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Diversity and status of susceptible hosts for Follicolous fungi from north central Tarai forests of U.P. India

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Abstract

The foliicolous fungi were collected from East & West Sohelwa, Shrawasti, Bahraich forest range and Katarniaghat Wildlife Sanctuary during April, 2010 to September, 2011. The present work reports 142 fungal species representing 62 fungal genera found on 126 angiosperm plant species representing 102 genera of 40 families.

Keywords: Foliicolous fungi, Northcentral Terai forest.

Introduction

Bahraich district is one of the district of Eastern Uttar Pradesh, situated in Upper Gangetic Plane. It lies between 27°43′ and 28°51′ North Latitude and 81°8′, and 82°10′, East longitude with a total area of about 6944 sq km. Botanically the area is very interesting. In north the Himalayas rise as a virtual wall beyond the snow line. Above the alluvial plain lies the Tarai strip, a seasonally marshy zone of sand and clay soils. Since this north Tarai region which has higher rain fall than the plains, and the downward rushing rivers of the Himalayas slow down and spread out in the flatter Tarai zone depositing fertile silt and reproductive means during the monsoon season and receding in the dry season. Tarai , as a result has higher water level and is characterized by moist sub tropical condition and a luxuriant turnover of green vegetation all the year around. The study area is blessed with several floras by nature and it is referred as natural paradise and it is very rich in ethnic and floristic diversity. Due to vast area of natural forests the Bahraich is also known as City of Forests.

The land surface is a level tract sloping gently from North West to South East. A remarkable feature fills landscape is the total absence of any hill or hillocks . The soil is composed of Gangetic alluvium. Since much of the ground is liable inundation, the particles deposited are very fine . Bahraich enjoys monsoon type of climate, very much influenced by Himalaya being nearer to the region.

The climate is markedly periodic and is divided in to three seasons i.e. rainy, winter and summer season. The general temperature range between 3°C to 43°C. The general vegetation of the area is tropical deciduous type. However , some of the trees are evergreen and semi evergreen. The forests are only restricted to Northern portion of the district bordering up to foot hills of Nepal. The middle and southern part of the area are under the influence of human and their domestic animals. Thus the vegetation of this area is being damaged by intense grazing, fire, cutting down of plants for fodder, fuel and for various developmental projects. A vast area is also under cultivation. The vegetation of these areas is mainly characterized by large number of herbaceous plants growing on variety of habitat along with scattered occurrence of many indigenous and exotic species of

trees and shrubs in open areas or cultivated in gardens and along road sides.

Plants have a significant contribution towards the wealth of a country. During recent years exploration of our plant wealth and its economic utilization have rightly been given due importance. The contribution on the economic aspects of our plants are scattered over numerous literatures. India represents one of the twelve mega biodiversity centers of the World, had two of the world's eighteen bio diversity hot spots. North East and Western Ghats ranks first followed by our North West Forests of Tarai region. This Tarai belt, well blessed and inhabited by tribal community in side the forest as well as around the forest area is a natural paradise for ethnobotanical, mycological, plant pathological as well as work related with wildlife alone or interdisciplinary work.

The leaves provide a very suitable habitat for the growth and development of fungal pathogen by providing ample surface area and nutrient supply. Such leaf inhabiting fungi are known as foliicolous fungi and invaded area of the leaf appear as leaf spot or leaf lesions. Taxonomic studies of such fungal forms have been generally considered as only of academic interest, taxonomic treatment of a fungal organism is the first requirement for any studies concerning its biology. Correct identification of a fungus absolutely free from ambiguities is vital for its employment in applied disciplines. In fact without being equipped for ascertaining the correct identity of a fungal pathogen all studies concerning its phyto pathlogical aspects would be misleading. The weed and forest plants serve as reservoirs of leaf spot pathogens which on getting opportunity may spread to agriculture and horticulture plants. Keeping this in view the author surveyed the Northcentral Terai forest of Uttar Pradesh which include East and West Sohelwa, Shrawasti, Bahraich forest range and Bahraich Wildlife Sanctuary during April, 2010 to September, 2011.

