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Indian Moon Moth / Indian Luna Moth

(*Actias selene*)
Coonoor, Nilgiris

These large moths with their beautiful trailing tails make for some of the prettiest moths you can hope to see. First described in 1807, this species is found across Asia, and commonly reared by many amateur entomologists from commercially available eggs or cocoons. They also produce silk and are crepuscular or nocturnal favouring dim light or night conditions to fly. They are widespread, with many subspecies in different countries across Asia. The males are supposed to be able to detect female pheromones from long distances (anywhere between 4-10 km). They can produce up to three generations of young ones in a year. Considered widespread before, there have been reports of its decreasing numbers in recent times.

Photo Credit : Samantha Iyanna, Coonoor

Text : R Sharada, Kotagiri

EDITORIAL

Dear Readers

We are trying our best to keep the newsletter on time and schedule and we are pleased to bring this edition which is a mixed bag of natural history tales from the Nilgiris. We have articles about all creatures great and small in this edition - from moths, butterflies, fish, gaur to fungi ... we have quite a diversity.

We are happy to have local naturalists from the Nilgiris put out their best photos as we see in the feature on fungi called morels and about moth diversity. The stunning winged dwellers of the night, the moths - rest in the day making them relatively easier to photograph than the butterfly who wants to flit about all the time!

Other sentinels of the day are the Gaur and today they have become so common place that local people go about their lives as if it is normal to have a 1 tonne weighing animal from the wild as your neighbour. The team from Keystone who monitor them on a daily basis share their experiences.

Morels are a distinct group of Fungi with a pointed shape and honeycomb surface and we have an article giving more details of this life form. This is also a new record for the Nilgiris.

From the natural world we focus on natural ways of farming to highlight efforts by local farmers in the Kukalthorai valley who are determined to grow food organically.

A local student writes about his research study on wild edible plants and how he rediscovered his own community's interaction with the forest through his research.

We want to share the story of a woman farmer who grows millets and is a protector of the seed diversity of her community. For several of us who know her personally - she is an inspiration.

From the terrestrial we take you to the fresh water dwelling orange-finned mahseer which has long held a fascination for anglers and researchers alike. Here we are happy to bring you some updates on its status

The NNHS has once again been buzzing with activities that range from making safe detergents to taking people out on walks to the sholas. We hope you enjoy reading this diverse newsletter and we look forward to your feedback.

Best wishes

Anita Varghese

Chief Editor

NEW RECORD OF MOREL

IN NILGIRI HILLS, TAMILNADU INDIA N Moinudheen

Abstract:

Morchella Galilaea Masaphy & Clowez 2012 true morals have been recorded in south India In Nilgiri Hills, Morchella research in South India has not taken place.

Key words: Nilgiri Hills, Fungus, Morchella, Morals

Introduction:

Fungus is any member of groups of eukaryotic organism, that includes microorganism such as yeast & molds, worldwide fungus recorded 3.8 million species. In India 27,000 species are recorded from till date (Sarbhoy et al 1996). Tamilnadu is one of plant rich states in the country that shows enormous diversity in various plant groups, and fungi, liches and algae. A total of 1077 species in about 370 genera have been recorded from tamilnadu till 2002 (Natarajan 2007). Nilgiri hills had a rich in fungal diversity. Morchella true morel is a genus of edible wild fungi. It's also of economic importance and medicinal uses. Morchella species have been used traditional Chinese medicine from 2000 years as well as in Malaysia and Japan for the treatment of many diseases (Hobbs, 1995). It is a laxative and can be used as emollient (Sher et al 2011). Worldwide morels are estimated 1069 species of mushrooms have been reported as being used for food purposes. (Boa 2004).

