New Mushrooms in Khasi Hills, Large Fungi in Arunachal & New Bacteria in Caves

Largest Mushroom Found

By Our Correspondent

The discovery of Lactifluus khasianus, the mushroom the Khasi call Tit longnah, is less a private scientific triumph than a public acknowledgment: a thread in a living cloth being formally woven into the catalogue of Western taxonomy. The story sits at the intersection of three forces: the forest that sustains people, the seasonal kitchen where an ingredient is made ordinary, and the laboratory where names and genes give that ordinary thing an official place.

In the East Khasi Hills, Tit longnah arrives with the monsoon. It is a market mushroom, gathered by hand from damp pine forests, brought into village kitchens, and sold in local bazaars in small baskets. Culinary practice here is pragmatic and precise. Tit longnah is not a delicacy; it is a staple of home cooking, sliced into rice dishes, folded into stews, or tossed with local aromatics and wild herbs. The recipes are unrecorded, passed down through repetition, their simplicity reflecting continuity rather than absence. The mushroom's cultural weight lies in its return - the monsoon's edible signpost, a rhythm of foraging and familiarity that ties people to landscape.

That culinary thread is also an ecological one. Tit longnah grows symbiotically with Khasi pine (Pinus kesiya), thriving at around 1,600 metres. For communities that read the forest as a living map, the mushroom is both edible and diagnostic - a sign that the forest's soil and trees are in sync. Foragers know when and where it will appear, how much to collect, and how to leave enough behind. That knowledge, shared orally, encodes practical ecology long before it was described as such: a system of sustainable harvest interlaced into daily survival.

Science entered this story when researchers from the Botanical Survey of India's Eastern Regional Centre (Shillong), St. Xavier's College (Dumka), and Mahidol University (Thailand) began to document the fungus. Using field surveys, microscopy, and DNA sequencing, they confirmed its distinct morphology - a chocolate-brown cap, larger cystidia, and genetic markers that set it apart within the Lactifluus genus, section Gerardii. The result: a name, Lactifluus khasianus, added to global databases and biodiversity records. But the naming did not create the mushroom; it only located it within the grammar of science. The Khasi had already named it, cooked it, and passed it through generations of knowing. The researchers' contribution was translation - from forest and kitchen into classification and lineage. That convergence matters. Tit longnah's shift from oral taxonomy to scientific literature is not just validation but a small correction in how discovery is understood.

Indigenous knowledge preceded investigation; fieldwork began with a local map. For the Khasi, the mushroom's worth is sensory, seasonal, and communal. For science, it is a new data point in a biodiversity hotspot. Both are partial truths that become whole only together. In the end, Tit longnah sits comfortably in both worlds: in monsoon markets, and in scientific journals. Its Khasi name keeps it alive in kitchens; its Latin one preserves it in archives. Each speaks to a different kind of permanence. ■