Materials and Methods

During collection, infected leaf samples were taken in separate polythene bags. Suitable mounts of surface scrapping and hand cut sections were prepared from infected portions of the leaf samples. Mounting is done in lactophenol-cotton mixture were examined and camera lucida drawings were made for fungal propagules. Morphotaxonomic determinations of taxa were done with the help of current literature and resident expertise available. All the fungal taxa were identified based on morphotaxonomy and later confirmed by most renound mycologist Prof. (Dr.) Kamal, Emeritus Scientist (DST), DDU Gorakhpur University, Gorakhpur, UP, India..

Results and Discussion

The author collected 126 plant species representing 102 genera of 40 families parasitized by 142 fungal species which belong to 62 fungal genera. The fungal Holotype specimen has been deposited in Herbaria Cryptogamic Indie Orientalis (HCIO), Indian Agricultural Research Institute (IARI), New Delhi, India. The Families, their host plants and their parasitic fungal strains are enumerated below.

Table. 1 Foliicolous fungi from Northcentral Terai Forests of Uttar Pradesh (Collected during April 2010 to September 2011)

S.No.	FAMILY	HOST NAME	FUNGAL STRAIN
1	**01 ANNONACEAE**	*01 Annona squamosa* L	*01 Astrosmella* sp. Coelo.
2			*02 Glomerella cingulata* (Stonem) Spauld. & Shrenk
3	**02 MENISPERMACEAE**	*01 Menispermum canadense* L.	*01 Sirosporium* sp. Bubak & Scrab
4		*02 Tiliacora accuminata* (Lam.) Miers. ex .Hook. f. & Thomson	*01 Acremonium moriforme* W. Games
5			*02 Phoma* sp. Desm
6		*03 Tinospora cordifolia* (Willd.) Miers	*01 Colletotrichum capsici* Butler & Bisby
7		*04 Tinospora malabarica* L.	*01 Acrodictys* sp. Ellis
8		*05 Tinospora* sp. L.	*01 Pseudocercospora cocculi* (Syd.) Deight.
9	**03 BRASSICACEAE**	*01 Brassica campestris* L.	*01 Curvularia lunata* (Walker) Bold

10		*02 Brassica oleracea var. capitata* L.	*01 Rhizoctonia solani* Kiihn
11			*02 Sclerotinia sclerotiarum* (L.) Bac.
12		*03 Lunaria annua* L.	*01 Alternaria* sp. Nees
13	**04 CARICACEAE**	*01 Carica papaya* L.	*01 Sirosporium* sp. Bubak & Scrab
14	**05 DIPTEROCARPACEAE**	*01 Shorea robusta* Gaertn. f. Fruet	*01 Ceratophorum helicosporum* Sacc
15			*02 Pseudocercospora rhoreae* (Thirum & Kotsuki) Deighton
16	**06 MALVACEAE**	*01 Abutilon indicum* (Lam.) Sweet	*01 Phomopsis abutilonis* M.C.Rai
17		*02 Hibiscus mutabilis* L.	*01Alternaria dianthi* Stev. & Hall
18		*03 Hibiscus rosa- sinensis* L.	*01 Alternari longipes* (Ellis. & Ev.) Mason
19			*02 Microxyphium fagi* (Pers.) Hughes
20		*04 Sida rhombifolia* L.	*01 Oidium* sp. Link. ex. Fr.
21	**07 TILIACEAE**	*01 Grewia elastia* L.	*01 Zasmidium grewiae* Syd
22	**08 RUTACEAE**	*01 Aegle marmelos* (L.) Correa	*01 Colletotrichum capsici* Butler & Bisby
23			*02 Phoma glomerata* (Cda.) Wr.
24		*02 Citrus lemon* (L.) Burm.f.	*01 Alternaria alternata* (Fr.) Keissler
25			*02 Alterneria citri* Nees.
26			*03 Curvularia tuberculata* Jain
27			*04 Geotrichum canadidum* Link.ex. Pers.
28		*03 Citrus medica L.*	*01 Coniella citri* Agarawal & Sharma
29		*04 Commiphora macrophylla* L.	*01 Pseudocercospora* sp. Speg.
30		*05 Glycosmis pentaphylla* Correa. Willd.	*01 Alternaria* sp. Nees
31			*02 Cercospora glycosmidis* Abbasi *et al.*
32			*03 Corynespora glycosmidis* Abbasi *et ai.*
33			*04 Corynespora* sp. Giissow
34		*06 Murraya exotica L.*	*01 Botryodiplodia theobromae* Pat
35			*02 Colletotrichum exoticum* Pavgi & Singh
36			*03 Leptoxyphium* sp. Speg.
37			*04 Phoma herbarum* West.
38	**09 MELIACEAE**	*01 Toona ciliata* M. Roem.	*01 Acremonium* sp. Link
39	**10 RHAMNACEAE**	*01 Zizyphus xylopyrus* (Retz.) Willd.	*01 Meliola ziziphi* Hosagouder *et al.*
40	**11 ANACARDIACEAE**	*01 Mangifera indica* Linn.	*01 Ascochyta mangiferae* Batista
41			*02 Meliola rhosis* Henn.
42			*03 Pericona* sp. Tode
43			*04 Sooty mold*
44	**12 FABACEAE(PAPILIONOIDEAE)**	*01 Butea frondosa* Koen. ex. Roxb	*01 Leptoxyphium buteae* Speg

45		*02 Cajanus cajan* (L.) Millsp	*01 Phoma cajani* (Rangel) Khune & Kapoor
46		*03 Desmodim triflorum (*L.*)* DC	*01 Oidium* sp. Link. ex. Fr.
47		*04 Dolichos lablab* (L.) Lynos.	*01 Cercospora dolichi* Ellis & Ev.
48			*02 Phoma herbarum* West.
49			*03 Pseudocercospora dolichi* Ellis.& Ev
50		*05 Medicago sativa* L.	*01 Cercospora* sp. Fres
51		*06 Pisum sativum* L	*01 Helminthosporium* sp. Link.
52		*07 Pongamia pinnata* (L.) Pierre	*01 Fusicladium pongamiae* Syd.
53	**13 CAESALPINIACEAE**	*01 Bauhinia purpurea* L.	*01 Leptoxyphium* sp. Speg.
54			*02 Phoma* sp. Desm.
55			*03 Phomopsis bauhiniae* Bansa Alealdi
56		*02 Bauhinia racemosa* Lamk.	*01 Pestalotia lambertiae*. Pet
57		*03 Bauhinia vahlii* W. & A.	*01 Alternaria bauhinia* Singh & Mall
58			*02 Corynespora* sp. Giissow
59		*04 Bauhinia variegata*	*01 Alternaria bauhinia* Singh & Mall
60		*05 Cassia fistula Linn.*	*01 Alternaria tenuis* Nees.
61		*06 Cassia occidentalis* L	*01 Pseudocercospora nigricans* Cooke
62	**14 MIMOSACEAE**	*01 Acacia bipar* L.	*01 Corynespora* sp. Giissow
63		*02 Acacia concinna* Wall	*01 Pseudocercospora acaciae* Kamal & Singh
64		*03 Albizia lebbek* (L.) Benth.	*01 Pseudocercospora acaciae* Kamal & Singh
65		*04 Inga dulcis* (Roxb.) Willd.	*01 Diatrype diseiformis* Kar & Maity
66			*02 Haplosporella baumontina* Ahmad
67		*05 Indopiptadenia oudhensis (Brandis) Brenan*	*01 Cercospora oudhensis* Mall
68	**15 GROSSULARIACEAE**	*01 Echinops* sp. L	*01 Puccinia pulvinata* Rabenn.
69	**16 MYRTACEAE**	*01 Eucalyptus lanceolatus* Hill Malpea	*01 Zasmidium* sp.Syd.
70		*02 Eugenia jambolina* Roxb...	*01 Meliola eugeniae- jamboloidis* Hansf.
71			*02 Penicillium expansum* Link. ex. SF. Gray.
72		*03 Eugenia myrtifolia* L.	*01 Meliola* sp. Fr.
73		*04 Psidium guajava* L.	*01 Cladosporium tennuussima* Cke.
74			*02 Mycovellosiella myrtacearium Rai & Kamal*
75			*03 Rhizoctonia solani Kiihn*
76		*05 Syzygium eugenia* L	*01 Asterina eugeniae* Yates
77		*06 Syzygium cumuni* L. Skeel	*01 Meliola eugeniae- jamboloidis* Hansf.
78			*02 Penicillium expansum* Link. ex. SF. Gray.

79		*07 Syzygium* sp. L.	*01 Oidium* sp. Link. ex. Fr.
80	**17 BARRINGTONIACEAE**	*01 Barringtonia acutangula* (L.) Gaertn.	*01 Acrodictys* sp. Ellis
81	**(Lecythidaceae)**		*02 Phomopsis barringtoniae* Kamal & Singh
82		*02 Careya arborea* Roxb.	*01 Zygosporium echnosporum* Mont.
83	**18 CUCURBITACEAE**	*01 Coccinia indica* W.& A.	*01 Oidium* sp. Link. ex. Fr.
84		*02 Cucurbita maxima* Duchesnc	*01 Cercospora citrullina* Cooke
85			*02 Leveillula taurica* (Lev.) Arnaud
86		*03 Legenaria siceraria* (Mol.) Standl.	*01 Cladosporium cucumerinum* Ellis & Arte.
87			*02 Curvularia verruculosa* Ellis
88		*04 Lagenaria vulgaris* Ser	*01 Glomerella cingulata* (Stonem) Spauld. & Shrenk
89		*05 Luffa acutangula* (L.) Roxb.	*01 Alternaria alternata* (Fr.) Keissler
90	**19 ALANGIACEAE**	*01 Alangium salvifolium* (Linn.f.) Wang	*01 Phyllosticta alangii* Hasija
91		*02 Adina cardifolia* Hook.f	*01 Cerospora adinae* Srivastava *et al.*
92			*02 Pseudocercospora adinae* Singh & Kamal
93		*03 Haldina cordifolia* Hook.f.	*01 Pseudocercospora adinae* Singh & Kamal
94	**20 ASTERACEAE(COMPOSITAE)**	*01 Ageratum conyzoides* (L) L.	*01 Alternaria* sp. Nees
95		*02 Chrysanthamum roseum* L	*01 Pseudocercospora* sp. Speg
96		*03 Eupatorium cannabium* L.	*01 Alternaria* sp. Nees
97			*02 Corynespora* sp. Giissow
98			*03 Leptoxyphium* sp. Speg.
99			*04 Passalora* sp. Fr. et. Mont.
100		*04 Parthenium hysterophorus* L.	*01 Alternaria zinniae* Ellis Pape
101		*05 Sphaeranthus indicus* L.	*01 Cercospora sphaeranthi* Patil
102			*02 Cercospora neo-sphaeranthi* Bhartiya Kumari & Singh
103		*06 Xanthium strumarium* L.	*01 Cercospora xanthicola* Heald & Worf.
104	**21 EBENACEAE**	*01 Diospyros melanoxylon* Roxb.	*01 Pseudocercospora kelleri* (Earle) Deight.
105			*02 Sarcinella gorakhpurenis* Kamal & Singh
106		*02 Diospyros tomentosa* Roxb.	*01 Aecidum rhytismoideum* Berk. & Br.
107			*02 Cercospora kaki* Ellis & Ev
108			*03 Diatrypella quercina* (Ces. & De Not.) Sac.
109			*04 Trichothecium roseum* Link.
110	**22 OLEACEAE**	*01 Nyctanthes arbor-tristis* L.	*01 Zasmidium* sp.Syd.

