

SANSKRITI IAS DAILY CURRENT AFFAIRS

10-08-2026

Russula griseopurpurata

 Northeast News

Scientists discover new mushroom species in Meghalaya's Ri Bhoi

A mushroom found growing beneath a sal tree in Meghalaya's Ri Bhoi district has been identified as a species previously unknown to science,...



Why in News

A mushroom collected beneath a **sal tree in Ri-Bhoi district, Meghalaya**, in 2022 has been identified as a new species, **Russula griseopurpurata**.

Taxonomic and Geographical Profile

- **Russula griseopurpurata** is a newly identified mushroom species recorded from **Meghalaya and West Bengal**.
- It belongs to the large and diverse **Russula genus**, which has about **2,000 species globally** and over **180 species in India**.
- It occurs singly or in scattered groups beneath **sal trees**.

Distinctive Features

- Its cap is **greyish-purple** and develops cracks as it matures.
- Its gills show characteristic **forking near the stalk**.

Food-Safety Dimension

- Although some **Russula** species are edible, the edibility of **R. griseopurpurata** has **not been established**.
- Its reported mild taste and odour **do not constitute a food-safety assessment**.

Phulkari

 The Tribune

Phulkari crisis: GI tag fails to protect artisans from machine-made competition

Several years after Punjab's traditional embroidery Phulkari secured the coveted Geographical Indication (GI) tag, the craftspersons who...



Why in News

Punjab's traditional embroidery **Phulkari**, despite receiving a **GI tag**, continues to face challenges related to recognition and sustainable livelihoods for artisans.

Cultural and Historical Profile

- **Phulkari** literally means “flower work” and is a traditional embroidery art of **Punjab**.
- Its origin is debated, with some traditions tracing it to the **7th century CE** and others associating it with **Iranian Gulkari**.
- The earliest references are found in **18th-century Punjabi literature**, along with folk traditions and legends.



GI and Cultural Significance

- **Phulkari received a Geographical Indication (GI) tag in 2010.**
- It is closely associated with major life-cycle events, particularly the **birth of a girl child and marriage ceremonies**.
- Traditionally, the number and quality of Phulkaris were also associated with **family status and cultural milestones**.

Traditional Technique

- The base fabric is generally thick hand-woven cotton called **khaddar**, while **pat**, a lustrous silk thread, is used for embroidery.
- Designs include **geometrical figures, flowers and local fauna**, including peacocks, elephants, birds and camels.
- Traditional products include **chaddars, dupattas and stoles**, often used during ceremonies.

Suckermouth Catfish

The Indian Express

Invasive fish species spawns India's first fishermen-driven removal system

The Ujani reservoir, once famous for its high-quality freshwater fish, is now battling an ecological crisis triggered by invasive alien...



Why in News

The **Bombay Natural History Society (BNHS)** has initiated active removal of invasive fish such as the **suckermouth catfish** from **Ujani Reservoir**.

Biological Profile

- The suckermouth catfish belongs to the **armored catfish family (Loricariidae)** and is scientifically identified in the source as **Hypostomus plecostomus**.

- It has a strongly arched body and a large dorsal fin with **one spine and seven branched rays**.
- Its accessory breathing organ allows it to extract oxygen from air and survive for considerable periods outside water.



Origin and Invasion

- It is native to **South America**, particularly areas including northeastern Brazil, the Guianas, and Trinidad and Tobago.
- It entered India primarily through the **global aquarium trade**.
- It is locally known as the **“Helicopter fish”** because of its unusual appearance.

Ecological Impact

- It is an **opportunistic omnivore** feeding on algae, plants, invertebrates and small fish.
- It can consume **fish eggs** and burrow into riverbanks and earthen check dams.
- Its high resilience and adaptability make it a potentially significant **invasive species** concern.

Thoti Tribe

Telangana Today

Thoti tribal community face extinction in Telangana

The Thoti community, a Particularly Vulnerable Tribal Group in Telangana, is facing a serious decline due to a shrinking population,...



Why in News

The **Thoti tribe of Telangana** is facing a rapid decline associated with its shrinking population.

Tribal and Constitutional Profile

- The **Thoti** are a small tribal community concentrated mainly in **northern Telangana**.
- They are classified as a **Particularly Vulnerable Tribal Group (PVTG)**.
- Their traditional occupations included serving as **village messengers, ballad singers and folk artists**.

Cultural Heritage

- Traditionally, Thotis narrated episodes from the **Mahabharata** through oral storytelling.
- They used instruments such as the **burra, maddela and harmonium**, while the **kingri**, a three-stringed fiddle, is also associated with ceremonial occasions.

