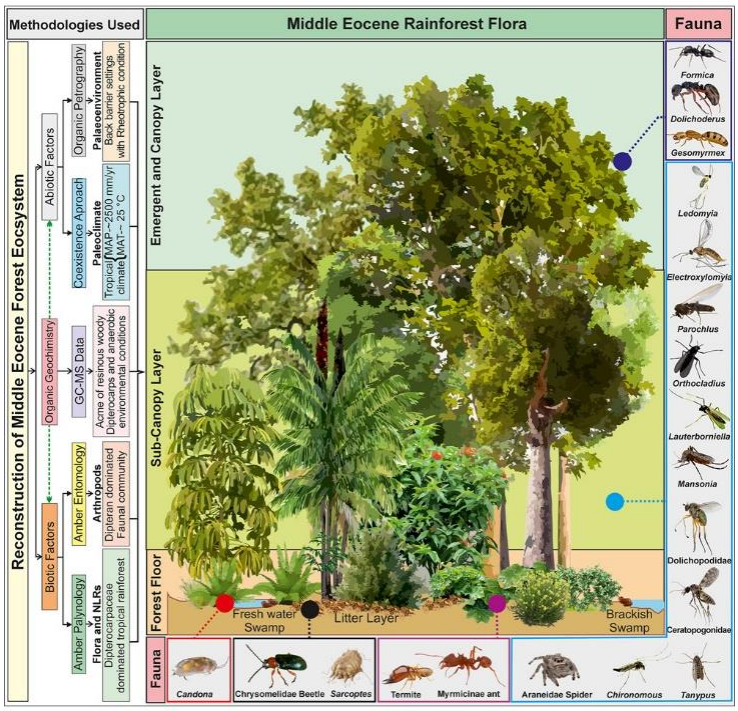
Birbal Sahni Institute of Palaeosciences
Monthly Summary of Research Activities
(Sept 2025)

Key Scientific Findings of the Month (September 2025)

A study on the Eocene Epoch and Indian paleobiodiversity highlights the reconstruction of a middle Eocene tropical ecosystem from amber biota recovered from the Harudi Formation (Umarsar Lignite Mine, western India; ~41.6–40.8 Ma). The findings reveal a highly diverse ecosystem with >800 arthropods, 78 genera, and 118 species of palynomorphs, thriving in warm and humid conditions (~25°C; ~2,450 mm annual rainfall), comparable to modern tropical climates. The results demonstrate that favorable climate, ecological complexity, and India's northward drift facilitated tropical lineage diversification, reinforcing the ESAT (energy-stability-area-time) theory as a robust model for deep-time biodiversity. These insights also provide valuable analogs for understanding biodiversity responses to ongoing climate change, emphasizing the importance of conserving species and ecological interactions (Agnihotri et al 2025, iScience-Cell Press).



a. **Celebration of Foundation Day and Hindi Pakhwada 2025 (10 Sept 2025)**
b. **INQUA On-line Talk Series under INQUA India-2027 (30 August 2025)**

During the month 15 Research papers were published in high Impact Factor Journals

Photographs showing important highlights of major programs/research activities organized during September 2025: