# Prelim Bits 01-01-2018

## Ant Species in Andaman

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- Scientists have discovered the new species Tetramoriumkrishnani and Tetramoriumjarawa in Havelock Island, a part of the Andaman archipelago.
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- The ant species are endemic to the Andaman Islands.
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- They dwell in leaf litter in the evergreen forests of the Island.
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- The species are named in honour of late scientist K.S. Krishnan, and after the Jarawas, an indigenous people of the islands, who are inhabited the islands.
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## Night Frogs

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- Frogs belongs to the genus Nyctibatrachus are commonly known as night frogs.
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- They are found only in the Western Ghats mountain range.
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- Scientists have recently discovered new night frog “Mewasinghi”, belonging to Nyctibatrachus from Malabar Wildlife Sanctuary, Kozhikode.
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- It is found in a small stream running along the Peruvannamuzhi dam.
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- It is closely relative to Athirappilly night frog (found south of the Palakkad Gap in Thrissur and Idukki) and the Kempholey night frog (found in the northern Western Ghats of Kerala and Karnataka).
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## New Ginger Species

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- Scientists have discovered two new species of Ginger in Manipur and Nagaland.
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- They were found in easternmost districts bordering Myanmar.
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- Both the plants are from the family of Zingiberaceae, to which the commonly found Ginger (Zingiberofficinale) belongs.
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- The species discovered in Nagaland, is an epiphytic plant and grows on tall trees.
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- The species from Manipur was found growing in rock crevices, boulders and humus rich soil in the Shirui Hills.
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## LiFi

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- Light-fidelity (LiFi) is a technology used for free-space communication using visible and near-visible light.
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- It is similar to Wireless Fidelity (WiFi), a technology for wireless local area network communication using microwaves.
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- Microwaves can pass through walls while transmitting signals whereas visible and near-visible light cannot pass through walls.
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- Thus it makes LiFi signal network more secure.
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- Scientists have recently added a new layer of security to LiFi.
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- Light bounces off from walls and falls on the receiver.
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- So wall boundaries can be used effectively for reflecting signals so that communication is maintained even without line-of-sight communication between the signal source and receiver.

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- Receiving detectors can receive both direct and reflected signals.
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- Walls painted with fluorescent and phosphorescent paints absorb and then emit light with marginal loss.
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- The paints continue to emit light even several hours after the original source of light has been switched off.
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- This makes the communication signal more effective and secure.
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## SOFIA

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- SOFIA, the Stratospheric Observatory for Infrared Astronomy, is the largest airborne observatory in the world.
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- It consists of an extensively modified Boeing aircraft carrying a reflecting telescope with an effective diameter of 2.5 meters.
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- The observatory is based at NASA's Armstrong Flight Research Center in Palmdale, California.
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- The project is implemented by NASA and German Aerospace Center (DLR).
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- Many objects in space emit almost all their energy at infrared wavelengths. Often, they are invisible when observed in ordinary visible light.
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- Thus SOFIA observes universe in infrared wavelengths to get the expanded views.
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- It is preparing for its 2018 campaign for observing Saturn’s giant moon Titan.
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Jupiter in Visible and Infrared Image

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Source: NASA

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## Schemes to Promote Milk Production

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- Government of India is implementing RashtriyaGokul Mission, National Dairy Plan- I to supplement the efforts of States in promoting milk production.
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- RashtriyaGokul Mission has been initiated with the aim of development and conservation of indigenous bovine breeds thereby enhancing milk production and productivity.
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- National Dairy Plan-I has focus on development and conservation of indigenous breeds of cattle and buffalo through implementation of progeny testing and pedigree selection programme.
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i. 6 indigenous breeds of cattle (Gir, Sahiwal, Rathi, Kankrej, Tharparkar and Hariana)
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ii. 6 buffalo breeds (Murrah, Mehsani, Jaffarabadi, Nili Ravi, Pandharpuri and Banni)
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**Source: The Hindu, Economic Times**

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