

FUNGI OF KARACHI—Supplement II.

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**Introduction**

Since the previous reports (Ghaffar & Kafi, 1968; Ghaffar, Abbas & Kafi, 1971) mycological specimens comprising of 45 genera and 59 species of fungi have been collected from Karachi area.<sup>a</sup> This brings the total to 100 genera and 238 species of which 18 genera and 64 species of fungi (*marked with asterisks\**) do not appear to be included in the monographic works on the Fungi of West Pakistan (Ahmad, 1956, 1969, 1971, Ahmad & Arshad, 1972). Of the remaining fungal species, however, several additional hosts have been encountered (*also marked with asterisks\**). These fungi appear to be new and interesting records and therefore are listed in this paper. Their occurrence extends the distribution of these taxa.

The fungi are listed in alphabetical order according to Martin's system of classification vide the Dictionary of Fungi (Ainsworth & Bisby, 1961). Under each fungus is noted the plant parts affected or its substrate, its distribution and literature references. The specimens have been deposited at the Karachi University Mycological Herbarium (KUMH) and the Herb. IMI, at the Commonwealth Mycological Institute, Kew, Surrey, England.

Mycological specimens that usually have been dried, preserved and arranged in the sequence of an accepted classification have considerable importance. It records the distribution of fungi and depicts their phylogenetic history. It is an aid to teaching and research with which comparative studies for taxonomic purposes can be made. It is therefore hoped that the present list will also contribute to the compilation and preparation of an up to date fungus flora of Pakistan being undertaken by Dr. Sultan Ahmad.

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<sup>a</sup> Karachi at Lat. 24°53'N and Long. 67°E extending over an area of 566.8 sq. miles.

## MYXOMYCETES

## Trichiales

**Arcyria cinerea** (Bull.) Pers.

Sacc. VII:427; Lister: 231; Lodhi:377; Ahmad, 1:1.

\*On jute bags.

Karachi (S. Qaiser Abbas) 20.9.70; KUMH 1285; IMI 152208.

## Physarales

**Physarum pusillum** (Berk. & Curt.) Lister

Lister:44; Lodhi:381; Ahmad, 1:3.

\*On jute bags.

Karachi (S. Qaiser Abbas) 20.9.70; KUMH 1284; IMI 152207.

## ASCOMYCETES

## Plectascales

**Arachniotus dankaliensis** (Cast) van Beyma

Kuehn in Mycologia, 50:417-439, 1958.

from soil of Karachi University Campus (Akhtar Hussain) 1970, IMI, 149621.

**Thielavia terricola** (Gilman & Abbot) Emmons

Gilman:170.

from rhizosphere of *Trifolium alexandrinum* L. (Papilionaceae).

Karachi University Campus (Akhtar Hussain) 1.3.70

## Hysteriales

**\*Gloniella** sp.

Sacc. II:765.

\*On stems of *Asparagus dumosus* Baker (Liliaceae).

Karachi (S. Qaiser Abbas) 3.2.71; KUMH 1449; IMI 164144.

\*On stems of *Solanum gracilipes* Decene (Solanaceae).

Karachi (S. Qaiser Abbas) 8.6.71; KUMH 1438; IMI 164132.

\*On culms of *Typha angustata* Bory & Chaub (Typhaceae).

Karachi (S. Qaiser Abbas) 25.9.71; KUMH 1426; IMI 164120.

**Helotiales****Haematomyxa** sp.

Sacc. VIII:646.

E. Muller is of the opinion that this is not the correct name for such fungi and quite probably these have to be named as *Tryblidaria*.

