J. Bangladesh Acad. Sci., Vol. 41, No. 2, 115-126, 2017

CHECKLIST OF DEUTEROMYCETOUS FUNGI OF BANGLADESH 1

SHAMIM SHAMSI*

Department of Botany, University of Dhaka, Dhaka-1000, Bangladesh

ABSTRACT

Earlier biodiversity explorations of Bangladesh have led to enumeration of varied flora and fauna. However, fungi being an important biodiversity component, and especially, the mycoflora having potential of impacting human economy and food security, present understanding is needed to make vision for the future. In this regard, past works (1952-2017) on fungi reported from Bangladesh were studied. Two hundred and ten species of anamorphic fungi under 51 genera of the family Dematiaceae are enlisted. The alphabetical checklist of the genera is provided herewith.

Key words: Checklist, Deuteromycetous Fungi, Bangladesh

INTRODUCTION

The Fungi imperfecti or imperfect fungi, also known as Deuteromycota, are fungi which do not fit into the commonly established taxonomic classifications of fungi that are based on biological species concepts or morphological characteristics of sexual structures because their sexual form of reproduction has never been observed; hence the name "imperfect fungi." Other, more informal names besides Deuteromycota ("Deuteromycetes") and fungi imperfecti are anamorphic fungi, or mitosporic fungi, but these are terms without taxonomic rank. Anamorphic or conidial fungi are asexually or mitotically sporulating fungi traditionally classified in the Fungi Imperfecti or the form taxon Deuteromycotina, with subsidiary form taxa Hyphomycetes and Coelomycetes (Alexopoulos *et al*. 1996, Kendrick. 1981 and Anonymous 2017a). The need for independent classification of anamorphs has always been questioned, and this persists today. Despite this, anamorphic features have contributed considerably to the elucidation of fungal taxonomy. Fewer than 5% of described anamorph species have known teleomorphs, most of which are in the Ascomycota. Numerous fungi are apparently permanently anamorphic and have lost the capacity to form a teleomorph. There are about 25,000 species that have been classified in the deuteromycota and many are basidiomycota or ascomycota anamorphs (Seifert and Gams 2001, Taylor 1995 and Anonymous.2017b). Bangladesh's alluvial soil is highly fertile, Area and boundaries total 143,998 km^2. Latitude: 23°37'N. Longitude: 90°30'E (Anonymous 2017c). Climate of Bangladesh is suitable for growth and reproduction of various mycroflora in nature as

* Corresponding author: <e-mail prof.shamsi@gmail.com>.

parasites or saprophytes. Present paper deals with hyphomyceteous fungi found in Bangladesh from 1952 till date (Ahmed 1952, 1968, Wadud 1962, Talukder 1974, Khan and Shamsi 1983a. 1983b, 1986, Fakir 1987, Khan *et al*. 2003, Siddiqui *et al.* 2007 and Bakr *et al.* 2007). Identification and classification of fungi were based on Ellis (1971, 1976), Ellis and Ellis (1997), Barnett and Hunter 1972, 1998 and 2000. Aforesaid scientists extensively worked on anamorphic fungi and they followed "Saccardean system of classification".

MATERIALS AND METHODS

The present paper deals with substratum range of 210 species of Mitosporic fungi (Deamtiaceous Hyphomycetes) reported so far from different habitats of Bangladesh. A checklist of Deuteromycetous fungi recorded from Bangladesh is compiled on the basis of published literatures of the Country. The checklist includes detail of the substrata on which they encountered as far as possible. This data will be useful in the compilation of fungal biodiversity of Bangladesh.

RESULTS AND DISCUSSION

The Hyphomycetes, like other groups of Deuteromycetes, is an artificial one composed almost entirely of anamorphic fungi of ascomycete affinity. The majority are known anamorphs of Ascomycetes, although some have basidiomycete affinities. Several of the latter are aquatic or aero-aquatic. They lack locular fruit bodies (conidiomata), and so sporulation occurs on separate or aggregated hyphae, which may or may not be differentiated; the thallus consists of septate hyphae. About 1400 genera comprising more than 11,500 species are recognized (Anonymous 2017b).

From 1952 till date, 210 species of anamorphic fungi under 51 genera of the family Dematiaceae have been recorded from Bangladesh (Ahmed 1952, 1968, Wadud 1962, Talukder 1974, Khan and Shamsi 1983a. 1983b, 1986, Fakir 1987, Khan *et al*. 2003 and Siddiqui *et al.* 2007 and Bakr *et al.* 2007). The most frequently collected species of the genera are *Alternaria, Cercospora, Cladosporium, Curvularia, Drechslera,* and *Pseudocercospora.* The alphabetical checklist of the genera is provided in Table 1.

Table 1: Check list of Fungi of Famous Dematiaceae.

Fungi	Host/ Habitat	Status	References
1. Acrocybella jasminicola (Hansf.) M.B. Ellis	On leaves of *Jesminum* sp.	Rare	Siddiqui *et al.* 2007
2. *Alternaria alternata* (Fr.) Keissler	On *Oryza sativa* L.	Wide host range including storage grains. mostly pathogenic	Shamsi *et al.* 2003
3. *A. brassicae* (Berk.) Saac.	On leaves of *Brassica juncea* L.	Wide host range. mostly pathogenic	Siddiqui *et al.* 2007

4.	*A. brassicicola* (Schweinitz) Wiltshire	On leaves, stems and pods of Bracecaceous hosts	Wide host range	Siddiqui *et al.* 2007
5.	*A. capsici-annui* Savulescu and Sandu Ville	On *Capsicum* sp.	Occurrence infrequent	Basak *et al.* 1994
6.	*A. citr*i Ellis and Pierce apud Pierce	On fruits of *Citrus* spp.	Occurrence infrequent	Siddiqui *et al.* 2007
7.	*A. dianthicola* Neergaard	On leaves of *Dianthus chinensis* L.	Common on Dianthus	Siddiqui *et al.* 2007
8.	*A. helienthi* (Hansf.) Tubaki & Nishihara	On *Helienthus annus* L.	Common on *Helienthus* spp.	Bakr. *et al.* 2007
9.	*A. lini* Dey	On *Linum ustitutissimum* L.	Occurrence infrequent	Bakr *et al.* 2007
10.	*A. longiceps* (Ellis & Everh.) Mason	On *Nicotiana tabaccum* L.	Causal agent of narrow leaf spot- amajor disease of tobacco	Talukdar 1974
11.	*A. macrospora* Zimm.	On cotton seeds	Occurrence infrequent	Mia , M.A.T. 1993
12.	*A. padwickii* (Ganguly) M.B Ellis	On grains of *Oryza sativa* L.	Major seed borne pathogen of rice in Bangladesh	Siddiqui *et al.* 2007
13.	*A. papaveris* (Bres.) Ellis.	On leaves of *Solanum melongena* L.	Occurrence infrequent	Siddiqui *et al.* 2007
14.	*A. phragmospora* Van Emden	On dead plant parts of *Calathea ornata* (Linden ex Lem.) Körn.	Occurrence infrequent	Siddiqui *et al.* 2007
15.	*A. pleuriseptata* (Kast and Har) Jorstad	On *Cucurbita maxima* Douch.	Occurrence infrequent	Haque and Shamsi 2011
16.	*A. porri* (Ellis) Cif.	On *Allium cepa* L.	Causing onion bloch.	Talukdar 1974
17.	*A. raphani* Groves & Sholko	Associated with diseases fruits of *Cassia occidentalis* L.	Common on *Raphanus* sp.	Siddiqui *et al.* 2007
18.	*A. ricini* (Yoshi) Hanaf.	*Ricinus comunis* L.	Occurrence infrequent	Talukdar 1974.
19.	*A. solani* (E. & M.) Jones and grout.	On *Lycopercicon esculentum* Mill., *Lactuca sativa L.*	Common on potato and tomato	Talukder 1974
20.	*A. sonchi* J.J. Davis	On *Lactuca sativa* L.	Common on *Raphanus* sp.	Talukdar 1974
21.	*A. tenuissima* (Kunz. *ex* Pers.) Wiltshire	On dried fruits of *Abelmoschus esculentus* (L.) Moen	On spotted fruits of *Lycopersicon lycopersicum* Mill., *Helianthus annus L.*	Siddiqui *et al.* 2007
22.	*A. triticicola* Vasant Rao	On leaves of *Triticum aestivum* L.	Occurrence frequent on wheat. Also infect *Allium cepa* L.	Siddiqui *et al.* 2007
23.	A. *triticina* Prasada & Prabhu	On leaves of *Triticum aestivum* L.	Occurrence frequent on wheat	Basak *et al*. 1987
24.	*A. zinnae* M.B. Ellis	On seeds of *Tagetes* sp.	Causing seed infection	Bakr *et al.* 2007.
25.	*Arthrinium phaeospermum* (Corda) M.B. Ellis	On *oryza sativa* L.	Occurrence infrequent	Siddiqui *et al.* 2007
26.	*Arthrinium saccharicola* Stevenson,	*Rosa* sp.	Occurrence infrequent	Ghos and Shamsi 2014.
27.	*Belternia mangiferae* (Munjal & Kapoor)	On fallen leaves of *Mangifera indica* L.	Occurrence infrequent	Siddiqui *et al.* 2007
28.	*Bipolaris australiensis* (M.B. Ellis) Tsuda & Ueyama	Isolated from felled, painted wood.	Occurrence infrequent	Shamsi and Yasmin 2009
29.	*B.hawaiiensis* (Bugnicourt ex M.B. Ellis) Uchida & Aragaki	Isolated from healthy leaves of *Gerbera aurantiaca* L.	Occurrence infrequent	Shamsi and Yasmin 2013
30.	*B. oryzae* (Breda de Haan) Shoemaker	Isolated from *Oryza sativa* L.	Common on rice varieties.	Bakr *et al.* 2007

