
An early archaeological evidence of Plane tree (*Platanus orientalis* L.) in Kashmir Valley

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An evidence of *Platanus orientalis* L. (Chinar) in charcoal samples from an archaeological site at Semthan in Kashmir Valley has brought to light the earliest record of this European tree dating back to early historic period from 500 to 1,000 A.D. The archaeological significance pertaining to its much earlier introduction in Kashmir Valley has been discussed.

Key-words—Archaeobotany, *Platanus*, Exotic tree, Kashmir Valley (India).

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सारांश

काश्मीर घाटी में प्लेन वृक्ष (प्लेटेनस ओरियेन्टेलिस एल०) का प्रारम्भिक पुरातात्विक प्रमाण

फारूक ए० लोन, गुलाम मोहम्मद बठ एवं मकसूदा खान

काश्मीर घाटी में सेमथान नामक गाँव में एक पुरातात्विक स्थान से उपलब्ध काष्ठ-चारकोल के नमूनों से प्लेटेनस ओरियेन्टेलिस एल० (चिनार) की लकड़ी के अवशेष मिले हैं। इस प्रमाण के आधार पर पाँचवीं से दसवीं शताब्दी के मध्य काश्मीर घाटी में इस यूरोपीय वृक्ष की उपस्थिति इंगित होती है। इस शोध-पत्र में काश्मीर घाटी में इस वृक्ष के और अधिक पहले समावेशन पर एक पुरातात्विक विवेचना भी की गई है।

THE study of wood remains recovered from the archaeological excavations has revealed not only the type of vegetation growing and the way of exploitation of forest trees by the ancient inhabitants but also provided important information on the introduction of exotics in the Kashmir Valley (Lone, 1987). The oriental plane (*Platanus orientalis* L.) is a large, graceful deciduous tree cultivated in Kashmir and north-west Himalaya. In Kashmir, the tree is known as "Chinar" or "Buin" and is very closely associated with the culture and folklore. Its introduction usually has so far been ascribed to the Moghul emperor Jehangir (1605-1627 A.D.) and Shahjahan (1627-1658), who brought it from Central Asia (Lawrence, 1967). But our recent investigations on the charcoal remains from an archaeological site at Semthan in Kashmir Valley (Lat. 33°48' N; Long. 75°9'E) have revealed that this tree was in existence centuries before the advent of Moghuls.

DESCRIPTION

Pl. 1, figs 1-4

Wood diffuse to semi-ring-porous. Growth rings marked by a band of fibres. Vessels small, 30-80 μm in tangential diameter, comparatively larger and more clustered in early-wood and smaller, solitary or in small files in latewood. Intervascular pits small, crowded and aligned in horizontal rows. Parenchyma apotracheal-diffuse and sparsely paratracheal. Fibres thin to moderately thick-walled, libriform, angular to oval in cross-view, 8-15 μm thick and not aligned in rows. Rays commonly larger and occasionally short and fine, more or less equidistant, homogeneous. Large rays 4 cells wide and fine rays 2-3 cells wide; height varies from 200-450 μm and width 47-103 μm .

The above combination of characters leads us to refer the ancient wood to *Platanus orientalis* L. of