- Their mother tongue is **Gondi**, and the community follows traditions of **endogamy**.

Beliefs and Social Practices

- The community believes strongly in **rebirth**, reflected in its traditional songs.
- They worship **Persapen** and other village deities and celebrate **Nagappa Jathara**.
- Thoti women are traditionally skilled in tattooing, including tattoo work on the bodies of **Gond women**.

E-SAMUDRA Platform

ET Edge Insights

E-Samudra: India's digital push to reshape maritime governance

E-Samudra brings maritime services, payments, certification and grievance redressal into one digital platform as India modernises maritime...



Why in News

The Union Minister for **Ports, Shipping and Waterways** inaugurated the **E-SAMUDRA platform** to simplify and digitise maritime governance.

Digital Governance Architecture

- **E-SAMUDRA** is a comprehensive digital platform developed as an initiative of the **Directorate General of Shipping**.
- It brings services for **seafarers, shipping companies, ports and other stakeholders** under a single digital window.
- It enables **end-to-end workflows, online payments, real-time tracking and digitally issued certificates**.

Policy Linkage

- E-SAMUDRA is part of the broader **Maritime India Vision 2030**.
- It represents the application of **e-governance and digital public infrastructure** to India's maritime sector.

Governance Outcomes

- The platform shifts maritime administration from a physical office-based model towards **Digital First and Faceless Governance**.
- It seeks to simplify administrative processes and strengthen **compliance monitoring**.
- It is designed to improve **transparency, accessibility, safety, security and welfare of seafarers**.

Other Important News of the day

**Places
News**

in

Deepak Dhar Receives 2026 Dirac Medal



Indian Physicist Deepak Dhar Wins 2026 Dirac Medal For Work In Statistical Mechanics

Deepak Dhar received the 2026 Dirac Medal for his influential research in statistical mechanics and complex system behaviors. Advertisement.



Why in News

Indian physicist **Deepak Dhar** received the **2026 Dirac Medal** from the **Abdus Salam International Centre for Theoretical Physics (ICTP)** on **8 August 2026**.

Dirac Medal

- Established in **1985**, the medal is awarded annually on **8 August**, the birth anniversary of physicist **Paul Dirac**.
- It carries a prize of **US\$5,000** and is awarded by **ICTP, Trieste, Italy**.
- Dhar shared the 2026 medal with **Bernard Derrida, Marc Mézard and Haim Sompolinsky**.

Key Facts

- Statistical mechanics** uses probability and statistical methods to study systems containing large numbers of particles.
- Dhar studied at the **University of Allahabad, IIT Kanpur and Caltech**, where he worked as a teaching assistant to **Richard Feynman**.

Deepak Dhar's Contributions

- Dhar is known for research in **statistical mechanics**, particularly the **sandpile model** and **self-organised criticality**.
- The 2026 citation recognised contributions to **equilibrium and non-equilibrium statistical mechanics, optimisation, theoretical neuroscience and artificial intelligence**.
- He became the **first Indian to receive the Boltzmann Medal in 2022** and was awarded the **Padma Bhushan in 2023**.

Places in News

Lake Mead

 mint

[Lake Mead water crisis: Why the US reservoir is falling to historic lows](#)

Lake Mead's water level reached 1040.4 feet (317.1 metres) above sea level on Friday (August 7), just below the previous record low set on...



Why in News

Lake Mead, the largest reservoir in the United States when full, has fallen to its lowest water level since its filling, highlighting the continuing crisis in the **Colorado River system**.



Geographical Profile

- Lake Mead lies on the border of **southern Nevada and northwestern Arizona** in the United States.
- It was formed in the **mid-1930s** by damming the **Colorado River** through the construction of **Hoover Dam**.
- When full, it extends about **180 km** and reaches a maximum depth of about **162 m**.
- Its water mainly comes from **Rocky Mountain snowmelt and runoff** and supplies drinking water to about **25 million people**.