31.	*Bipolaris spicefera* (Bainier) Subrum.	Isolated from *Oryza sativa* L.	Occurrence infrequent	Shamsi 1999
32.	*B. sorokiniana* (Sacc.) Shoem	. Isolated from *Triticum aestivum* L.	Common on wheat varieties	Bakr *et al.* 2007
33.	*Bipolaris tetramera* (McKinney) Shoemaker	On *Triticum* sp.	Occurrence infrequent	Bakr *et al.* 2007
34.	*Botrytis cineria* L.	*Cicer aretanum* L.	Occurrence frequent	Bakr *et al.* 2007.
35.	*Cercospora althaeina* Sacc.	On leaves of *Althea rosea* L.	Common on *Althea rosea* L.	Khan and Shamsi 1983a
36.	*C. arachidicola* Hori.	*Arachis hypogaea* L.	Common on Groundnut	Talukdar 1974
37.	*C. annulata* Cooke.	*Ficus hispida* L.	Rare	Talukdar 1974
38.	*C. batatae* Zimm.	On *Ipoemea batatus* L.	Occurrence frequent	Talukdar 1974
39.	C. *beticola* Sacc.	On *Beta vulga*ris L.	Minor Leaf spot	Talukdar 1974
40.	*C. blumae*Thirum.	On *Blumea lacera* L.	Occurrence frequent	Talukdar 1974
41.	*C. brassicola* P. Henn.	On *Brassica oleraceae* L.	Occurrence frequent	Khan and Shamsi 1983a
42.	*C. canescens* Ellis and Martin	On *Lablab niger* L.	Common on Blackgram (Mashkolai), *Vigna catjang* Walp.	Talukder 1974
43.	*C. caracallae*	On Lentils	Occurrence infrequent	Bakr *et al.* 2007
44.	*C. calendula* Sacc.	On *Calendula officinales* L.	Common on *Callendula*	Khan and Shamsi 1983a
45.	*C. cofficola* B. & Cke.	On *Coffea Arabica* L.	Causing minor leaf spot. Occurrence infrequent.	Talukdar 1974
46.	*C. capsici* Heald and Holf	On *Capsicum* spp.	Occurrence frequent	Talukdar 1974
47.	*C. corchori* Sawada	On *Corchorus capsularis* L.	Common on jute	Khan and Shamsi 1983a
48.	*C. crotalariae* Sacc.	On *Crotalaria juncea* L.	Major disease	Talukdar 1974
49.	*C. cruenta* Sacc.	On *Vigna mugo* (L.) Hepper	Major disease	Talukdar 1974
50.	*C. cucurbitae* Ell.&Ev.	On *Benincasa cerifera* Savi.	Causing leaf spot	Talukdar 1974
51.	*C. fukushiana* (Matsura) Yamamoto	On *Impatiens balsamina* L.	Minor disease	Khan and Shamsi 1983a
52.	*C. gerberae* Chupp and Vie´gas	On *Gerbera* sp.	Occurrence frequent	Khan and Shamsi 1983a
53.	*C. gossypina* Cooke	On *Gossypium* spp.	Occurrence frequent	Khan and Shamsi 1983a
54.	*C. grandissima* Rongel.	On *Dahlia hybrida*	Occurrence frequent	Siddiqui *et al.* 2007
55.	*C. helianthicola* Chupp and Viegas	On *Helienthus annus* L. , and *H. debilis* Nutt.	Occurrence frequent	Siddiqui *et al.* 2007
56.	*C. hemigraphidis* Khan & Shamsi sp. nov	On leaves of *Hemigraphis* sp.	Occurrence frequent	Shamsi 1978
57.	*C. impatensis*	On *Impatiens balsamina* L.	Causing leaf spot	Talukdar 1974
58.	*C. janseana* (Racib.) O. Const	On leaves of *Oryza sativa* L.	Causing narrow brown leaf spot of rice	Bakr *et al.* 2007.
59.	*C. kikuchii* . Matsumoto & Tomoy.	Isolated from *Glycin max* L.	Occurrence frequent	Bakr *et al.* 2007.
60.	*C. lactucae* Henn.	On *Lactuca sativa* L.	Occurrence frequent	Talukdar 1974
61.	*C. longissima* Cugini *ex* Trav,	On *Lactuca sativa* L.	Occurrence frequent	Khan and Shamsi 1983a
62.	*C. lupinicola* Lieneman	On leaves of *Lupinus* sp.	Occurrence frequent	Khan and Shamsi 1983a
63.	*C. melongenae* Walles	On leaves of *Solanum melongena* L.	Occurrence frequent	Shamsi 1978
64.	*C. momordiceae* Mc. Rac.	On *Momordica chorantia* L., and *M. cochinchinensis* (Lour.) Spreng.	Occurrence frequent	Talukdar 1974
65.	*C. musae* Zimm.	On *Musa* spp.	Causing sitago disease of Banana	Shahjahan 1993

66.	*Cinicotimae* Ell. & Eve.	On *Nicotiana tobacum* L.	Causal agent of Frog eye leaf spot of tobacco –a major disease.	Talukdar 1974
67.	*C. nebulosa* Sacc. Nuov.	On leaves of *Althaea rosea* L.	Occurrence frequent	Shamsi 1978
68.	*C. oryzae* Miyaka	On leaves of *Oryza sativa* L.	Causing narrow brown leaf spot of rice	Talukdar 1974
69.	*C. piperina* Khan and Shamsi sp. nov.	On leaves of *Piper betel*. L.	Occurrence infrequent	Shamsi1978
70.	*C. polygonaceae* Ellis & Everh.	On leaves of *Polygonum chinensis* L.	Occurrence infrequent	Shahriar 1997
71.	*C. puderi* Davis,	On *Rosa* sp.	Occurrence frequent	Bakr *et al.* 2007.
72.	*C. ricinella* Sacc. and Berl.	On *Ricinus communis* L.	Occurrence infrequent	Siddiqui *et al.* 2007
73.	*C. rumicis* Ellis and Langolois	On leaves of *Rumex maritimus* L.	Occurrence infrequent	Shahriar 1997
74.	*C. sesami* Zimm.	On *Sesamum indicum* L.	Causing minor leaf spot	Talukdar 1974.
75.	C.*subsessilis* H. Syd.	On *Azadirechta indica* L.	Causing leaf spot	Bakr *et al.* 2007.
76.	*C. trichosanthes* Rang. & Hand	On *Trichosanthes anguina* L.	Causing leaf spot – a major disease	Talukdar 1974.
77.	*C. truncata* Ellis and Everhart.	*Vitex adnata* Wall.	Occurrence infrequent	Shahriar 1997
78.	*Cercosporella tinosporae* (Lacy & Thirum) Deighton	On leaves of *Tinospora cordifolia* (Thunb.) Miers	Occurrence infrequent	Siddiqui *et al.* 2007
79.	*Chalara sharminensis* sp. nov.	On *Chorcorus capsularis* L.	Rare	Shamsi and Sultana 2012
80.	*Cladosporium asterinae* Deighton	Overgrowing on the colonies of *Asterina pemphioides* Cooke on *Eugenia* sp.	Occurrence infrequent	Khan & Shamsi 1986
81.	*C. cladosporioides* (Fresen). De Vries.	Isolated from healthy and infected leaves of *Gerbera* spp.	Occurrence infrequent	Siddiqui *et al.* 2007
82.	*Cladosporium elatum* (Harz) Nannf.	On dried fallen leaves *of Hevea brasiliensis* L.	Occurrence frequent	Siddiqui *et al.* 2007
83.	*C. herbarum* (Pers.) Link.	On sheaths of *Saccharum officinarum* L.	Occurrence infrequent	Siddiqui *et al.* 2007
84.	*C. oxysporum* Berk. & Curt.	On dead leaves of *Cucurma arometica* L.	Common saprophyte. Occurrence frequent	Siddiqui *et al.* 2007
85.	*C. varians* Braun, Melnik & K. Schu.	Isolated from *Arthrospira platensis* (Nordstedt) Gomont [*Spirulina platensis* (Gomont) Geitler],	Occurrence infrequent	*Kibria et al.* 2016
86.	*C. sphaerospermum* Penz.	On leaves of *Justicia gendarussa* Burm.f.	Occurrence infrequent	Khan and Hossain 1978
87.	*C. tenuissima* Cooke	On dead attached branches of *Lantana camera* L.	Occurrence frequent	Siddiqui *et al.* 2007
88.	*Corynespora cassiicola* (Berk. & Curt.) Wei	On dried fruits of *Abelmoschus esculentus* (L.) Moen	Wide host range	Shamsi and Sultana 2012
89.	*Corynespora citricola*	On *Carica papaya* L.	Rare	Helal 2017
90.	*Corynespora smithii* (Berk. & Br.) M. B. Ellis.	On dried stems and capsules of *Sesamum indicum* L.		Shamsi and Sultana 2012
91.	*C. yerbae* (Speg.) M. B. Ellis.	On dried stems and capsules of *Sesamum indicum* L.	Rare	Shamsi and Sultana 2012
92.	*Curvularia affinis* Boedijn	On *Axonopus compressus* (Sw.) Beauv.	Occurrence infrequent	Siddiqui *et al.* 2007
93.	*C. brachyspora* Boedijn	Isolated from fruits of *Capsicum frutescens* L.	Also isolated from fruit, *Tagetes* spp.	Haque and Shamsi 2011

