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INTERESTING SLIME MOLDS FROM TELANGANA STATE, INDIA

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There is little or no information available on Myxomycetes from Telangana state, India. Fifteen Myxomycetes which form new reports for Telangana state are listed. These slime molds are found colonizing mostly dead wood and litter collected from different forest localities of Telangana state.

Keywords: Forest, Litter, Myxomycetes, Wood.

Myxomycetes are a small group of relatively homogenous group of eukaryotic organisms, encompassing more than 60 genera and 500 species. These molds typically inhabit and colonize fallen, decaying plant parts, humid soils and are distributed throughout the world. Though information is available on Myxomycetes from different parts of India (Agnihotrudu 1968, Indira 1975, Thind 1977, Lakhanpal 1983, Temburne and Nahir 2011, Ranade *et al.* 2012), there is no information available on Myxomycetes from Telangana and Andhra Pradesh states, but for the reports of Manoharachary *et al.* (2012). It is in this context a survey of Myxomycetes has been conducted in some forest localities of Telangana state during 2013-15, and the data is presented in this paper.

MATERIALS AND METHODS

Collections were made during July to November (2013-14). About 200 samples were collected from the forests of Adilabad, Anantagiri, Bhadrachalam, Mannanoor, Manchippa and Narasapur of Telangana state. Slime molds were collected from dead and decaying leaves, plant parts, twigs, litter etc. Meticulous care was taken during transportation. The collected Myxomycete (s) specimens were preserved in small plastic vials of 2.5 to 4 cm and are placed in card board boxes. Later samples are dried and treated with Potassium chloride for dehydration keeping them in desiccators (Davis, 1965). Hoyer's medium (Distilled water 50 ml, Arabic gum 30 g, Chloral hydrate 200g, Glycerine 20g) was used for observing calcareous members. Non calcareous specimens were observed in Glycerine mixed with water (2:1). The examined materials have been deposited in the Herbarium of Osmania University under OUMH accessions. Identifications were done based on morphotaxonomic criteria and keys provided by Lakhanpal and Mukherji (1981) and Thind (1977).

RESULTS AND DISCUSSION

Slime molds are worldwide in distribution and are common in occurrence besides being the dominant colonizers of dead, decaying litter and other substrates. Myxomycetes are distributed in temperate, tropical and sub-tropical forests but are of less occurrence in deserts.

Moderate rainfall, high humidity, a temperature range of 15^0C – 30^0C, luxuriant vegetation, age of the plant, altitude and other related factors seems to play major role on the occurrence, distribution, quantitative and qualitative composition, dominance and seasonal distribution of Myxomycetes. Agnihotrudu (1954), Thind (1977) and Lakhanpal and Mukherji (1981) have made valid contributions to the understanding of diversity, taxonomy and conservation of Myxomycetes from India. A perusal of literature indicates that Manoharachary *et al.* (2012) have reported around 20 Myxomycetes from Andhra Pradesh, India. The present data

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Table 1. Myxomycetes collected from different forest localities of Telangana state.

S. No.	Slime mold name	Forest locality	Date	Substrate	Accession No.
1.	*Cribriaria atrofusca* Martn & LoveJoy	Adilabad	7-7-2013	Dead wood	OUMH-45
2.	*C. aurantiaca* Schard	Bhadrachalam	9-10-2013	Dead wood	OUMH-46
3.	*Dictydium canceilatum* (Batsch) Macbr	Adilabad	10-12-2014	Dead wood	OUMH-47
4.	*Arcyria glauca* A. lister	Ananthagiri	9-7-2013	Dead wood	OUMH-48
5.	*A. leiocarna* (Cooke) Martin Alexop	Mannanoor	8-10-2014	Dead wood	OUMH-49
6.	*Hemitrichia calvaculata* (Speg) Farr.	Manchippa	23-10-2013	Dead wood	OUMH-50
7.	*Trichia botrytis* (J.F. Gmel) Pers.	Narsapur	8-8-2014	Dead wood	OUMH-51
8.	*Physarum nucleatum* Rex	Bhadrachalam	10-12-2013	Dead wood	OUMH-52
9.	*Diacchea leucopodia* (Bull.) Rest	Adilabad	6-7-2014	Dead wood	OUMH-53
10.	*Comatrichia elegans* (Racin) G. Lister	Narsapur	9-9-2014	Dead wood	OUMH-54
11.	*C. typhoides* (Bull) Roth.	Adilabad	12-1-2015	Dead wood	OUMH-55
12.	*Stemonitis fusca* Roth.	Ananthagiri	15-1-2015	Dead wood	OUMH-56
13.	*S. hyperopta* Meylan	Adilabad	28-1-2013	Dead wood	OUMH-57
14.	*S. uvifera* Machr.	Adilabad	30-12-2013	Dead wood	OUMH-58
15.	*S. virgiiensis* Rev.	Adilabad	8-7-2014	Dead wood	OUMH-59

(Table 1) enlists 15 interesting Myxomycetes collected from different forests of Telangana and this data enriches the Myxomycetes floristics of not only Telangana and Andhra Pradesh but also of India. In the present study litter and wood have supported more Myxomycetes than others. Thus the data presented here forms new information on Myxomycetes from Telangana state, India.

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REFERENCES

Agnihotrudu V 1968 Some slime molds from Sothern India X. *Sydowia* **22**171-182.

Davis EE 1965 Preservation of Myxomycetes, *Mycologia* **57** 986:988.

Indira PU 1975 Some slime molds from Southern India XI. *Kavaka* **3** 41:54.

Lakhanpal TN 1983 Contibution to Indian Myxomycetes during the decade 1970-80. *Bibl Mycol* **91**319-353.

Lakhanpal TN and Mukherji KG 1981 *Indian Myxomycetes.* Cramer Publishers p. 530.

Manoharachary C, Kunwar IK and Tilak KVBR 2012 Some Myxomycets from Andhra Pradesh, India. *J Ind Bot Soc* **9(4)** 427-429.

Renade VD, Korade ST, Jagtap AV and Ranadive KR 2012 Checklist of Myxomycetes from India. *Mycosphere* **3** 358-390.

Tembhurne RR and Nasarin SP 2012 New five species of the Myxomycetes recorded from the south-east region of Maharashtra (India). *Science Research Reporter* **1** 65-68.

Thind KS 1977 The *Myxomycetes in India.* Indian council of Agricultural Research New Delhi Publication p. 452.