111	23 APOCYNACEAE	*01 Carrisa carandus* L..	*01 Corynespora carissae* Singh & Mall
112			*02 Pseudocercospora carissae* Singh & Mall
113			*03 Sirosporium* sp. Bubak & Scrab
114		*02 Carrisa congensta* Wight	*01 Discosia hiptages* Tilak
115		*03 Antidysenterica sensu* Wall	*01 Glomerella cingulata* (Stonem) Spauld. & Shrenk
116			*02 Periconia byssoides* Pers. ex. Mandel
117		*04 Ichnocarpus frutescens* **(**L.) W.T. Aiton	*01 Alternaria ichnocarpicola* Singh & Mall
118			*02 Alternaria* sp. Nees
119			*03 Corynespora ichnocorpii* Singh & Mall
120	**24 ASCLEPIADACEAE**	*01 Calotropis gigentia (L.)* R.Br.	*01 Alternaria alternata* (Fr.) Keissler
121		*02 Calotropis prosera* (Aiton.) R. Br	*01 Alternaria alternata* (Fr.) Keissler
122			*02 Passalora* sp. Fr. et. Mont.
123	**25 BORAGINACEAE**	*01 Cordia dichotoma* Forst.	*01 Phaeoramularia cordiae* Kumar & Kamal
124		*02 Cordia myxa* H. K. f.	*01 Alternaria tenuis* Nees.
125		*03 Heliotropium indicum* L.	*01 Leptoxyphium* sp. Speg
126			*02Meliola eugeniae- jamboloidis* Hansf.
127			*03 Oidium* sp. Link. ex. Fr.
128	**26 CONVOLVULACEAE**	*01 Ipomoea fistulosa* (L.) Mart.ex. choisy	*01 Zasmidium* sp. Syd.
129	**27 SOLANACEAE**	*01 Datura stramoniuma* L.	*01Colletotrichum capsici* Butler & Bisby
130		*02 Solanum melongena* L.	*01 Alternaria solani* Nees.
131			*02 Cladosporium oxysporum* Berk. & Curt.
132			*03 Cladosporium sphaerospermm* Penz.
133		*03 Solanum tuberosum* L.	*01 Alternaria alternata* (Fr.) Keissler
134		*04 Lycopersicum esculantum* Mill	*01 Cladosporium tennussimum* Cke.
135	**28 BIGNONIACEAE**	*01 Haplophragma adenophyllum* (Wall ex.G. Don). Dop.	*01 Leptoxyphium* sp. Speg
136			*02 Mycovellosiella haplophragmatis* Kamal & Singh
137			*03 Oidium* sp. Link. ex. Fr**.**
138			*04 Passalora* sp. Fr. et. Mont.
139		*02 Holoptelia integrifolia* (Roxb.) Planch	*01 Colletotrichum dematium* (Pers. Ex. Fr.) Grove
140	**29 VERBENACEAE**	*01 Clerodendrum indicum* L.	*01 Cercospora clerodendri* Miyake
141			*02 Fusarium concolor* Reink
142		*02 Clerodendrum inerme* (L.) Gaertn	*01Amerosporium polynematoides* Speg.

143		*03 Clerodendrum phlomidis* L.f.	*01 Cercospora phlomidicola* Mall
144		*04 Clerodendrum viscosum* L.	*01 Corynespora cleorodendri-viscosi* Giissow
145			*02 Pseudocercospora clerodendril* Speg
146			*03 Zasmidium clerodendri* Syd.
147		*05 Clerodendrum* sp L.	*01 Corynespora cleorodendri-viscosi* Giissow
148		*06 Lantana indica* Roxb..	*01 Corynespora nana* Meenu and Kamal
149		*07 Lantana camera* L.	*01 Sirosporium lantanae* Bubak & Screb
150		*08 Premna mucronata* Roxb.	*01 Cercospora premnae* Mall
151		*09 Tectona grandis* L.	*01 Phomopsis variosporum* Sacc.
152			*02 Zasmidium tectoni* Syd.
153	**30 LAMIACEAE**	*01 Nepeta hindostana* (Roth.) Hains	*01 Cercospora nepetae* Trehan
154		*02 Ocimum basilicum*. L.	*01 Meliola* sp. Fr
155		*03 Ocimum sanctum* L.	*01 Cercospora ocimicola* Petrak & Gferri
156		*04 Achyranthes aspera* L	*01 Cerocospora achyranthina* Thrim. & Chupp
157			*02 Zasmidium* sp.Syd.
158		*05 Spinacia olaracia* L.	*01 Alternaria alternata* (Fr.) Keissler
159			*02 Rhizoctonia solani* Kiihn
160	**31 BASELLACEAE**	*01 Basella alba* L.	*01 Macrophomina phaseolina* (Tass) Goia
161			*02 Selerotium relfsii* Sacc.
162	**32 LOURACEAE**	*01 Litsea chinensis* Lamk	*01 Alternaria longipes* (Ellis. & Ev.) Mason
163			*02 Astrosmella* sp. Coelo.
164			*03 Fuligomyces indica* Khan & Kamal
165			*04 Phomopsis litsea* Kamal & Singh
166		*02 Litsea glutinosa* (Lour.) C.R. Robinson	*01 Litsea glutinosa* (Lour.) C.R. Robinson
167		*03 Litsea polyantha* Juss	*01 Diatrypella citricola* Ellis & Ev.
168	**33 EUPHORBIACEAE**	*01 Bridelia retusa* Sprengel	*01 Periconia byssoides* Pers. ex. Mandel
169		*02 Croton roxburghii* Balakr	*01 Corynespora bahraichiana* Singh & Mall
170		*03 Euphorbia pulcherrima* Wild ex Klotz.	*01 Alternaria tenuissima* (Kunz ex. Pers.) Wiltshire
171			*02 Phyllactinia sub- spiralis* Lev.
172		*04 Mallotus philippensis* (Lamk.) Muell. Arg.	*01 Alternaria kamalella* Singh & Mall
173			*02 Glomerella cingulata* (Stonem) Spauld. & Shrenk
174			*03 Mycovellosiella malloti* Bhalla *et al.*
175			*04 Pestalotiopsis palmarum* (Cke.) Stey.