94. *C. clavata* Jain	On dead leaf of *Cucurma aromatica* Salis.	Occurrence infrequent	Siddiqui *et al.* 2007
95. *C. eragrostidis* (P. Heen) J.A. Meyer	Isolated from fruits of *Trichosanthes dioica* Roxb.	Occurrence infrequent	Haque and Shamsi 2011
96. *C. falax* Boedijn	Isolated from fruits of *Cucurbita maxima* Duch.	Occurrence infrequent	Haque and Shamsi 2011
97. *C. geniculata* (Tracy & Earle) Boedijn	On *Zea mays*. L.	Occurrence infrequent	Siddiqui *et al.* 2007
98. *C. harveyi* Shipton	Isolated from the infected leaves of *Zea mays* L.	Rare	Shamsi and Yasmin 2007
99. a. *C. lunata* (Wakker) Boedijn	On *Abelmoscus esculentus* L.	Wide host range including rice and wheat grains	Shamsi *et al.* 2003
b. *C. lunata* var. area	Isolated from O*ryza sativa* L.	Occurrence infrequent	Shamsi *et al.* 2003
100. *C. pallescens* Boedijn	Isolated from O*ryza sativa* L.	Occurrence frequent	Shamsi *et al.* 2003
101. *C. penniseti* (Mitra) Boedijn	Isolated from fruits of *Capsicum frutescens* L.	Occurrence frequent	Haque and Shamsi 2011
102. *C. prasadii* R.L. & B.L. Mathur.	Isolated from *Lablab purpurea* L.	Occurrence infrequent	Haque and Shamsi 2011.
103. *C. senegalensis* (Speg.) Subram.	*Cucurma aromatic* Salis.	Occurrence in frequent	Siddiqui *et al.* 2007
104. *C. stapeliae* (du Plessis) Hughes and du Plessis	Isolated from fruits of *Trichosanthes anguina* L.	Occurrence infrequent	Haque and Shamsi 2011
105. *Drechslera cynodontis* (Marignoni) Subrum & Jain	On leaves of *Cynodon dactylon* L.	Occurrence frequent	Khan and Shamsi 1986
106. *D. halodes* (Drechsler) Subrum & Jain	On dead leaves of standing *Sachharum officinarum* L.	Occurrence infrequent	Khan and Shamsi 1986
107. *Drechslera* state of *Cochliobolus heterostrophus* (Drechsler) Drechsler	On older leaves of *Zea mays* L.	Occurrence infrequent	Siddiqui *et al.* 2007
108. *D. hevae* (Petch.) Ellis	On *Hevea brasiliensis*	Minor disease	Talukdar 1974
109. *D. oryzae* (Breda de Haan) Subram. & B.L. Jain	Isolated from *Oryza sativa* L.	Causal agents of brown spot disease of rice. Occurrence in frequent in different rice and wheat varieties	Shahjahan 1993
110. *D. rostrata* (Drechsler) M.J. Richardson & E.M. Fraser	On wheat	Occurrence infrequent	Bakr *et al.* 2007.
111. *D. sachhari* (E.J. Butler) Subram. & B.L. Jain,	On *Sachharum officinarum* L.	Occurrence infrequent	Bakr *et al.* 2007.
112. *D. setariae* Shoemaker	. On *Sateria italica*	Occurrence infrequent	Bakr *et al.* 2007.
113. *D. stenospilum* (Drechsler) Subram. & B.L. Jain	On *Zea mays* L.	Causing brown stripe.	Bakr *et al.* 2007.
114. *D. tetramera* (McKinney) Subram.	*Triticum* spp.	Occurrence infrequent	Bakr *et al.* 2007.
115. *D. turcica* (Pass.) Subram. & B.L. Jain	On *Zea mays* L.	Attack flowering to maturity	Shahjahan 1993
116..*D. tritici-repentis*	*Triticum* sp.	Occurrence infrequent	Bakr *et al.* 2007.
117. *D. turcica* (Pass) Subrum . & Jain	On Living leaves of *Zea mays* L.	Occurrence infrequent	Khan and Shamsi 1986
118. *D. victoriae* (F. Meehan & H.C. Murphy) Subram.	*Triticum* sp.	Occurrence infrequent	Bakr *et al.* 2007
119. *Dendryphiella vinosa* (Berk. & Curt.) Reisinger	On dead standing stem of *Glycin max* (L.) Merr.	Occurrence infrequent	Khan and Shamsi 1986
120. *Epicoccum nigrum* Link	On *Areca catechu* L.	Occurrence infrequent	Talukdar 1974
121. *Epicoccum purpurescens* Ehrenb. *Ex* Schlecht.	*Rosa* sp.	Occurrence infrequent	Ghosh and Shamsi 2014

