



*Ulmus* 'Clusius' ('Clusius' elm) has a strong vertical habit - approximately eighteen metres tall and six to eight metres wide - with a columnar to egg-shaped crown and a vigorous upright main trunk. This selection is part of the third generation of elms, it was released in 1983 and is part of the Wageningen five. This triple hybrid, from Dutch elm professor Hans Heybroek, is a cross between *Ulmus wallichiana, Ulmus glabra* 'Exoniensis' and *Ulmus x hollandica* 'Bea Schwarz'. The tree was named after medieval Dutch physician and botanist Carolus Clusius, who - together with Dodoens and De Lobel - was part of the Flemish botanical triad.

The matt, dark green leaf of *Ulmus* 'Clusius' is ovoid and has a white powdery petiole. The silver-grey, smooth trunk develops black vertical grooves later on. At the end of March and early April, inconspicuous, dense, light green racemes of flowers are produced and after flowering - but before the foliage emerges - winged, bright green flat nuts appear hanging on the tree. These then flutter down to the ground creamy-white.

*Ulmus* 'Clusius' has excellent wind resistance and is resistant to Dutch elm disease. In terms of width, the selection is midway between 'Dodoens' and 'Lobel'. These elements make the tree an excellent option for avenues in both urban public spaces as well as rural areas. On richer soils in particular, this elm makes a magnificent tree. In its juvenile form, *Ulmus* 'Clusius' requires strong supportive pruning because of its tendency to bifurcate or fork.

#### **TYPES OF PLANTING**

Tree types: standard trees, shade trees | Topiary on stem: pollard

# USE

**Location**: street, avenue, square, car park / parking lot, park, central reservation, large garden, cemetery, traffic areas, industrial zones, bioswale, coastal area | **Pavement**: none, open, sealed | **Planting concepts**: Landscape planting, Solid planting, urban planting

## CHARACTERISTICS

Crown shape: columnar, egg-shaped | Crown structure: semi-open | Height: 15 - 18 m | Width: 6 - 8 m | Winter hardiness zone: 5A - 9B

#### ASPECTS

Wind: tolerant to wind, tolerant to coastal wind | Soil: loess, sabulous clay, peaty, light clay, sand, loamy soil | Nutrient level: moderately rich in nutrients, rich in nutrients | Soil moisture level: moist, wet | Light requirements: sun | pH range: acidic, neutral, alkaline | Extreme environments: tolerant to salt spray, tolerates air pollution, resistant to Dutch elm disease 3

## PLANTKENMERKEN

Flowers: raceme, discrete | Flower colour: pale green | Flowering period: March - April | Leaf colour: bright green | Leaves: deciduous, ovate, big, serrate | Autumn colour: yellow | Fruits: winged, small, raceme, nut | Fruit colour: brown, green | Bark colour: grey, grey-black | Bark: furrowed | Twig colour: brown | Twigs: bare, vertical branches, long shoots | Root system: deep, shallow, extensive, highly branched, central root, on own root