Colorado River Linkages

- The **Colorado River** rises in the **Rocky Mountains of Colorado** and flows about **2,330 km** towards the Gulf of California.
- It passes through **seven U.S. states and two Mexican states** and is known as the **“Lifeline of the Southwest.”**

	Major reservoirs associated with it include Lake Mead and Lake Powell, while the Grand Canyon is among its most prominent geographical features.
Environment	Tadoba-Andhari Tiger Reserve
	 The Indian Express <u>Beyond Zeenat: Inside Odisha's next tiger translocation</u> Odisha's wildlife department has initiated the second phase of tiger translocation to Similipal Tiger Reserve (STR) after the state...  Why in News Odisha has initiated the second phase of tiger translocation to Similipal Tiger Reserve after bringing two tigresses from Tadoba-Andhari Tiger Reserve in Maharashtra. Location and Legal Profile Tadoba-Andhari Tiger Reserve is located in Chandrapur district, Maharashtra. - It is the largest and oldest tiger reserve in Maharashtra and was established in 1955. - The reserve comprises Tadoba National Park and Andhari Wildlife Sanctuary. Landscape and Ecology - The reserve lies within the Deccan Peninsula's Central Plateau province and has tropical dry deciduous forests. - Its average elevation ranges between 200 and 350 metres. - Important water sources include Tadoba Lake, Kolsa Lake and the Tadoba River. Biodiversity and Connectivity - Major flora includes teak, bamboo, bija, dhaoda, haldu, salai, semal and tendu. - Fauna includes tiger, leopard, sloth bear, Indian gaur, dhole, striped hyena, marsh crocodile, sambar, chital and four-horned antelope. - It has corridor linkages with Nagzira-Navegaon and Pench Tiger Reserves.

Defence	Cessna C172 CNBC TV18 <u>Baramati crash: Cessna trainer aircraft veers off runway, DGCA to investigate</u> A Cessna C172 trainer aircraft veered off the runway at Baramati airfield during training. No casualties were reported and DGCA will...  Why in News A Cessna C172 trainer aircraft carrying two people was damaged after veering off the runway at Baramati airfield, Maharashtra. Aviation Profile - The Cessna 172 Skyhawk is a four-seat, single-engine, fixed-wing aircraft manufactured by Cessna. - Cessna is an American general aviation aircraft manufacturer now part of Textron Aviation. - Introduced in 1956, more than 44,000 aircraft have been produced, making it the most-built airplane of all time. Training Significance - The aircraft is primarily used for flight training and private aviation and remains in production. - Its high-wing design, stability and forgiving handling make it suitable for trainee pilots. - Its maximum cruise speed is about 124 knots, while its maximum range is around 640 nautical miles.
Science and Technology	Myoglobin TOI The Times of India <u>Researchers used a gene gun to make lettuce and tobacco produce cattle and pig myoglobin, the protein tha</u> Science News: Let us accept it: livestock farming is a heavy burden on the environment. Raising animal feed takes vast amounts of land and...  Why in News Scientists have engineered lettuce and tobacco plants to produce myoglobin, a protein normally associated with muscle tissue. Biological Profile Myoglobin is a small protein constituting about 2% of total muscle protein. - It is predominantly present in skeletal and cardiac muscle.

- It belongs to the **globin superfamily**, which also includes haemoglobin.
- It contains a single **oxygen-binding site**.

Physiological Functions

- Myoglobin acts as an **oxygen reservoir and buffer** within muscle cells.
- It facilitates oxygen availability for muscle metabolism, particularly during periods of **hypoxia**.
- It can serve as an indicator of **cellular damage** when detected in urine or plasma.

Biochemical Significance

- Myoglobin contains **iron** and other molecular components required for oxygen binding.
- It participates in the decomposition of **nitric oxide to nitrate**, thereby influencing mitochondrial respiration.
- It can also interact with fatty acids to help remove **reactive oxygen species**.

Uttar Pradesh in News

UP Farmer Registry Reaches 85.19%

F Free Press Journal

UP Achieves 85.19% Farmer Registry Target, Ranks 10th Nationally In Digital Farmer Registration Drive

Uttar Pradesh has achieved 85.19 per cent progress in the Farmer Registry campaign and secured the 10th position nationally.



Why in News

Uttar Pradesh has achieved **85.19%** of its **Farmer Registry Campaign** target, ranking **10th nationally**.

Key Progress

- **Target:** 2,88,70,495 farmers; **2,45,94,831** have been registered.
- **Pending:** **42,75,664 farmers** remain to be registered.
- **Top Districts:** **Ghaziabad and Rampur** achieved **100% registration**.
- **Ansh Nirdharan:** **88.92%** land-share determination work has been completed, with **Jhansi and Hardoi** performing best.

Governance Significance

- The digital registry will enable better delivery of **PM-KISAN**, crop insurance, agricultural loans and input subsidies.
- It aims to improve **transparency, reduce duplication and strengthen digital agriculture governance**.