122. *Exobasidium vexans* Massee	On *Canellia sinensis* L.	Minor disease	Talukdar 1974
123. *Exosporium extensum* (Petch.) Ellis	On leaves of *Borassus flabillifer* L.	Occurrence infrequent	Talukdar 1974
124. *Exosporium palmivorum* Saac.	On *Borrassus flabillifer* L.	Minor disease	Talukdar 1974
125. *Gonatophragmium mori* (Sawada) Deighton,	On leaves of *Ficus hispida* L.	Rare	Shamsi *et al.* 2017
126. *Helminthosporium avenae* Br. & Cav.	On *Avena sativa* L.	Causing minor leaf spot.	Talukdar 1974
127. *H. gramineum* Rabh.	On *Hordium vulgarae* L.	Causing leaf stripe -a major disease	Talukdar 1974
128. *heveae* Pet.	On *Hevea brasiliensis*	Causing minor leaf spot.	Talukdar 1974
129. *H. sacchari* (Brida de Hann) Butl.	*Saccharum offininarum* L.	Causing major disease	Talukdar 1974.
130. *H. solani*	*On Solanum tuberosum* L.	Causing leaf spot.	Bakr *et al.* 2007.
131. *H. sativum* Pamm., Bakke	On *triticum aestivum*	Causing seedling blight and leaf spot	Talukdar 1974
132. *H. turcicum* Pass.	On *Zea mayze* L.	Causing major disease	Talukdar 1974
133. *Hemicula fusocatra* Traaen.		Rare	Siddiqui *et al.* 2007
134. *Hormodendrum olovaceum* (Corda) Bon	On storage grain	Occurrence infrequent	Siddiqui *et al.* 2007
135. *Memnoniella echinata* (Riv.) Galloway	On dried leaves	Occurrence infrequent	Siddiqui *et al.* 2007.
136. *Monodictys putredinis* (Wallr) Hughes	On dried stems of *Corchorus capsularis* L.	Rare	Shamsi and Sultana 2010
137. *Mycoleptodiscus indicus* (Sahni) Sutton	On leaves of Lima bean	Rare	Siddiqui *et al.* 2007
138. *Mycosphaerella coffeicola* (Cooke) J.A.Stev. & Wellman	On *Coffea arabica* L.	Causing Minor leaf spot.	Talukdar 1974.
139. *M. musicola* Cke.	On *Musa* spp.	Major disease	Talukdar 1974
140. *M. pinodes* B. & Blox.	On *Cicer arietinum* L.	Occurrence infrequent	Talukdar 1974
141. *Mycovellosiella cajani* (P. Henn.) Rangel *ex* Trotter	On leaves of *Cajanus cajan* L. Millsp.	Occurrence infrequent	Khan and Shamsi 1986
142 *Myrotheceum oryzae*	On *Oryza sativa* L.	Occurrence infrequent	Bakr *et al.* 2007.
143. *M. rodidum* Tode	On *Phaseolus* sp.	Occurrence infrequent	Bakr *et al.* 2007.
144. *M. verrucaria* (Alb. & Schwein.) Ditmar	On *Phaseolus mungo* L.	Occurrence infrequent	Bakr *et al.* 2007.
145. *Nigrospora oryzae* (Berk. & Broome) Petch	On *Oryza sativa* L.	Occurrence infrequent	Shamsi *et al.* 2003.
146. *N. sacchari* (Speg.) Mason	On *Saccharum officinarum* L.	Occurrence 1nfrequent	Siddiqui *et al.* 2007
147. *N. sphaerica* Mason	On *Oryza sativa* L.	Occurrence 1nfrequent	Shamsi *et al.* 2003.
148. *Periconia byssoides* Pers. *Ex* Merat	On leaves of *Glycine max* L. (Merr.)	Occurrence 1nfrequent	Khan and Shamsi 1986
149. P. *cookie* Masson & M. B. Ellis	On leaves of *Bambus*a sp.	Occurrence 1nfrequent	Siddiqui *et al.* 2007
150. *P. lateralis* Ellis & Everh	On *Cynadon dactylon* Pers.	Occurrence 1nfrequent	Khan and Shamsi 1986
151. *Phialophora parasitica* Ajello, Georg and Wang	Recored on Soil, wood	Occurrence 1nfrequent	Siddiqui *et al.* 2007
152. *Pithomyces graminicola* R.Y. Roy & Rai.	On *Saccharum officinarum* L.	Occurrence 1nfrequent	Siddiqui *et al.* 2007
153. *Phaeoisariopsis personata* Berk. and M. A.	*Arachis hypogaea* L.	Causal agent of tikka disease of groundnut	Shamsi and Sharmin 2012
154. *Pseudocercospora abelmoschi* (Ellis & Ev.) Deighton	*Hibiscus esculentus* L.	Occurrence frequent	Khan and Shamsi 1983 (Dec.)

