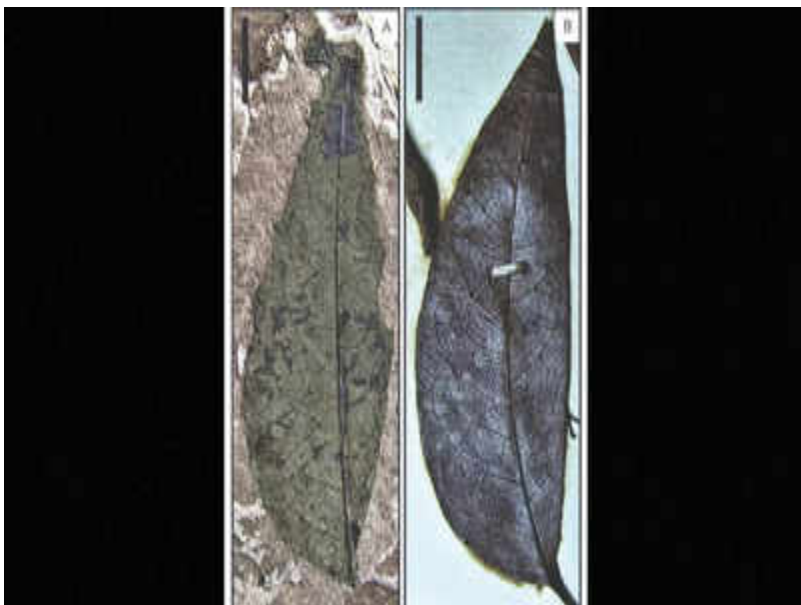


Mahogany fossil shows tree grew in India 56 million years ago: Study

TNN | Mar 29, 2023, 12.41 PM IST



LUCKNOW: The Birbal Sahni Institute of Palaeosciences (BSIP) has discovered the oldest mahogany fossil, the study of which reveals that the mahogany tree endemically found in some parts of Mexico, Brazil and a few islands surrounding them, existed in India too around 56 million years ago.

An economically significant plant known for its beautiful reddish brown timber which is popularly used in making furniture disappeared from India due to changes in the climatic condition, the research said. The research shows that the Indian mahogany found in the country at present is a cultivated/ genetically engineered variety.

A team of six BSIP researchers retrieved a fossil leaflet from the Gurha lignite mine in the Bikaner district of Rajasthan. The study of the fossilised

mahogany leaflet and pollen suggested that mahogany ancestors are at least 56 million years old, much older than was found from the study of fossils discovered so far.

The research was led by senior scientist Anumeha Shukla and her team members, former BSIP scientist RC Mehrotra, research scholars Kajal Chandra and Mahi Bansal and BSIP director Vandana Prasad. The study has been published in the Journal of the Geological Society of India and Springer Link.

“Mahogany has a very mysterious history of its early appearance and past geographical distribution. Only two fossil records are known for this genus: one is from the Dominican Republic and the other one is from Mexico, both are around 20 million years

old. The fossil discovered by us is the oldest found fossil so far,” said BSIP senior scientist Anumeha Shukla who led the research.

She said the study is significant and much older than earlier known fossils and has given a new perspective to understanding the history of the mahogany family. In the 19th century, this plant genus gained significant attention for its timber and was introduced in India for the first time. “Our study highlights that mahogany had a wide geographical distribution (including India and North and South America) in the past. It later got extinct from the Indian subcontinent due to unfavourable climatic conditions ,” she added.

BSIP director Vandana Prasad said for survival and growth, mahogany needs warm and humid climate which were present on the Indian plate when it was near the equator around 56 million years ago. Due to the change in climatic conditions because of the shift of the Indian plate from the equator to 21 degree north and the advent of a monsoonal climate after the India-Asia collision, the climatic conditions of Rajasthan changed drastically. It couldn't survive due to the dry and desert climatic conditions of Rajasthan . Gradually its presence declined and ultimately it got extinct from India. Now, it is only found in parts of America, she added.