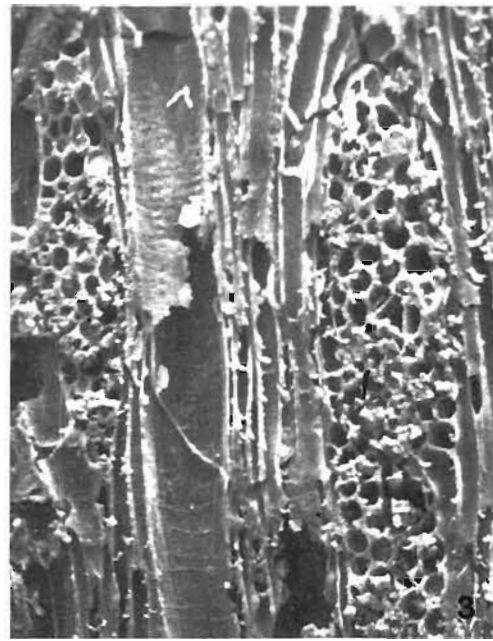
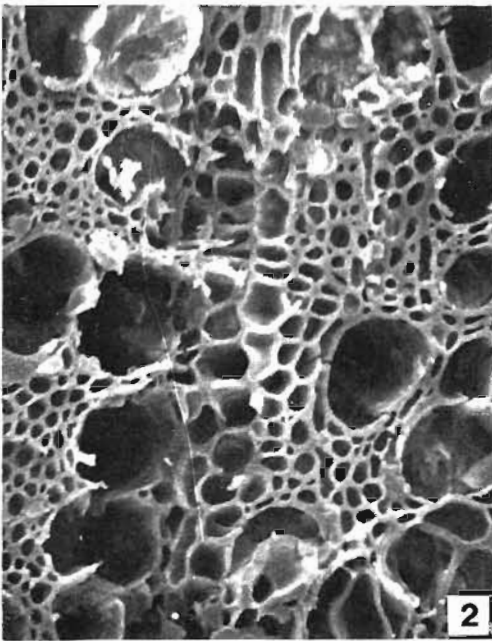
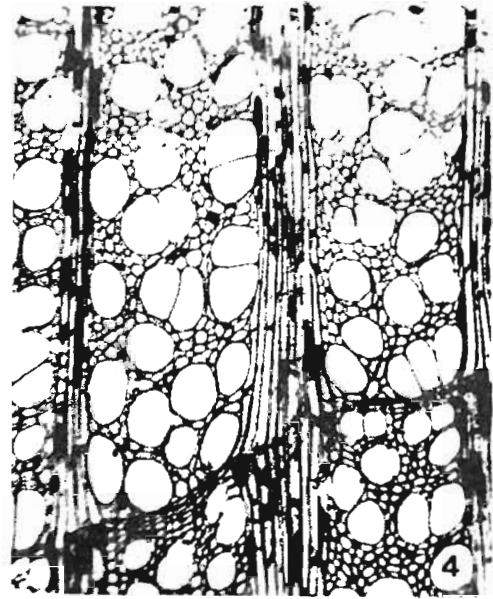
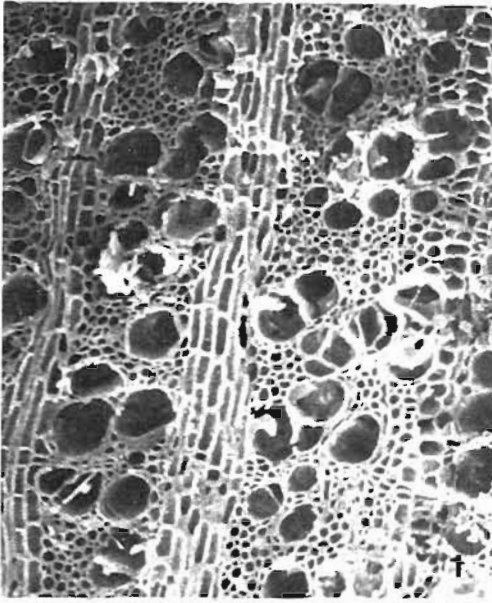


PLATE 1

1. Cross section of *Platanus orientalis* wood remain, $\times 100$.
2. Higher magnification of the same as above, $\times 200$.
3. Tangential longitudinal section of *Platanus orientalis* wood remain, $\times 200$.
4. Cross section of extant *Platanus orientalis* wood for comparison with the archaeological wood, $\times 60$.

the family Platanaceae (Schweingruber, 1978). Comparison with the extant material of the same, further supports our identification.

CONCLUSION

The beautiful tree of Oriental Plane (*Platanus orientalis*) is an old introduction in Kashmir Valley

and adjoining areas. Now-a-days it has been planted for ornamental purposes. This species is indigenous in Greece, Macedonia, Armenia and northern Persia (Gamble, 1902). At present, the plane trees have also come under extensive cultivation in Baluchistan and Afghanistan and in the western Himalaya as far as the Sutlej River ascending to 8,300 ft. In all probability, the plane tree in the north-western region of Indian

subcontinent must have come from Mediterranean region (northern Persia) in the remote past.

We do not know exactly when this tree got introduced in Kashmir region. Some references in this regard could be found in the literature. Lal Ded (1320-1390 A.D.), the famous mystic poetess of Kashmir, made the reference of Plane tree in an epigram comparing "Virtuous and loving wife to the cool and refreshing shade on a hot summer day of Buin". In '*Akbarnama*' written by Abul Fazl (1551-1602), a scholar in the regime of Moghul emperor Akbar, it is mentioned that "the emperor took 34 persons inside the hollow trunk of an aged Chinar (plane) tree" Similarly Jehangir in his memories has made mention of a huge plane tree, in the hollow of which he and his seven companions could be comfortably accommodated. All the same, these references have led us to conclude that plane trees were already existing in Kashmir when the Moghul emperors visited this area. Now, the first factual

evidence of plane tree from Semthan has traced back the history of its occurrence in Kashmir Valley to 1,000-500 A.D., and it is to be reckoned with. Whatsoever might have happened in the past, such an early introduction of plane—the gracious ornamental tree of Kashmir, bears ample testimony to its importance in the archaeological context.

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