155. *P. angastata* (Chupp & Solheim) Deighton	*Cassia fistula* L.	Occurrence 1nfrequent	Khan and Shamsi 1983 b
156. *P. arboriae* (Tharp.) Khan and Shamsi, comb. Nov	On leaves of *Vitis bracteata* Benth.	Occurrence 1nfrequent	Siddiqui *et al.* 2007
157. *P. atromarginalis* (Atk.) Deighton	On leaves of *Solanum filicifolicum* Ort.	Occurrence 1nfrequent	Siddiqui *et al.* 2007
158. *P. avicularis* (Winter) Khan & Shamsi, comb. Nov.	*Polygonum orientale L.*	The fungal species was also recorded on *P. hydropiper* L.	Khan and Shamsi 1983b
159. *P. bangalorensis* (Thirum. And Chupp) Deighton	*Aristolochia indica* L.	Occurrence 1nfrequent	Khan and Shamsi 1983 b
160. *P. baringtonae* (H. & P. Sydow) Khan & Shamsi, comb. Nov.	*Barringtonia acutangula* Gaertn	Occurrence infrequent	Khan and Shamsi 1983 b
161. *P. blumae* (Thöman) Deighton	O leaves of *Blumea lacera* (Burm.f.) DC	The fungal species recorded as *Cercospora blumae* on *B. laciniata* (Ahmed *et at*. 1962) and *B. lacera* (Ishaque and Talukder 1967, Tatukder 1974).	Siddiqui *et al.* 2007
162. *P. bradburyae* (Young) Deighton	On leaves of *Centrosema pubescen* Benth.	Occurrence infrequent	Siddiqui *et al.* 2007
163. *P. cocculi* (H. Syd, and McRae) Deighton	On leaves of *Tinospora cordifoia* (Willd.) Hook	Occurrence infrequent	Siddiqui *et al.* 2007
164. *P. cotizensis* (Moller & Chupp) Deighton	*Crotalaria juncea* L.	Occurrence infrequent	Khan and Shamsi 1983 b
165. *P. cruenta* (Sacc.) Deighton	On leaves of *Lablab niger* L.	Also reported on other members of Leguminosae. Occurrence frequent	Shamsi 1978
166. *P. dolichi* (Ellis and Everhart) Khan and Shamsi	On leaves of *Vigna catjang* Walp	Occurrence infrequent	Shamsi 1978
167. *P. dalbergiae* (Sun) Yen,		Occurrence frequent	Shamsi 1978
168. *P. egenula* (Chupp and Doidge) Khan and Shamsi, comb. nov.	On leaves of *Solanum melongena* L.	Occurrence frequent	Siddiqui *et al.* 2007
169. *P. eupatorii* (Peck) Khan and Shamsi. comb. nov.	On leaves of *E. odoratum* L.	Occurrence infrequent	Siddiqui *et al.* 2007
170. *P. eupatoricola* (Govindu & Thirumalachar) Khan & Shamsi, comb. nov.	*Eupatoricola odoratum* L.	Occurrence infrequent	Khan and Shamsi 1983 b
171. *P. fuligena* (Roldan) Deighton	*Lycipersicon esculentum* Mill	Occurrence frequent	Khan and Shamsi 1983 b
172. *P. jujubae* (Chowdhury) Khan & Shamsi. comb. nov.	*Zyzipus Jujuba* Lamk.	Occurrence frequent	Khan and Shamsi 1983 b
173. *P. mori* (Hara) Deighton	*Morus indica* L.	Occurrence infrequent	Khan and Shamsi 1983b
174. *P. nigricans* (Cooke) Deighton	On leaves of *Cassia sophera* L.	Occurrence infrequent	Siddiqui *et al.* 2007
175. *P. pergularae* Khan and Shamsi sp.nov.	On leaves of *Pergularia daemia* (Fersk) Chiov.	On leaves of *Pergularia daemia* (Fersk) Chiov.	Shamsi 1978
176. *P. punicae* (P. Heen.) Deighton	On leaves of *Punica granatum*. L.	Occurrence infrequent	Siddiqui *et al.* 2007
177. *P. rauwolfiae* (Chupp and Muller) Khan and Shamsi. comb. Nov.		Occurrence frequent	Siddiqui *et al.* 2007
178. *P. sesbaniae* (P. Heen.) Deighton	On leaves of *Sasbania grandiflora* (L.) Poir.	Occurrence infrequent	Siddiqui *et al.* 2007

179. *P. vestitae* (Remakr.) Deighton		Occurrence frequent	Shamsi 1978
180. *P. viticis* (Ellis and Everhart) Khan and Shamsi comb. Nov.	On leaves of *Vitex nigundo* L.	Occurrence frequent	Siddiqui *et al.* 2007
181. *Psudocercospra* sp.	On leaves of *Lantana camara* L.	Occurrence frequent	Shahriar 1997
182. *Pseudospiropes leptotrichum* (Cooke & Ellis) Hughes	On dried leaves of *Saccharum officinarum* L.	Occurrence infrequent	Shahriar 1997
183. *Pteroconium* state of *Apiospora camptospora* Penz. & Sacc.	On dried leaf sheaths of *Saccharum officinarum* L.	Occurrence infrequent	Siddiqui *et al.* 2007
184. *Pyriculara oryzae* Cav.	On *Oryza sativa* L.	Causal agent of blast disease of rice. Major disease	Talukdar 1974
185. *P. grissea* (Cooke) Sacc.	On *Oryza sotiva* L.	‘’	Shahjahan 1993
186. *Scytalidium thermophilum* (Cooney and Emerson) Austwick	On iron material in a private museum, Ahsan Monzil. Dhaka	Rare	Siddiqui *et al.* 2007
187. *Spegazzini a deitonii* (Hughes) Subram	On On dried leaves of *Saccharum officinarum* L.	Rare	Siddiqui *et al.* 2007
188, *Spiropes dorycarpus* (Mont.) M. B. Ellis	Overgrowing on colonies of *Asterina pleuripora* Ryan on *Shorea robusta* Gaertin	Rare	Khan and Shamsi 1986
189. *S. helleri* (Stev.) M. B. Ellis	On dead leaf sheaths of *Bambusa* sp.	Rare	Siddiqui *et al.* 2007
190. *Sporidesmium tropicale* M. B. Ellis	On dead attached branches of *Ixora coccinia* Linn.	Rare	Siddiqui *et al.* 2007
191. *Stemphylium btryosum* Wallr.	*Alliam cepa* L.	Causing onion blight/bloch	Siddiqui *et al.* 2007
192. *Stemphylium* state of *Pleospora herbarum* (Pers ex Fr.) Rabenh.	On *Solanum melongena* Wall.	Caused stemphylium blight of lentil	Siddiqui *et al.* 2007
193. *S. sarcinifome* (Cav.) Wiltshire	On fruits *of Citrus aurantifolia* (Chirst & Penz.)SM.	Caused stemphylium blight of lentil.	Siddiqui *et al.* 2007
194. *S. vescarium* (Wallr.) Simmons	On *Solanun melongena* Wall.	Occurrence infrwquent	Siddiqui *et al.* 2007
195. *Sporotrichum roseolum* Oudemans and Beijerinck	On Soil and Water	Occurrence infrequent	Siddiqui *et al.* 2007
196. *Stachybotrys atra* Corda	On dried leaves of *Sechium edule* (JACQ.) SW.	Occurrence infrequent	Shamsi and Sultana 2010
197. *Stenella aegles* S.S. Prasad	On leaves of *Aegle marmelos* Corr.	Occurrence infrequent	Khan and Shamsi 1986
198 *Taeniolella breviuscula* (Berk. & Curt.) Hughes	On dried stem of *Chorcorus capsularis* L.	Occurrence infrequent	Siddiqui *et al.* 2007.
199. *Tetraploa aristata* Berk & Br.	On *Brassica oleracea* L.	Occurrence infrequent	Siddiqui *et al.* 2007
200 *Thielaviopsis paradoxa* (de Sey.) V.Ho.	On *Areca catechu* L.	Causing stom rot and bleeding- major disease	Talukdar 1974
201. *Torula herbarum* f. *quaternella* Sacc.	On old attached fruits of *Abelmoschus esculentus* (L.) Moen	Also found on dead leaves of *Dracaena spicata* Roxb., on dead attached branches of *Cajanus cajan* (L.) Millsp. and on older jute stem.	Siddiqui *et al.* 2007
202. *Triposporium elegans* Corda	On dried leaf sheath of *Saccharum officinarum* L	Rare	Siddiqui *et al.* 2007
203. *Ulocladium chlamydosporum* Mouchacca	On dried leaf sheath of *Saccharum officinarum* L	Occurrence infrequent	Siddiqui *et al.* 2007