176			*05 Phoma malloti* Desm
177			*06 Zygosporium* sp. Mont.
178		*05 Codiaeium variegatum* (L.) A. *Juss*. Spiral leaf croton	*01 Alternaria alternata* (Fr.) Keissler
179		*06 Codiaeium variegatum* (L.) A. Juss Small leaf croton	*01 Alternaria alternata* (Fr.) Keissler
180		*07 Codiaeium variegatum* (L.) A. Juss Narrow leaf croton	*01 Alternaria alternata* (Fr.) Keissler
181	**34 ULMACEAE**	*01 Holoptelia integrifolia* Planch	*01 Phoma exigua* Desm
182	**35 MORACEAE**	*01 Artocarpus heterophyllus* Lam.	*01 Alterneria tenuissima* (Kunzex.Pers.) Wiltshire
183			*02 Colletotrichum capsici* Butler & Bisby
184			*03 Pseudocercospora artocarpi* (H.P. Syd.) Deighton
185			*04 Rhizoctonia solani* Kiihn
186		*02 Ficus benghalensis* L.	*01 Alternaria alternata* (Fr.) Keissler
187			*02 Cercospora fici* Heald & Worf.
188			*03 Zasmidium ficina* Syd.
189		*03 Ficus carica* L.	*01 Alternaria alternate* (Fr.) Keissler
190		*04 Ficus glomerata* Roxb.	*01 Alternaria alternata* (Fr.) Keissler *Uredo fici* Cast
191		*05 Ficus religiosa* L.	*01 Alterneria tenuissima* (Kunz ex. Pers.) Wiltshire
192			*02 Cercospora fici relegiosae* Heald & Worf
193			*03 Fuligomyces* sp. Morgan-Jones & Kamal
194		*06 Ficus rumphii* Blume, Bijdr.	*01 Alternaria* sp. Nees
195			*02 Botryodiplodia theobromae* Pat.
196			*03 Colletotrichum dematium* (Pers.ex.Fr.) Grove
197			*04 Oidium* sp. Link. ex. Fr.
198			*05 Phomopsis* sp. Sacc.
199			*06 Phyllachora ficuum* Niessa
200			*07 Sooty mold*
201		*07 Ficus scabrella* Roxb.	*01 Alternaria* sp. Nees
202		*08 Streblus asper* L	*01 Asterina* sp.Lev
203			*02 Meliola* sp. Fr.
204			*03 Pseudocercosporella strebli* Singh
205			*04 Pseudocercosporella strebli* Singh
206	**36 MUSACEAE**	*01 Musa paradisiaca* L	*01 Alternaria* sp. Nees
207	**37 LILIACEAE**	*01 Dracaena marginiata* L.	*01 Alternaria* sp. Nees
208			*02 Asterina* sp.Lev.

