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The Tregye form of *Melliodendron xylocarpum*

Melliodendron xylocarpum, a new star

MAURICE FOSTER writes about the flowering and propagation of this Chinese species related to *Styrax*.

Introduced into cultivation around 25 years ago, *Melliodendron xylocarpum* has already established a reputation as one of the most beautiful flowering small trees for cool temperate gardens and one of the finest of recent woody plant introductions. According to the account in *New Trees*, it arrived in North America through a nursery, Piroche Plants of British Columbia in 1994, into Europe via nurseries and at the same time from the Shanghai Botanic Garden. From there it passed to Hilliers where, by 1996, it was being propagated.

A member of the Styracaceae, it is endemic to China and monotypic. Given its wide distribution in southern China—from south-east Yunnan across the south through Guangxi to Jiangxi and north to cooler mountains in southern Sichuan, Guizhou and Hunan—it is surprising that it was not introduced earlier to western gardens.

It is a rewarding plant for its vigour, growing quickly and healthily into a large shrub or small tree with leaves that vary in size but for the *Styrax* family are large, as much as 24 cm long by 11 cm across on a well-grown specimen. The dense spreading canopy of dark green, ovate, semi-glossy, serrate leaves is fresh from spring into late autumn. There is little autumn colour and most leaves fall green. As a small plant it has been confused with *Pterostyrax hispida*.

The flowers are beautifully displayed, hanging along the branches singly or in pairs, from leaf axils on the shoots of the previous year. The corolla is



Left, the white form of *Melliodendron xylocarpum* comes from the University of British Columbia Botanical Garden.

Bottom, a pink form; both these plants are growing in the east of England with protection.

campanulate and pendulous on a short 1.5 cm pedicel. Its five narrowly ovate lobes are about 3 cm long and cut almost to the base, giving a star-like effect. The colour is in various tones of pink, some quite deep, fading to white, occasionally with a pale pink stripe along the back of the lobe. There are white forms. The flowers appear in April, just before and with the leaves.

Cultivation

In cultivation in the UK it has so far proved to be hardy and grows and flowers well as far north as Gresgarth in Lancashire, where Arabella Lennox-Boyd writes that despite a minor benefit from the Gulf Stream, they have 'a



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bitter cold wind bouncing on and off the hills' from both west and east, and are prone to late frosts right up to May. At White House Farm in Kent, wind sheltered in light woodland, it has not been damaged in 12 years, and was unaffected by the Beast from the East in 2018. It is hardy at Hergest, in Herefordshire, at an altitude of 244 m (800 ft).

On the colder continent Raf Lenaerts of Botanic Treasures nursery in Antwerp regards it as perfectly hardy. He reports that the original Piroche clone has been outside for seven years and came through a very cold low of -15 °C without damage. It is sometimes cut by a late frost, from which recovery is swift and vigorous.

Evidence to date suggests that it grows well on a variety of soils, from a rich heavy loam to a stony light shallow soil. At present the soils in which it is thriving are all acid: there appears to be no information about performance in alkaline soils. In Kent, in open woodland, in sun for much of the day, in 12 years it has reached 4 m tall by 5 m across, pruned up onto two stems. A ten-year-old seedling nearby has reached 3 by 4 m as a large spreading unpruned shrub, and produced its first flower after ten years from seed. Lawrence Banks writes that his specimen at Hergest also took ten years to flower. Planted in 2004 in full sun, it first flowered in 2014. At Tregrehan in Cornwall, Tom Hudson also flowered a seedling after ten years.

However, a sturdy one-year-old plant grafted on *Pterostyrax* was kindly given to me by Tom Wood. It grew strongly after planting and flowered in only four years, an advantage where long term compatibility for grafting can be assured. Brian Humphrey writes that plants grafted from mature scion wood and kept under greenhouse protection usually flower from the first or second year after grafting and reliably every year thereafter.

Propagation

Fruit is an obovoid woody hard capsule up to 7 cm long, ribbed and tomentose with a characteristic smooth cap-like apex. Each fruit contains up to five embryos and seed appears to germinate readily. Brian Humphrey has simply pushed fruits into the soil below his plant, growing in a tunnel, and many seedlings have germinated. He writes that potted in a standard commercial



The fruit of *Melliodendron xylocarpum* at Hergest.

ericaceous compost with added pine bark and perlite and top dressed twice with sulphate of ammonia, these have grown on strongly to between 40 and 90 cm.

In 2019, plants fruited freely both under cover and in the open but in 2020 little fruit is evident, perhaps due to the relative absence of pollinators, probably during cold conditions at flowering time.

In his recently published, comprehensive *Bench Grafter's Handbook*, Brian writes that *Meliiodendron* grafts on *Styrax japonicus* failed and *Halesia carolina* showed eventual incompatibility. However, he records excellent growth of up to 2 m a year on *Pterostyrax hispida* understocks, with little or no suckering, and long term compatibility very likely, with eight-year-old plants still vigorous.

My own grafted plant on *Pterostyrax* has reached 4 m in as many years, in quite dry but semi-shady conditions.

From cuttings, juvenility appears to be an important factor. Basal growth left on the tree and cut back will stimulate strong shoots, and semi-ripe cuttings, unconventionally up to a foot long, will root readily under plastic (I have no experience with mist). They were taken with or without a heel, the tip removed, the base wounded down one side to about 3 cm and dipped into an IBA rooting powder. Having succeeded in 2019 and boasted about the ease of rooting, I felt obliged to repeat the procedure in 2020. Five out of five cuttings taken on May 23 rooted in eight weeks and the strongest have put on some 15 to 20 cm (6–8 in.) of growth before dormancy, despite a sterile medium of 50/50 peat and perlite. They will remain in the same pot, kept dry, cold but frost free, and potted up when growth restarts, perhaps late March/early April. I suspect cuttings will take longer to reach floescence than grafted plants.

With its ability to set viable seed in cultivation, to grow quickly from grafting, ostensibly with good long term compatibility, and to root readily from cuttings, *Meliiodendron xylocarpum*—if it continues to prove to be hardy—should soon become available for wider planting and grace many more gardens.

References

- Grimshaw, J. & Baynton O. (2009). *New Trees*. IDS and Kew Publishing. London.
Humphrey, B. E. (2019). *The Bench Grafter's Handbook*. 638 pp. CRC Press.



Meliiodendron xylocarpum cuttings from semi-ripe cuttings root readily.