204. *Verticillium tenuissimum* Corda	On *Bambus*a sp.	Occurrence infrequent	Siddiqui *et al.* 2007.
205. *V. albo-atrum* Reinke & Berthold	*Isolated from Arthrospira platensis* (Nordstedt) Gomont [*Spirulina platensis* (Gomont) Geitler],	Occurrence infrequent	*Kibria et al. 2016*
206. Xylohypha pinicola D. Hawksw.	Associated with infected fruits of *Momordica cochinchinensis* (Lour.) Spreng.	Rare	Shamsi *et al.* 2017
207. *Zygosporium gibbum* (Sacc., Rosus & Bomm.) Hughes	On dead leaves of *Saccharum officinarum* L.	Also found on dead leaf sheaths of *Cocos nucifera* L.	Khan *et al.* 2003
208. *Z. masonii* Hughes	On dead leaves of *Saccharum officinarum* L.	Occurrence infrequent	Khan *et al.* 2003
209. *Z. minus* Hughes	On dead leaves of *Elaeis guieensis* Jacq.	Also found on dead leaves of *Dracaena spicata* Roxb.	Khan *et al.* 2003
210. *Z. oscheoides* Mont.	On dead leaves of *Saccharum officinarum* L.	Also found on found on dead leaves of *Dracaena spicata* Roxb. And dead leaf sheaths of *Cocos nucifera* L.	Khan *et al.* 2003

REFERENCES

Ahmed, Q. A. 1952. Fungi of East Bengal. *Pak. Jour. For*. **2**:91-115.

Ahmed, Q. A. 1968. Diseases of jute in East Pakistan. Jute and Jute Fabrics. Pak.7: 147-151.

Alexopoulos, C.J., C. W. Mims and M. Blackwell. 1996. Introductory Mycology, 4th edn. pp. 869.

Anonymous 2017c. Geography of Bangladesh. From Wikipedia, the free. encyclopedia.

https://en.wikipedia.org/wiki/Geography of Bangladesh

Anonymous. 2017a. Fungi imperfecti **.** From Wikipedia, the free encyclopedia https://en.wikipedia.org/wiki/Fungi_imperfecti

Anonymous. 2017b. Hyphomycetes. From Wikipedia, the free encyclopedia

https://en.wikipedia.org/wiki/Hyphomycetes

Bakr, M.A., H. U, Ahmed and M. A. Wadud Mian. 2007. Advances in Plant Pathological research in Bangladesh. Plant Pathology Division. BARI. Gazipur. Bangladesh. pp. 344.

Barnett, H. L. and Hunter B.B. 2000. *Illustrated Genera of Imperfect fungi*. 4th edn., Burgess Pub. Company, Minneapolis. pp. 218.

Barnett, H.L. and B.B. Hunter,. 1998. *Illustrated genera of imperfect fungi*. 4th edn. Burgess Publishing Company: Minneapolis, 241pp.

Barnett, H.L. and B.B. Hunter. 1972. *Illustrated Genera of Imperfect fungi*. Burgess Publishing Company, Minneapolis .U.S.A. 3rd edn. pp. 241.

Basak, A. B., G.A. Fakir and M. A. U. Mritha. 1994. Histopathology of Alternaria infected chilli seeds. *Bangladesh, J. Microbiol*. **11**(10): 37-41.

Basak, A.B., Karim M.B., M.N Hoque and A.P. Biawas. 1987. Studies on the fungi associated with different varieties of wheat seeds grown in Bangladesh. *Seed Reasearch*. **15**(1): 17-75.

Cole, G.T. and B. Kendrick. 1981. Biology of conidial fungi. Academic Press. New York.

Ellis, M. B. 1971. *Dematiaceous Hyphomycetes.* The Commonwealth Mycological Institute, England, pp. 608.

Ellis, M. B. 1976. *More Dematiaceous hyphomycete*s. The Commonwealth Mycological Institute, England. pp. 507.

Ellis, M. B. and J. P. Ellis. 1997. *Micro fungi on Landplants. An Identification Handbook*. The Richmond Publishing Company Ltd., England. pp. 868.

Fakir, G. M. 1987. An annotated list of seed-borne diseases in Bangladesh Agril. Inf. Service, Ministry of Agric. and Forests. Dhaka. pp. 17.

Gams, W. 1995. How natural should anamorph genera be? *Canadian J. Bot.* **73**(1): 747-753.

Ghosh, A and S. Shamsi. 2014. Fungal diseases of rose plant in Bangladesh. *J. Bangladesh Acad. Sci.* **38**(2): 335-233.

