

'Life sprouts in space', says ISRO after cowpea seeds germinate under microgravity conditions

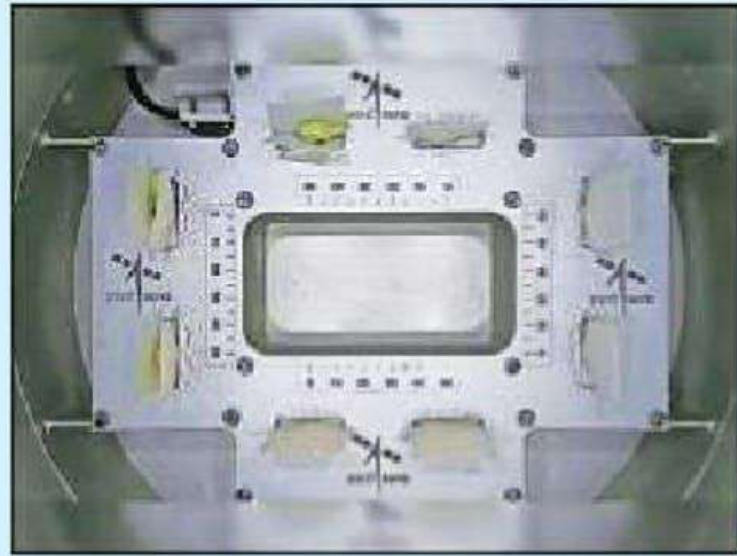
NEW DELHI, Jan 4 (PTI)

ISRO on Saturday said the cowpea seeds it had sent to space onboard the PSLV-C60 POEM-4 platform have germinated under microgravity conditions within four days of the launch of the mission. The space agency sent eight cowpea seeds as part of the Compact Research Module for Orbital Plant Studies (CROPS) experiment conducted by the Vikram Sarabhai Space Centre (VSSC) to study plant growth in microgravity conditions.

"Life sprouts in space! VSSC's CROPS experiment onboard PSLV-C60 POEM-4 successfully sprouted cowpea seeds in 4 days. Leaves expected soon," ISRO said in a post on X.

The PSLV-C60 mission placed two SpaDeX satellites in orbit on the night of December 30. The fourth stage of the rocket carrying the POEM-4 platform has been orbiting the earth with 24 onboard experiments at an altitude of 350 km since Tuesday. The CROPS experiment aims to understand how plants grow in the unique conditions of space, which is essential for future long-duration space missions.

The experiment involves growing eight cow-



pea seeds in a controlled environment with active thermal regulation, simulating conditions that plants might encounter during extended space travel. CROPS is envisioned as a multi-phase platform to develop and evolve ISRO's capabilities for growing and sustaining flora in extra-terrestrial environments.

Designed as a fully-automated system, a five to seven-day experiment has been planned to demonstrate seed germination and plant sustenance until reaching the two-leaf stage in a microgravity environment.

Huge contingent of security forces deployed in Manipur after attack on SP's office

IMPHAL, Jan 4 (PTI)

SECURITY was beefed up in Manipur's Kangpokpi district where the SP was injured in a mob attack for failing to "remove" the Central armed forces as per the demands of Kuki groups, officials said on Saturday.

A mob on Friday evening attacked the office of Superintendent of Police M Prabhakar, throwing stones and other "projectiles" to vent their anger over the continued deployment of central forces, particularly the BSF and the CRPF, in the Saibol village.

Vehicles of district police kept within the compound of the SP's office were vandalised. Prabhakar was injured after being hit on the forehead by some projectile, officials said.

A senior officer in Imphal said a huge contingent of security forces have been deployed in the area. "Situation is now under control and being closely monitored," he added.

In a statement, the police said

that besides stones, the protesters attacked the SP office with petrol bombs.

"Security forces retaliated against the mob and resorted to the use of adequate force to disperse the mob and the situation was brought under control," it said. The SP is "fine now and presently leading the joint security forces in tackling the situation," it added.

KHARGE CHARGES BJP WITH HAVING VESTED INTEREST IN KEEPING MANIPUR ON BOIL: AFTER fresh violence erupted in Manipur, the Congress on Saturday hit out at Prime Minister Narendra Modi and said he could not escape the constitutional culpability of not following "rajdharma."

Mallikarjun Kharge alleged that the BJP had some vested interest in keeping the border State on the boil.

"The BJP is the matchstick which burnt Manipur!" he said.

He also shared a screengrab of a news report about the latest violence.

Veteran nuclear scientist R Chidambaram passes away

NEW DELHI, Jan 4 (PTI)

EMINENT physicist Rajagopala Chidambaram, who played a key role in the nuclear tests of 1974 and 1998, passed away on Saturday, according to the Department of Atomic Energy (DAE). He was 88.

Chidambaram, who was also associated with the nuclear weapons programme, breathed his last at Jaslok Hospital in Mumbai, a DAE official said.

Prime Minister Narendra

Modi said he was "deeply saddened" by the demise of Chidambaram.

"He was one of the key architects of India's nuclear programme and made groundbreaking contributions in strengthening India's scientific and strategic capabilities. He will be remembered with gratitude by the whole nation and his efforts will inspire generations to come," the prime minister said.

Science and Technology



Minister Jitendra Singh extended his condolences to

Chidambaram's family.

"Saddened to learn about the passing away this morning of eminent nuclear scientist Dr. Rajagopala Chidambaram, who led India's Atomic Energy Commission and played a key role in the development of strategic weapons.

"Dr. Chidambaram's role in the two nuclear tests conducted by India was memorable. He also had the distinction of being Principal Scientific Advisor to

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US NSA Sullivan on India visit from today



WASHINGTON, Jan 4 (PTI)

OUTGOING US National Security Advisor Jake Sullivan will travel to India on January 5 and 6 for a final round of talks with his counterpart Ajit K Doval and other top Government officials on a wide range of bilateral, regional and global issues and to finalise some ongoing initiatives.

His visit to India comes as the Joe Biden administration prepares to wrap up its four-year term.

Sullivan, 48, the youngest national security advisor when President Biden appointed him on January 20, 2021, would also deliver a major India-centric foreign policy speech at IIT, New Delhi during his last trip to India before leaving office.

Congressman Michael Waltz would succeed him on January 20, when Donald Trump is sworn in as the 47th President of the United States.

"National Security Advisor Jake Sullivan will be travelling to New Delhi, India, on January 5 and 6 for a capstone meeting with Indian National Security Advisor Ajit Doval," White House National Security Communications Advisor John Kirby said on Friday.

"It will span a range of issues across the breadth of our partnership with India, from space, defence, and strategic technology cooperation, all the way also to shared security priorities in the Indo-Pacific and beyond," he said.

4 soldiers killed, another hurt as Army vehicle falls into gorge in J&K

SRINAGAR, Jan 4 (PTI)

FOUR Army personnel died and another was injured when their vehicle skidded off the road and fell into a gorge due to inclement weather and poor visibility in Jammu and Kashmir's Bandipora district on Saturday, the second such tragedy in less than two weeks. The accident occurred near SK Payen in the north Kashmir district where the soldiers were on duty, officials said.

The region had received snowfall on Thursday and there were foggy conditions on Saturday.

The Army said that "while performing duty in Bandipora District, a vehicle of Indian Army skid and fell into the gorge due to inclement weather and poor visibility conditions".