Birbal Sahni Institute of Palaeosciences

Significant Development / Acheivement (April 2025)

The evolutionary history of bamboo has remained elusive, primarily due to the scarcity of fossils that exhibit varied morphological traits, often lacking detailed features. In this study, we introduce a remarkable fossil find, a bamboo culm from the early Miocene sediments of the Neyveli lignite mine in India. This fossil is distinguished by its nodal buds and notably ventricose (swollen) nodes—features rarely preserved in the fossil record. This unique specimen stands alone to showcase such specific morphological characteristics and is the earliest known bamboo fossil from southern India. Its discovery is a significant breakthrough in the study of bamboo diversity, offering fresh insights into the morphological evolutionary history of bamboo and lending support to the hypothesis of a Gondwanan origin for Asian bamboos. Furthermore, this fossil is crucial for reconstructing past environments, suggesting that ancient bamboos likely evolved in warm, humid climatic conditions (Bhatia et al 2025).

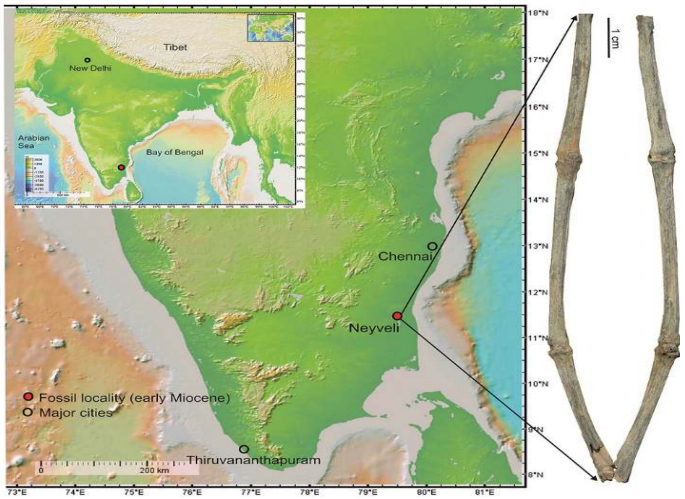

Fig: Photo showing Fossil of seldom-preserved features–ventricose (swollen) nodes and nodal buds of bamboo fossil recovered from Neyveli lignite mine.

MoU between BSIP and Patanjali Research Foundation (April 7, 2025): This collaboration aims to advance research in Palaeosciences and Ayurveda, integrating ancient wisdom with modern scientific approaches.

World Earth Day (April 22, 2025): BSIP observed World Earth Day 2025 with great commitment and urgency, echoing the global theme "Our Power, Our Planet."

Total 9 Research Papers were published during the month in high impact factor Journals