Haque, J. and S. Shamsi. 2011. Study of fungi associated with some selected vegetables of Dhaka city. *Bangladesh J. Sci. Res*. **24**(2): 181-184.

Helal, R. B. 2017. Mycoflora associated with papaya (*Carica papaya* L.) and their management. MS thesis. Dept. Bot. Univ. Dhaka. Bangladesh.pp.i-xi +182.

Khan, A. Z.M. Nowsher A. and S. Shamsi. 1983a. Cercosporae from Bangladesh I. *Bangladesh J. Bot.* **12**(1): 66-80.

Khan, A. Z.M. Nowsher A. and S. Shamsi. 1983b. Cercosporae from Bangladesh II. *Bangladesh J. Bot.* **12** (2): 105-118.

Khan, A. Z.M. Nowsher A. and S. Shamsi. 1986. Hyphomycetes from Bangladesh. *Bangladesh J. Bot.* **15 (2)**: 111-121.

Khan, A.Z.M. Nowsher A., S. Shamsi and R. Akhter. 2003. Hyphomycetes from Bangladesh II. *Bangladesh J. Bot*. **32**(1): 47-48.

Kibria, A, K. S. Hossain, N. Akhtar, M. A.A. Jahan, Md. A.M. Sarker and Mst. N. Begum**.** 2016. New records of seven fungal species for Bangladesh. *Bangladesh J. Plant Taxon*. **23**(1): 1-6.

Mia, M.A.T. 1993. Status of research on seed in Bangladesh and future need. Progress in Plant Pathology. Proced. Fifth Biennial confer. Phytopathol. Soc. 27-28 June 1993. Pp. 108.

Seifert, K. A. and W. Gams. 2001. The taxonomy of anamorphic fungi. In: McLaughlin, D. J., McLaughlin, E. G. & Lemke, P. A. (eds.), *The Mycota VII part A.* Heidelberg: Springer-Verlag. pp. 307-347.

Shahjahan, A.K.M. 1993. *Practical approaches to crop pest and disease management in Bangladesh*. BARC. Dhaka, Bangladesh. pp.168.

Shamsi, S. 1978. Taxonomic studies of *Cercospora* Fres. and *Pseudocercospora* Speg. found in Bangladesh. M.Sc thesis. Dept. Bot. Univ. Dhaka. Bangladesh. pp. i-iv + 48.

Shamsi, S. 1999. Investigations into the sheath rot disease of rice (*Oryza sativa* L.) in Bangladesh. Ph. D. thsis. Dept. Bot. Univ. Dhaka. Bangladesh. pp. xii + 132.

Shamsi, S. and A. Yasmin. 2007. *Curvularia harveyi* Shipton: A new hyphomycetes record for Bangladesh. *Bangladesh J. Plant Taxon*. **14** (1): 67-69.

Shamsi, S. and F. Yasmin 2013. *Bipolaris hawaiiensis* (Bugnicourt ex M.B. Ellis) Uchida & Aragake - Anew record of human pathogenic species of *Bipolaris* in Bangladesh. *Dhaka Univ. J. Biol. Sci*. **22**(2):175-178.

Shamsi, S. and R. Sultana. 2010. New records of two hyphomycetous fungi *Monodictys putredinis* (Wallr) Hughes and *Stachybotrys atra* Corda for *Bangladesh. Bangladesh J. Plant Taxon*. **17**(1):101-103.

Shamsi, S. and R. Sultana. 2012. A new species of *Chalara* (Corda) Rabenhost from Bangladesh. *Bangladesh Journal of Plant Pathol*. **28**(1&2):71-73.

Shamsi, S. and R. Sultana. 2012. New records of two species of *Corynespora* on sesame (*Sesamum indicum* L.) from Bangladesh. *Bangladesh Journal of Plant Pathol.* **27**(1&2):75-76.

Shamsi, S. and S. Sharmin. 2012. *Fungal diseases of Groundnut from Bangladesh*. Lambert Publishers. Germany.pp. 54.

Shamsi, S. and Z. Yasmin. 2009. *Bipolaris australiensis* (M.B. Ellis) Tsuda & Ueyama-a new dematiaceous hyphomycetes record for *Bangladesh. Bangladesh J. Plant Taxon*. **16** (1):91-93.

Shamsi, S. S. Hosen and M. Begum. 2017. New record of *Gonatophragmium mori* (Sawada) Deighton on *Ficus hispida* L. from Bangladesh. .*Bangladesh J. Plant Taxon*. **24**(1): 125-127.

Shamsi, S. S. Hosen, Md. Al-Mamun and M. Begum. 2016. Mycoflora associated with infected fruits of *Momordica cochinchinensis* (Lour.) Spreng. *Bangladesh J. Plant Taxon*. **23**(2): 181-188.

Shamsi, S., A. Z. M. Nowsher A. Khan, A.K.M. Shahjahan and S. A. Miah. 2003. Fungal species associated with sheaths and grains of sheath rot affected rice varieties from Bangladesh. *Bangladesh J. Bot*. **32**(1): 17-22.

Siddiqui, K. U., M. A. Islam, Z. U. Ahmed, Z. N. A. Begum, M. A. Hassan., M. Khandker and M.M. Rahman. 2007. Encyclopedia of flora and fauna of Bangladesh. Vol.2. Cyanobacteria, Bacteria and Fungi. Asiatic. Soc. of Bangladesh, Dhaka. pp. 415.

Talukdar M.J. 1974. Plant diseases in Bangladesh. *Bangladesh* J. *Agric. Res*.**1**(1):61-86.

Taylor, JW. 1995. Making the Deuteromycota redundant: a practical integration of mitosporic and meiosporic fungi. *Canadian J. Bot.* **73**(1):754-759.

Wadud, M. A. and Q. A. Ahmed. 1962. Studies on fungous organisms associated with wilted jute plants. *Mycopathologia et mycologia applicata*. **18**(1): 107-114.

(*Received revised manuscript on 23 October, 2017*)