SHORT COMMUNICATION

Addition to Black Mildew Fungal Species from Eturnagaram, Pakhal Wildlife Sanctuaries of Telangana State, India.

MOHAMMAD KHAJA MOINUDDIN*, RANA KAUSAR AND BAGYANARAYANA GADDAM



J. Mycopathol, Res, 54(4) : 559-561, 2017; ISSN 0971-3719 © Indian Mycological Society, Department of Botany, University of Calcutta, Kolkata 700 019, India

This article is protected by copyright and all other rights under the jurisdiction of the Indian Mycological Society. The copy is provided to the author(s) for internal noncommercial research and educational purposes.

SHORT COMMUNICATION

Addition to Black Mildew fungal species from Eturnagaram, Pakhal Wildlife Sanctuaries of Telangana State, India

MOHAMMAD KHAJA MOINUDDIN1*, RANA KAUSAR² AND BAGYANARAYANA GADDAM²

¹P.G. Center, Wanaparthy, Palamuru University, Telangana ²Mycology and Plant Pathology Laboratory, Department of Botany, Osmania University, Hyderabad 500 007, Telangana

| Received : 22.06.2016 | Accepted :20.07.2016 | Published : 30.01.2017 |
|-----------------------|----------------------|------------------------|
| | | |

This paper reports eight Black Mildew fungi belonging to genera *Sarcinella*, namely *S. gorakhpurensis* which is a new record from the south India. Whereas *S. wrightiae*, *S. limoniae*, *S. tamarindi*, *S. azadirachtae*, *S. cassiaefistulae*, *S.odinae* and *S.shambhoodharii*, are reported for the first time from Pakhal, Eturnagaram wildlife sanctuaries of Telangana state.

Key words: Black mildew, Sarcinella, new records, Pakhal, Eturnagaram wildlife sanctuaries, Telangana state

During the survey of foliicolous fungi of forests of Pakhal and Eturnagaram wild life sanctuaries of Warangal district of Telangana state. authors found eight Black mildew infected leaves of *Diospyros melanoxylon*, *Wrightia* sp., *Feronia limonia*, *Tamarindus indica*, *Azdirachta indica*, *Cassia fistula*, *Lannea coromandelica*, and *Elaeodendron glaucum*.

Infected plant leaves were carefully collected from Pakhal and Eturnagaram wild life sanctuaries, each infected leaves were collected separately in polythene bags along with the host twigs (preferably reproductive parts) to facilitate the identity of corresponding host. These infected plant parts were pressed neatly and dried in between blotting papers. After ensuring their dryness, they were kept in the butter paper folders. Later, these folders were placed in the thick paper envelop of convenient size with collection details. For microscopic study, in the

laboratory, the standard method nail polish technique used to study the entire colony in its natural condition. A drop of high quality well transparent nail polish were applied to the selected colonies and carefully thinned with the help of a fine brush without disturbing the colonies. Colonies with hyperparasites show wooly nature and were avoided. When the nail polish on the colonies dried fully, a thin, colourless film or flip formed with the colonies firmly embedded in it. A drop of DPX will be spread on a clear slide and the flip were spread properly on it. One or two more drops of DPX again added on the flip and a clean cover glass were placed over it and a gentle pressure on the cover glass brings out the excess DPX and it was removed after drying. These slides were labeled and placed in a dust free chamber for 12 days for drying. These permanent slides were then used for further studies. Microscopic studies were carried with the compound microscope with Scopeimage image analyzer software and microphotographs were taken by inbuilt CMOS camera of 1.3 megapixels. After the

^{*}Corresponding author : khaja.moin83@gmail.com

study of each collection, some of the materials were deposited at Department of Botany Fungal Herbarium (DBFH), remaining materials were deposited at Jawaharlal Nehru Tropical Botanic Garden Research Institute (JNTBGRI), Palode, Kerala, India.

Taxonomic descriptions

Sarcinella azadirachtae Meenu, Sanjay K.Singh and R.K. Chaudhary., J.Living World. Hosag. and Sabeena, J. Threat ened Taxa 3: 1620, 2011.

Material examined

On living leaves of *Azdirachta indica* A. Juss., (Meliaceae), Eturnagaram forest, Eturnagaram wild life sanctuary, Warangal district, Telangana state, India. Coll. By Mohammad Khaja Moinuddin, Dt. 27112013, DBFH No23.

Remarks

This fungus was known on *Azdirachta indica* from Nepal (Meenu, Sanjay K.Singh and R.K. Chaudhary) however this fungus is reported here for the first time from Telangana state.

Sarcinella cassiae fistulae Hosag. and Shajivaz. Zoos'PrintJournal.17(12):943948.

Material examined

On living leaves of *Cassia fistula* L. (Caesalpiniaceae), Eturnagaram forest, Eturnagaram wild life sanctuary, Warangal district, Telangana state, India. Coll. By Mohammad Khaja Moinuddin, Dt. 26122013, DBFH No42.

Remarks

This fungus was known on this host genus from the Western Ghats region of Kerala and it is reported here for the first time from the Eastern Ghats.

