM); 12 September 2016, YG-Om8 (TASM).

Note: First record for study area. It is wide spreading in summer on leaves in various willow trees and infected marrsonian fungal disease. When more rain falls, the fungal disease is widespread and damages 70% of leaves on each host

M. truncatula (Sacc.) Magnus, Hedwigia 45: 89 (1906).

Host – *Acer platanoides* subsp. *turkestanicum* (Pax) P.C.DeJong. SR: 27 July 1986, YS026 (TASM).

Note: This species found only one place in study area by Solieva (1989).

Genus with uncertain order family (incertae sedis)

MONOSTICHELLA Höhn.

M. salicis (Westend.) Arx, Verhandelingen Koninklijke Nederlandse Akademie van Wetenschappen Afdeling Natuurkunde 51 (3): 131 (1957).

Host – *Salix interior* Rowlee. SR: 13 May 2016, YG-S26-3 (TASM).

Note: First record for Southern Uzbekistan.

CONIOTHECIUM Corda

C. tamariscinum Thüm., Flora, Regensburg 63: 477 (1880).

Host – *Convolvulus arvensis* L., QR: 10 July 1996 (Nuraliev 1999), 21 July 1997 (Nuraliev 1999).

CYLINDROSPORIUM Grev.

C. ferulinum Tartenova, in Shvartsman et al., Flora Sporovykh Rastenii Kazakhstana [Cryptogamic Flora of Kazakhstan], 7, [Fungi Imperfecti, Melanconiales] (Alma-Ata): 211 (1971).

Host – *Ferula foetida* (Bunge) Regel, QR: 10 July 1995 (Nuraliev 1999).

C. sibiricum Dearn. & Bisby, Mycologia 20(4): 245 (1928).

Host – *Trachomitum scabrum* (Russanov) Pobed., QR: 12 July 1997 (Nuraliev 1999).

TRIMMATOSTROMA Corda

T. betulae Tartenova & Philimonova, in Shvartsman et al., Flora Sporovykh Rastenii Kazakhstana [Cryptogamic Flora of Kazakhstan], 7, [Fungi Imperfecti, Melanconiales] (Alma-Ata): 150 (1971).
Host – *Glycyrrhiza glabra* L., QR: 21 July 1995 (Nuraliev 1999).

Genus with uncertain class, order and family position (*incertae sedis*)

CHAETOSTROMA Corda

Ch. atrum Sacc., *Michelia* 2(no. 6): 174 (1880).

Host – *Crepis pulchra* L., QR: 21 June 1996 (Nuraliev 1999).

MONODICTYS S. Hughes

M. paradoxa (Corda) S. Hughes, *Canadian Journal of Botany* 36: 786 (1958).

Host – *Glycyrrhiza glabra* L. QR: 24 July 1996 (Nuraliev 1999, listed as *Stemphylium paradoxum* (Corda) Fuckel.).

Taphrinomycotina O.E. Erikss. & Winka

TAPHRINOMYCETES O.E. Erikss. & Winka

Taphrinales Gäum. & C.W. Dodge

Taphrinaceae Gäum.

TAPHRINA Fr.

T. deformans (Berk.) Tul., *Annales des Sciences Naturelles Botanique*, sér. 55: 122 (1866).

Host – *Prunus persica* L., SR: April-July 1985 (Gulyamova et al. 1990)

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