209			*03 Zasmidium* sp.Syd
210	**38 ARACEAE**	*01 Colocasia esculenta* Schott.	*01 Colletotrichum dematium* (Pers.ex. Fr.) Grove
211			*02 Drechslera colocaceae* Tandan & Bhargava
212	**39 POACEAE**	*01 Saccharum spontaneum* L.	*01 Ramularia* sp.Sacc.
213	**40 CYCADACEAE**	*01 Cycas circinalis* L.	*01 Alternaria* sp. Nees
214			*02 Drechslera monoceros* Subram. & Jain
215			*03 Sphaeropsis cycadis* Mundkur and Ahmad
216			*04 Zasmidium* sp.Syd.
217		*01* Dead drying wood	*01 Oidium* sp. Link. ex. Fr.

The perusal of the list reveals that *Ficus rumphii* is most sensitive to fungal attack and is found to be infected with seven fungal species followed by *Mallotus philippensis* with six fungal species whereas eleven plant species ie., *Citrus lemon, Glycosmis pentaphylla, Murraya exotica, Mangifera indica, Eupatorium cannabium, Diospyros tomentosa, Haplophragma adenophyllum, Litsea chinensis, Artocarpus heterophyllus, Streblus asper* and *Cycas circinalis* were found to be infected with four fungal species each ; *Dolichos lablab, Bauhinia purpurea, Psidium guajava, Carrisa carandus, Ichnocarpus frutescens, Heliotropium indicum, Solanum melongena, Clerodendrum viscosum, Ficus benghalensis, Ficus religiosa* and *Dracaena marginiata* were found to be infected with three fungal species each; *Annona squamosa, Tiliacora accuminata, Brassica oleracea var. capitata, Shorea robusta, Hibiscus rosa- sinensis, Aegle marmelos, Bauhinia vahlii, Inga dulcis , Eugenia jambolina, Syzygium cumuni, Barringtonia acutangula, Cucurbita maxima, Legenaria siceraria, Adina cardifolia, Sphaeranthus indicus, Diospyros melanoxylon, Antidysenterica sensu, Calotropis prosera, Clerodendrum indicum, Tectona grandis, Achyranthes aspera, Spinacia olaracia, Basella alba, Euphorbia pulcherrima* and *Colocasia esculenta* were found to be infected with two fungal species each whereas remaining host plant were found to be infected with single fungal species only . *Ficus rumphii* was found to be the most susceptible host where as *Alternaria alternata* was thus found to be most potent fungal species.

The perusal of the results reveals that species of genus *Cercospora* was found on eighteen hosts whereas *Pseudocercospora* on forteen hosts; *Corynespora* on twelve ; *Alternaria alternata* and *Zasmidium* sp. on eleven hosts each; *Alternaria* sp. on ten hosts; *Colletotrichum, Meliola, Oidium,* and *Pseudocercospora* sp. on eight hosts each ; *Leptoxyphium,and Phomopsis* sp. on six each ; *Geotrichum, Mycovellosiella, Rhizoctonia* and *Sirosporium* on four each; *Asterina, Acrodictys* sp., *Alternaria tenuissima Cladosporium, Colletotrichum capsici, Colletotrichum dematium, Corynespora* sp., *Curvularia Meliola eugeniae- jamboloidis, Meliola* sp., *Passalora, Pericona* and *Sirosporium* sp on three hosts each; *Alternaria tenuis, Asterina* sp., *Astrostomella, Botryodiplodia theobromae, Corynespora clerodendri, Macrophomina phaseolina, Penicillium expansum, Periconia byssoides, Phoma herbarum, Phoma* sp., *Pseudocercospora adinae* and *Sooty mold* on two hosts each. The remaining fungal species were found to infect single host each. One hundred twenty six host plants infected by one hundred forty two fungal species represents one hundred two genera and forty families.

The literature (Bilgrami *et al*., 1979, 1981, 1991; Ellis, 1971, 1976; Jamaluddin *et al.*, 2004; Kamal, 2010; Mall, 2011a,b &.c, 2011-2012,2013 a & b ; Sarbhoy *et al.*, 1986, 1996 ; Singh & Mall, 2007) reveals that all the fungal taxon has not been reported from Northcentral Terai forest of U.P. Therefore, all are a new record for Indian mycoflora from Northcentral Terai forest of U.P., India.

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