- \*On stems of *Acacia arabica* (Lamk.) Willd. (Mimosaceae).  
Karachi (S. Qaiser Abbas) 5.8.69; KUMH 1370; IMI 161057.
- \*On stems of *Acacia senegal* Willd. (Mimosaceae).  
Karachi (S. Qaiser Abbas) 15.8.69; KUMH 1408; IMI 161094.
- \*On stems of *Cordia gharaf* (Forsk.) Ehrenb. (Boraginaceae).  
Karachi (S. Qaiser Abbas) 4.9.70; KUMH 1330; IMI 161020.
- \*On stems of *Euphorbia tirucalli* L. (Euphorbiaceae).  
Karachi (S. Qaiser Abbas) 20.9.70; KUMH 1323; IMI 161013.
- \*On stems of *Ficus retusa* L. (Moraceae).  
Karachi (S. Qaiser Abbas) 4.9.70; KUMH 1311; IMI 161004.
- \*On stems of *Indigofera oblongifolia* Forsk. (Papilionaceae).  
Karachi (S. Qaiser Abbas) 20.9.70; KUMH 1329; IMI 161019.
- \*On stems of *Lycium europeum* L. (Solanaceae).  
Karachi (S. Qaiser Abbas) 24.4.70; KUMH 1396; IMI 161082.
- \*On stems of *Prosopis cineraria* (L.) Druce (Mimosaceae).  
Karachi (S. Qaiser Abbas) 24.5.70; KUMH 1387; IMI 161073.
- \*On stems of *Salvadora oleoides* Decne (Salvadoraceae).  
Karachi (S. Qaiser Abbas) 7.5.70; KUMH 1258.
- \*On stems of *Tamarindus indica* L. (Caesalpinaceae).  
Karachi (S. Qaiser Abbas) 27.10.69; KUMH 1265.
- \*On stems of *Zizyphus nummularia* (Burm. f.) Wt. & Arn. (Rhamnaceae).  
Karachi (S. Qaiser Abbas) 10.9.69; KUMH 1409; IMI 161095.

**\*Patellaria atrata** (Hedw.) Fries

\*On stems of *Commiphora mukul* (Hk. f. ex Stocks) Engler (Burseraceae).  
Karachi (S. Qaiser Abbas) 4.9.70; KUMH 1337; IMI 161027.

\*On stems of *Ficus benghalensis* L. (Moraceae).

Karachi (S. Qaiser Abbas) 27.8.69; KUMH 1382; IMI 161068.

**\*P. clavispora** Berk. et Br.

Sacc. VIII:787.

\*On stems of *Ficus retusa* L. (Moraceae).

Karachi (S. Qaiser Abbas) 21.9.76; KUMH 1257.

**Rhytidhysterium rufulum** (Spreng) Pet.

Sydowia 5:186, 1951.

\*On stems of *Acacia senegal* Willd. (Mimosaceae).

Karachi (S. Qaiser Abbas) 19.5.70; KUMH 1249; IMI 157726.

**Sphaeriales****Botryosphaeria ribis** Grossenb. & Duggar

in N.Y. Agri. Sta. Bull., 18:138, 1911.

\*On stems of *Sesbania sesban* (L.) Merrill (Papilionaceae).

Karachi (S. Qaiser Abbas) 11.9.71, KUMH 1430; IMI 164124.

**Cucurbitaria** sp.

Sacc. II:307.

\*On stems of *Albizia lebbek* Benth. (Mimosaceae).

Karachi (S. Qaiser Abbas) 22.4.70; KUMH 1264.

**\*Didymella bryoniae** (Fuck.) Rehm.

Sacc. I:557.

\*On stems of *Citrullus colocynthis* (L.) Schard. (Cucurbitaceae).

Karachi (S. Qaiser Abbas) 8.8.71; KUMH 1439; IMI 164133.

**Leptosphaeria capparidicola** Mundk. & Ahmad

Mundker & Ahmad in Mycol. Pap., 18:4, 1946.

\*On stems of *Mimosa hamata* Willd. (Mimosaceae).

Karachi (S. Qaiser Abbas) 20.9.70; KUMH 1288; IMI 152211.

**\*Otthia clavata** (Muller & Ahmad) Muller

\*On dried grass (Gramineae).

Karachi (S. Qaiser Abbas) 12.2.70; KUMH 1442; IMI 164136.

**Pleospora dichromatica** (Speg.) Wehmeyer

Wehmeyer:77.

On dried grass (Gramineae).

Manghopir (S. Qaiser Abbas) 3.8.70; KUMH 1425; IMI 164119.

**P. laricina** Rehm.

Sacc. II:257; Wehmeyer:228.

\*On stems of *Ficus benghalensis* L. (Moraceae).

Karachi (S. Qaiser Abbas) 31.3.70; KUMH 1262; IMI 157727.

**P. pellita** (Fr.) Rab.

Wehmeyer:44.