Morchella species commonly called as guchi in India. Most about this morchella genus of morels has been reported in the north provinces in India, temperate Zones in Himachal Pradesh, Punjab, Jammu & Kashmir, Rajasthan and Uttaranchal, Maharashtra, Morchella required undisturbed natural condition but very rarely linked with agricultural ecosystem (Lakhanpal & Shad 1986). Six species of morels have been identified in India *M.esculenta*, *M.conica* (pers) Fr. (syn. *M.elata* Fr.),

M.deliciosa (Fr.)Jct., *M.angusticeps* peck, *M.classipes* (vent.) pers and *M.semilibera* (Dc.)Fr. (Chandra Singh Negi 2006). *Morchella galilaea* is one of species in morchella genus, this species was described as new to science in 2012. (Masaphy & Clowez 2012).

The Vegetation of the Nilgiri hills is Thorny scrubs and shola grass land. The morchella galilaea specimen was found under *cycas circinalis* L. in Coonoor Nilgiri Hills. *Cycas Circinalis* L. is endemic to Western Ghats, IUCN red list data base of threated species as data deficient. It was transformed early in the fall of autumn. Although morel fruiting season occurs generally during the spring season (Sturgis 1905) and (Masaphy et al 2009). *Morchella galilaea* give the phylogenetic cod Mes-16) was observed in autumn in the mist units of the Horticulture Research and Application Area of kurova University, Adana Turkey (Taskin et al 2012).

Distribution:

China, Java, Hawaii, Isreal, New Zealand, Turkey and three countries of Africa, North province & South province in India.

Systematic Account:

Order : Pezizales

Family : Morchellaceae

Genus : Morchella

Species : *Morchella Galilaea*

(Masaphy & Clowez 2012)

Species Description:

Size: 6.5 Cm tall. Stem color is white and Cap color brownish with yellow color. *M. Galilaea* looking honey comb appearance (Fig.1). *Galilaea* species are thin, elastic simple, or forked anastomosing to form elongated hymenial pits, white, bluntly rounded when young. (H. Taskin et al 2015).



(Fig.1) All *Morchella galilaea* are looking honey comb appearance.

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References

- Boa E. 2004. Wild edible fungi; a global overview of their use and importance to people. Non-wood forest products, No. 17, FAO, Forest Department, Rome, Italy.
- Chandra Singh Negi 2006 - Morels (*Morchella* spp) is kumaun Himalaya. Natural product Radiance Vol. 5(4) pp.306-310.
- Hill, KD., C.J. Chen & P.K Loc (2003). In: Donaldson, J (ed) Cycads: Status survey and conservation action plan. IUCN/SSC Cycad specialist group. IUCN the world conservation union, cambridge, UK. Regional Overview: Asia Chapter 5: pp 25-30.
- Hobbs. C 1995. Medicinal Mushrooms. Bot Press, CA, USA.
- Lakhanpal, TN and O.S Shad, 1986 studies on wild edible mushrooms of Himachal Pradesh (North Western Himalaya II. Ecological relationship of morchella species. Ind.J.Mush., 12: 15-20.
- Masaphy S, Zabari L, Goldsberg D. 2009. New long season ecotype of *Morchella rufoburunea* from northern Israel, Mycologia Aplicada Internation 21: 45-55.
- Masaphy & Clowez in Clowez 2012 *Morchella galilaea*. Bull Soc Mycol France 126(3-4): 238.
- Natarajan K. 2007 List of fungi reported from Tamilnadu. A database available at <http://www.tnenvs.nic.in>.
- Sarbhoy, A.K., Agarwal D.K and Varshney, J.L, fungi of India 1982-1992, CBS publication and Distributors, New Delhi, 1996, pp:350.
- Sher, H., Elyemeni, M., Hussain, K. and Sher, H.2011. Ethnobotanical and economic observations of some plant resources from the northern parts of Pakistan. Ethnobot. Res., Appl. 9:27-41.
- Sturgis wc. 1905 Remarkable occurrence of *Morchella esculenta* (L) Pers. Journal of Mycology 11:269.
- Taskin H. Buyukalaca S. 2012 Morel (*morchella*) mushroom, Bahce 41: 25-36.
- Taskin H. Hasan Huseyin Dogan & Buyukalaca S. 2015. *Morchella galilaea*, an autumn species from Turkey. Mycotaxon Vol-130 pp:215-221.

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