A Shady Character: *Platanus × acerifolia*

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On hot, sunny summer days, visitors gravitate toward the Arboretum’s magnificent old specimen trees whose dense, leafy canopies provide welcome shade. One such specimen is a centenarian London planetree (*Platanus × acerifolia, accession 16595-B*) growing in a prominent location near the juncture of Bussey Hill Road and Valley Road. This stately tree was accessioned in April 1891, received as a plant from Thomas Meehan and Son nursery in Philadelphia. With an age of about 125 years, it currently measures 31 meters (102 feet) tall, 24.5 meters (89 feet) wide, and has a trunk dbh (diameter at breast height) of 132.5 centimeters (52 inches).

London planetree was long considered to be a hybrid of Oriental planetree (*Platanus orientalis*) and American sycamore (*P. occidentalis*), though it required modern molecular analysis to prove this definitively. The species’ exact origin and correct scientific name have been the subject of debate over the years. The parent species are from Eurasia and North America, respectively, so it was only through human transportation of germplasm between continents that they were able to hybridize. The first hybrid may have occurred at the Oxford Botanic Garden around 1670, though an origin in Spain has also been suggested. The first recorded binomial was *Platanus hispanica* in 1770, followed by *P. hybridus* in 1804, then *P. acerifolia* in 1805. Current references are split, with some listing *P. × acerifolia* (Ait.) Willd. and others *Platanus × hispanica* Mill. ex Münchh. as the accepted name.

Because of its hybrid nature, seed-grown London planetrees can be quite variable in growth habit, leaf shape, and fruit production. This is further compounded by potential backcrossing with either of the parent species. Mature London planetrees typically have a spreading crown and substantial trunk, and reach a height of 60 to 90 feet (18.3 to 27.4 meters) or more. The large (up to 10 inches [25.4 centimeters] wide) leaves have 3 to 5 lobes and are medium green with limited yellowish fall color. Male and female flowers are borne separately in globose inflorescences; the bumpy, tan, golf-ball-sized fruit holds multiple achenes. The fruit are usually borne in groups of 2 and may persist well into winter before breaking apart. London planetree’s most notable ornamental feature is its thin, exfoliating bark that displays a camouflage-like pattern in shades of white, brown, and green.

A number of London planetree cultivars have been selected and vegetatively propagated; these cultivars are often preferred over seed-grown plants in landscapes where uniform tree shape and size is desirable. The species can be affected by several diseases including anthracnose, powdery mildew, and canker stain, so disease resistant cultivars have been especially sought after. The original “London” form (which lead to the common name) was likely a clonal selection, though “London planetree” is now widely used to denote the species as a whole.

Because of its large size and abundant leaf and fruit litter, London planetree is not ideal for many residential lots, especially small city lots. It is best reserved for sites where it can achieve its full stature, such as parks, public gardens, and campuses. London planetree is noted for its tolerance of heavy pruning and is often pruned and trained to limit crown growth, especially in Europe. Pollarding, a severe type of pruning that heads back growth to short, knobby limbs, is commonly practiced on London planetrees in European park and boulevard plantings. At the Arboretum, accession 16595-B and surrounding London planetrees have been allowed to grow in their natural, wide-spreading form, thus providing a shady haven during the dog days of summer.

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