\*On stems of *Euphorbia tirucalli* L. (Euphorbiaceae).

Karachi (S. Qaiser Abbas) 14.5.70; KUMH 1400; IMI 161086.

\*On stems of *Melia azedarach* L. (Meliaceae).

Karachi (S. Qaiser Abbas) 27.6.69; KUMH 1369; IMI 161056.

\*On stems of *Opuntia* sp. (Cactaceae).

Karachi (S. Qaiser Abbas) 20.9.70; KUMH 1335; IMI 161035.

\*On stems of *Tamarindus indica* L. (Caesalpinaceae).

Karachi (S. Qaiser Abbas) 5.8.69; KUMH 1370; IMI 161057.

**Teichospora bovei** Speg.

Sacc. IX:903.

\*On stems of *Acacia arabica* (Lamk.) Willd. (Mimosaceae).

Karachi (S. Qaiser Abbas) 17.9.69; KUMH 1247; IMI 157725.

**BASIDIOMYCETES****Uredinales****\*Sphaerophragmium acaciæ** (Cooke) Magn.

Sacc. XI: 209.

\*On leaves of *Albizia lebbek* Benth. (Mimosaceae).

K.U. Campus (A. Ghaffar) 20.3.71; KUMH 1302; IMI 157730.

**Uromyces chenopodii** Schroet.

Sacc. VII:548; Ahmad in Biologia 2:83

\*On leaves of *Suaeda monoica* Forsk. ex Gmel. (Chenopodiaceae).

Clifton (S. Qaiser Abbas) 12.4.72; KUMH 1457.

## Agaricales

**Pleurotus ostreatus** Jacqu.

Sacc. V:355.

\*On stems of *Ficus benghalensis* L. (Moraceae).

Karachi (S. Qaiser Abbas) 20.8.70; KUMH 1303.

## DEUTEROMYCETES

## Sphaeropsidales

**Aposphaeria** sp.

Sacc. III:169.

\*On stems of *Parkinsonia aculeata* L. (Caesalpiniaceae).

Karachi (S. Qaiser Abbas) 4.9.70; KUMH 1283; IMI 152206.

\***Ascochyta obiones** (Jaap) Diedieke

Dickinson &amp; Morgan-Jones:47

\*On stems of *Suaeda nudiflora* (Willd.) Moq. (Chenopodiaceae)

Karachi (S. Qaiser Abbas) 6.8.71; KUMH 1434; IMI 164129.

\***Bartilinia robillardoides** Tassi

Sacc. XVI:951.

\*On stems of *Citrullus colocynthis* (L.) Schard. (Cucurbitaceae).

Karachi (S. Qaiser Abbas) 23.9.70; KUMH 1282; IMI 152205.

\*On stems of *Cyperus* sp. (Cyperaceae).

Karachi (S. Qaiser Abbas) 3.2.71; KUMH 1456; IMI 164145.

**Botryodiplodia palmarum** (Cke.) Pet. & Syd.

Pet. &amp; Syd: 164.

\*On stems of *Cocos nucifera* L. (Palmae).

Karachi (S. Qaiser Abbas) 22.4.70; KUMH 1383; IMI 161069.

**B. theobromae** Pat.

Sacc. XXII:1011.

\*On stems of *Albizia lebbek* Benth. (Mimosaceae).

Karachi (S. Qaiser Abbas) 20.9.70; KUMH 1334; IMI 161024.

\*On stems of *Aloe barbadensis* Mill. (Liliaceae).

Karachi (S. Qaiser Abbas) 15.8.69; KUMH 1335; IMI 161042.

- \*On stems of *Anthurium andraeanum* Linden (Araceae).  
Karachi (A. Ghaffar) 10.3.71; KUMH 1291.
- \*On stems of *Borassus flabellifer* L. (Palmae).  
Karachi (S. Qaiser Abbas) 8.8.70; KUMH 1339; IMI 161029.
- \*On stems of *Erythrina indica* Lam. (Papilionaceae).  
Karachi (M. Ashraf) 28.4.71; KUMH 1413; IMI 161099.
- \*On stems of *Nerium indicum* Mill. (Apocynaceae).  
Karachi (S. Qaiser Abbas) 8.8.71; KUMH 1436; IMI 164130.
- \*On stems of *Pedilanthus tithymaloides* Poid. (Euphorbiaceae)  
Karachi (S. Qaiser Abbas) 3.6.70; KUMH 1389; IMI 161075.
- \*On stems of *Zizyphus mauritiana* Lam. (Rhamnaceae).  
Karachi (S. Qaiser Abbas) 5.5.69; KUMH 1375; IMI 161062.