Sarcinella gorakhpurensis Kamal and Singh. Hughes, p.110, 1987, Rajak & Soni, Indian J. Mycol. Plant. Pathol. 11: 89, 1981. K.K. Soni Jabalpur, Madhya Pradesh, December 1977, IMI 224097~ Madhaulia range, Gorakhpur, Uttar Pradesh, August 1976, R.P. Singh 211, IMI 210842.

Material examined

On living leaves of *Diospyros melanoxylon* Roxb (Ebanaceae), Thirumalagandi forest Kothaguda mandal, Pakhal wild life sanctuary, Warangal district, Telangana state, India. Coll. By Mohammad Khaja Moinuddin, Dt. 29112013, DBFH No11.

Remarks

Apart from being reported originally from Uttar Pradesh (R.P. Singh, 1976) and Madhya Pradesh (K.K. Soni, 1977), this pathogen has not been reported from southern region of India. Therefore, the present report happens to be its first record from southern India.

Sarcinella limoniae Hosag., Sabeena and Riju, Indian Phytopath. 63: 236, 2010.

Material examined

On living leaves of *Feronia limonia* (Rutaceae). Kamaram forest. Kothaguda mandal, Pakhal wild life sanctuary. Warangal district, Telangana state, India. Coll.By Mohammad Khaja Moinuddin, Dt.31112012, DBFH No54.

Remarks

This fungus is known on this host genus from the Western Ghats region of Kerala and is reported here for the first time from the Telangana state.

Sarcinella odinae V.P.Sahni. Mycopathol. Mycol. Appl. 23: 336, 1964.

Material examined

On living leaves of *Lannea coromandelica* (Houtt.)Merr. (Anacardiaceae). Kamatlagudem forest. Kothaguda mandal, Pakhal wild life sanctuary. Warangal district, Telangana state India. Coll. By Mohammad Khaja Moinuddin, Dt. 20102013. TBGT No6875.

Remarks

This Pathogen was reported originally from Madhya Pradesh, Jabalpur, Kundam Road, on leaves of *Odina wodier* Roxb. (Anacardiaceae), by V.P. Sahni in 1962, this pathogen has not been reported from southern region of India. Therefore, : 54(4) January, 2017]

the present report is for the first time record from her southern India.

Sarcinella shambhoodharii Sharma, Rai & Vyas, Indian J. Mycol. Plant Pathol. 26: 313, 1996. V.B. Hosagoudar & al. 3 January 2009, HCIO 49341~ TBGT 3586.

Material examined

On living leaves of *Elaeodendron glaucum* Pers. (Celastraceae), Kamaram forest, Kothaguda mandal, Pakhal wild life sanctuary, Warangal district, Telangana state, India. Coll. By Mohammad Khaja Moinuddin, Dt.11092013, DBFH No16.

Remarks

This species was known from Madhya Pradesh and Kerala it is reported here for the first time from Telangana state.

Sarcinella tamarindi Hosagoudar, V.B,. Riju, M.C.2011. Kerala, India. Mycosphere.2(2):157160.

Material examined

On living leaves of *Tamarindus indica L*. (Caesalpiniaceae), Thirumalagandi forest, Kothaguda mandal, Pakhal wild life sanctuary, Warangal district, Telangana state, India. Coll. By Mohammad Khaja Moinuddin, Dt.03112013, DBFH No06.

Remarks

This fungus was known on same host genus from the Western Ghats region of Kerala and is reported here for the first time from the Telangana state. **Sarcinella wrightiae** Hosag., Archana and Agarwal, Indian Phytopath. 60: 348, 2007. Gireesh Kumar and P.J. Robin HCIO 46993.

Material examined

On living leaves of *Wrightia* sp. (Apocynaceae). Tirumalgandi forest. Kothaguda mandal, Warangal district, Telangana state India. Coll. By Mohammad Khaja Moinuddin on dated 20102012.

Remarks

This species was known from Kerala and is reported here for the first time from Telangana state.

ACKNOWLEDGEMENTS

The author is very much thankful to Prof: Rana Kausar, Department of Botany, Osmania University, Hyderabad, for the providing physical facilities and also her kind help, encouragement in during the research work. Mohammad Khaja Moinuddin is grateful to Osmania University authorities for the award of UGC New Delhi, BSR, RFSMS fellowship

REFERENCES

Hosagoudar, V.B. Archana, G.R. and Agarwal, D.K. 2007. Studies on foliicolous fungi XXVIII. *Indian Phytopathology*. 60: 345-349.

- Hosagoudar, V.B. Sabeena, A. and M.C. Riju, M.C. 2010. Sarcinella limoniae sp. nov. from Kerala, India. Indian Phytopathology. 63:236-237.
- Hosagoudar, V.B. and Riju, M.C. 2011. Sarcinella tamarindi sp. nov. from Kerala, India. *Mycosphere*. **2**:157-160.
- Hosa Goudar, V.B. 2011. The genus *Schiffnerula* in India. Plant Pathology & Quarantine Doi 10.5943/ppq/1/2/4.
- Mohammad Khaja Moinuddin, 2015 Ph.D. Thesis, *Bio Diversity, Taxonomy* and *Conservation of foliicolous fungi of forests of Warangal district,* Telangana State, India. November 2015.