The extraction of fossil arthropods from Lower Eocene Cambay amber

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Fossil arthropods preserved in amber typically comprise only hollow spaces lined with a thin layer of diagenetically altered or decomposed cuticle. In contrast, the cuticle of inclusions from Lower Eocene Cambay amber (Gujarat, India) is commonly perfectly preserved and moreover allows the extraction of whole specimens. Here we report on the examination of several groups of solvents to determine their ability to dissolve Cambay amber. The amber dissolves well in toluene, xylene, dichloromethane and trichlormethane (chloroform). Even orange oil and turpentine oil dissolve Cambay amber quite well. The extraction of inclusions by dissolving the amber matrix enables various novel observations and further investigations with biological analytical methods, although the material is extremely fragile after extraction.

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