#### **Coniothyrium fruticosae** Ahmad

- On stems of *Suaeda nudiflora* (Willd.) Maq. (Chenopodiaceae).  
Karachi (S. Qaiser Abbas) 3.2.71; KUMH 1448; IMI 164143.

#### **C. fuckelii** Sacc.

Sacc. III:306.

- \*On stems of *Aerva javanica* (Burm. f.) Juss. (Amaranthaceae).  
Karachi (S. Qaiser Abbas) 5.8.69; KUMH 1358; IMI 161046.
- \*On stems of *Aloe barbadensis* Mill (Liliaceae).  
Karachi (S. Qaiser Abbas) 15.8.69; KUMH 1353; IMI 161042a.
- \*On stems of *Bignonia* sp. (Bignoniaceae).  
Karachi (S. Qaiser Abbas) 9.9.70; KUMH 1458; IMI 160999.
- \*On stems of *Bougainvillea spectabilis* Will. (Nyctaginaceae).  
Karachi (S. Qaiser Abbas) 26.1.71; KUMH 1447; IMI 164142.
- \*On stems of *Lantana camara* L. (Verbenaceae).  
Karachi (S. Qaiser Abbas) 1970; KUMH 1348; IMI 161038.
- \*On culms of *Panicum antidotale* Retz. (Gramineae).  
Karachi (S. Qaiser Abbas) 21.4.70; KUMH 1366; IMI 161054.

- \*On stems of *Pithecellobium dulce* Benth. (Mimosaceae).  
Karachi (S. Qaiser Abbas) 21.4.69; KUMH 1401; IMI 161087.
- \*On stems of *Phoenix sylvestris* Roxb. (Palmaceae).  
Karachi (S. Qaiser Abbas) 22.7.71; KUMH 1364; IMI 161052.
- \*On stems of *Prosopis cineraria* (L.) Druce (Mimosaceae)  
Karachi (S. Qaiser Abbas) 24.5.70; KUMH 1391; IMI 161077.
- \*On stems of *P. glandulosa* Forr. (Mimosaceae).  
Karachi (S. Qaiser Abbas) 7.5.70; KUMH 1394; IMI 161080.
- \*On stems of *P. juliflora* DC. (Mimosaceae).  
Karachi (S. Qaiser Abbas) 20.9.70; KUMH 1310; IMI 161003.
- \*On stems of *Pterospermum acerifolium* Willd. (Sterculiaceae).  
Karachi (S. Qaiser Abbas) 1.5.70; KUMH 1403; IMI 161089.
- \*On stems of *Tectona grandis* L. (Verbenaceae).  
Karachi (S. Qaiser Abbas) 31.5.70; KUMH 1405; IMI 161091.
- \*On stems of *Zizyphus nummularia* (Burm. f.) Wt. & Arn. (Rhamnaceae).  
Karachi (S. Qaiser Abbas) 16.7.70; KUMH 1349; IMI 161039.

**C. olivaceum** Bon. apud Fuckel/var. *salsolae* Fairman  
Sacc. III:305.

- \*On stems of *Salsola foetida* Willd. (Chenopodiaceae).  
Karachi (S. Qaiser Abbas) 8.8.70; KUMH 1445; IMI 164140.

**Camarosporium capparidis** Ahmad  
Ahmad in Sydowia 5:393, 1951.

- On stems of *Capparis decidua* (Forsk.) Edgew. (Capparidaceae).  
Karachi (S. Qaiser Abbas) 20.9.70; KUMH 1287; IMI 152210a.

**Dichomera** sp.  
Sacc. III:471.

- \*On stems of *Salvia santolinaefolia* Boiss (Labiatae).  
Karachi (S. Qaiser Abbas) 4.9.70; KUMH 1290; IMI 152213.

**Discosia artocreas** (Tode ex Fr.) Fr.  
Sacc. III:653.

- \*On stems of *Mimosa hamata* Willd. (Mimosaceae).  
Karachi (S. Qaiser Abbas) 4.9.70; KUMH 1411; IMI 161097.



**Hendersonia cenchrina** Ahmad

Ahmad in *Biologia*, 17:17, 1971.

On culms of *Cenchrus ciliaris* Fig. & De Not. (Gramineae).  
Karachi (Sultan Ahmad) 16.2.65.

**H. culmicola** Sacc. var. *minor* Sacc.

Sacc. III:437.

\*On culms of *Panicum antidotale* Retz. (Gramineae).  
Karachi (S. Qaiser Abbas) 20.9.70; KUMH 1286; IMI 152209.

**\*Macrophoma sycophila** (Mass.) Sacc.

Sacc. XVIII:273.

\*On stems of *Ficus benghalensis* L. (Moraceae).  
Karachi (S. Qaiser Abbas) 3.6.70; KUMH 1390; IMI 161076.

**Macrophomina phaseolina** (Tassi) Goid.

Goidanich:449.

\*On stems of *Citrullus colocynthis* (L.) Schrad. (Cucurbitaceae).  
Karachi (S. Qaiser Abbas) 18.4.71; KUMH 1441; IMI 164135.

\*On stems of *Corchorus capsularis* L. (Tiliaceae).  
Karachi (Akhtar Hussain) 14.7.70; KUMH 1296.

\*On stems of *C. depressus* (L.) Stocks (Tiliaceae).  
Karachi University Campus (Akhtar Hussain) 14.7.70; KUMH 1300.

\*On stems of *Dalbergia sissoo* Roxb. (Papilionaceae).  
Karachi (S. Qaiser Abbas) 21.1.70; KUMH; IMI 161106.

\*On pods of *Gynandropsis gynandra* (L.) Briq. (Capparidaceae).  
Karachi (S. Qaiser Abbas) 11.9.71; KUMH 1317; IMI 161010.

**\*Microxyphiella hibiscifolia** Bat. nasc. & Cif.

Bat. & Cif.:98.

\*On leaves of *Gossypium hirsutum* L. (Malvaceae).  
Karachi University Campus (A. Ghaffar) 9.3.67; KUMH 1244; IMI  
123661.

\*On leaves of *Hibiscus micranthus* L. f. (Malvaceae).  
Karachi University Campus (Sultanul Abedin) 15.3.71; KUMH 1291;  
IMI 157728.

**Phomopsis bakeri** Syd.

Sacc. XXV:131.

\*On stems of *Ficus benghalensis* L. (Moraceae).

Karachi (A. Ghaffar) 3.6.70; KUMH 1407; IMI 161093.

**\*P. caricae-papayae** Pet. & Cif.

Pet. &amp; Cif. in Annal. Mycol., 28:412, 1930.

\*On petioles of *Carica papaya* L. (Caricaceae).

Malir (A. Ghaffar) 31.3.71; KUMH 1293; IMI 157729.

**\*P. mendax**\*On stems of *Albizia lebbek* Benth. (Mimosaceae).

K.U. Campus (A. Ghaffar) 20.9.70; KUMH 1339; IMI 161031.

**\*P. tithymaloides**\*On stems of *Pedilathus tithymaloides* Poit. (Euphorbiaceae).

Karachi (S. Qaiser Abbas) 4.9.70; KUMH 1346; IMI 161035.

**\*Phyllosticta nerii** West.

Sacc. III:26.

\*On leaves of *Nerium indicum* Mill. (Apocynaceae).

Karachi (S. A. Jamil Khan) 31.7.65; KUMH 1226.

**\*Phylyctaena** sp.

Sacc. III:593.

\*On stems of *Caesalpinia crista* L. (Caesalpinaceae).

Karachi (S. Qaiser Abbas) 22.10.69; KUMH 1259; IMI 157726.

**\*Seimatosporiopsis salvadorae** Sutton, Ghaffar & Abbas

Sutton, Ghaffar &amp; Abbas:295.

\*On stems of *Salvadora oleioides* Decne. (Salvadoraceae).

Karachi (S. Qaiser Abbas) 22.4.70; KUMH 1424; IMI 148620.

\*On stems of *S. persica* L. (Salvadoraceae).

Karachi (S. Qaiser Abbas) 4.8.70; KUMH 1459.

**Sphaeropsis cordiana** Ahmad

Ahmad in Biologia, 17:80, 1971.

On stems of *Cordia gharaf* (Forsk.) Ehrenb. (Boraginaceae).

Karachi (Sultan Ahmad) 16.2.65.

**\*S. enormis** Sacc.

Sacc. X:254.

\*On stems of *Commiphora mukul* (Hk, f. ex Stocks) Engl. (Burseraceae).  
Karachi (S. Qaiser Abbas) 24.5.70; KUMH 1379; IMI 166065.

\*On stems of *Ficus benghalensis* L. (Moraceae).

Karachi (S. Qaiser Abbas) 3.6.70; KUMH 1378; IMI 161064.

**Stagnospora panici** AhmadAhmad in *Biologia*, 17:25, 1971.

On culms *Panicum antidotale* Retz. (Gramineae).

Karachi (Sultan Ahmad) 16.2.65.

**Melanconiales****Colletotrichum dematium** (Pers. ex Fr.) Groves

von Arx:102.

\*On stems of *Gynandropsis gynandra* (L.) Briq. (Capparidaceae).

Karachi (S. Qaiser Abbas) 11.9.70; KUMH 1322; IMI 161012.

\*On stems of *Physalis peruviana* L. (Solanaceae).

Karachi (A. Ghaffar) 4.9.70, KUMH 1308; IMI 161001.

**\*Trimmatostroma** sp.

\*On stems of *Tecomella undulata* (G. Don) Seem. (Bignoniaceae).

Karachi (S. Qaiser Abbas) 3.8.71; KUMH 1446; IMI 164141.

**Moniliales****Aspergillus candidus** Link.

Raper &amp; Fennel: 347.

\*From rhizosphere of *Trifolium alexandrinum* L. (Papilionaceae).

K.U. Campus (Akhtar Hussain) 1970, IMI 149624.

**A. nidulans** (Eidam) Wint.

Raper &amp; Fennel: 495.

\*From rhizosphere of *Trifolium alexandrinum* L. (Papilionaceae)

K.U. Campus (Akhtar Hussain) 1970, IMI 150422.

**Hadrotichum phragmites** Fuck.

Sacc. IV:301.

\*On culms of *Arundo donax* L. (Gramineae).

Karachi (S. Qaiser Abbas) 2.1.69; KUMH 1256.

**Memmoniella echinata** (Rivolta) Galloway

Gilman: 327; Subramanian:206.

\*On stems of *Salvadora persica* L. (Salvadoraceae).

Karachi (S. Qaiser Abbas) 8.8.71; KUMH 1427; IMI 164121.

**Myrothecium striatisporum** Prest.

Preston in Trans. Brit. mycol. Soc., 31:271:276, 1948.

\*From rhizosphere of *Trifolium alexandrinum* L. (Papilionaceae).

Karachi University Campus (Akhtar Hussain) 11.3.70; IMI 150426.

**Penicillium oxalicum** Currie & Thom

Raper &amp; Thom: 378.

\*From rhizosphere of *Trifolium alexandrinum* L. (Papilionaceae).

Karachi University Campus (Akhtar Hussain) 11.3.70, IMI 150417.

**P. rubrum** Stoll

Raper &amp; Thom:637.

\*From rhizosphere of *Trifolium alexandrinum* L. (Papilionaceae).

Karachi University Campus (Akhtar Hussain) 1.3.70.

**\*Scytidium** sp.

Pesante in Ann. Sper. N.S., 11:264, 1957.

\*From rhizosphere of *Trifolium alexandrinum* L. (Papilionaceae).

Karachi University Campus (Akhtar Hussain) 1.3.70; IMI 149623.

**Stachybotrys atra** Corda ex Fr.

Gilman:322; Bisby:133.

From soil Karachi University Campus (Abdul Ghaffar) 1970.

**\*S. bisbyi** (Srin.) Barron

Bisby:133.

\*From rhizosphere of *Trifolium alexandrinum* L. (Papilionaceae).

Karachi University Campus (Akhtar Hussain) 1.3.70; IMI 149622.

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