Hornbeams

Genus Characteristics

Leaves: **Hornbeams have simple, alternate leaves with doubly-serrate margins. Doubly serrate means each serration along the leaf margin has its own teeth. Leaves tend to be small (1-3 inches long).**

Carpinus japonica

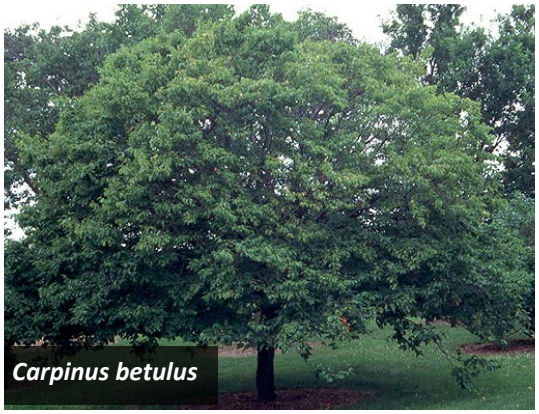
Carpinus caroliniana

Fruit: **Seeds are borne as a cluster of nutlets with winged bracts. Fruit matures in late summer. Angle at which bracts are held to fruit and presence of teeth on bracts are important species identifiers.**

Carpinus caroliniana

Carpinus japonica

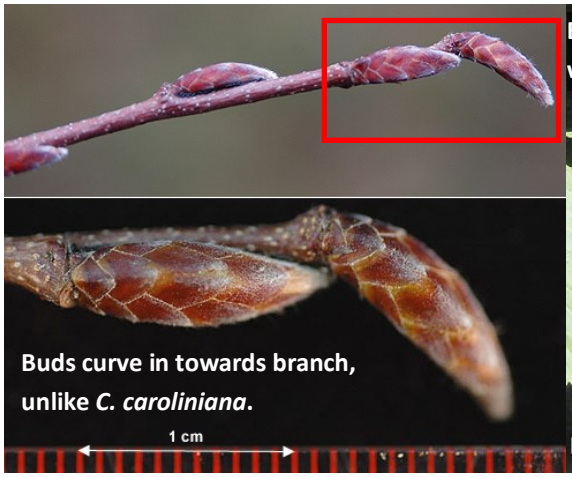
Form: **Hornbeams are small to medium trees with round, irregular canopies. Some species are planted as fastigiate (upright) varieties. Can be multistemmed.**


Carpinus betulus

Carpinus japonica

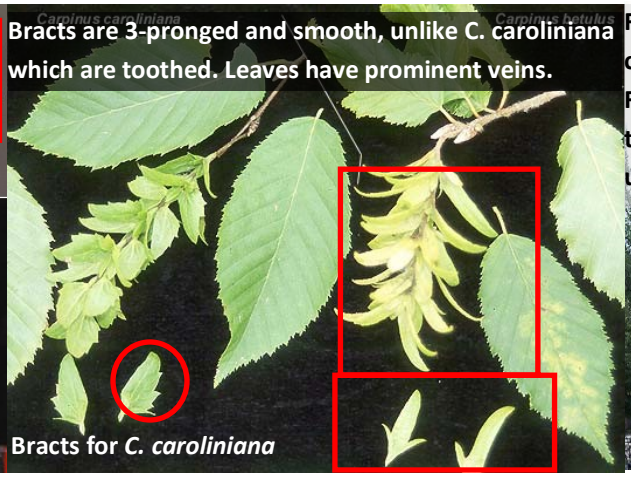
Hornbeams

Carpinus betulus—European hornbeam



Buds curve in towards branch, unlike *C. caroliniana*.

1 cm

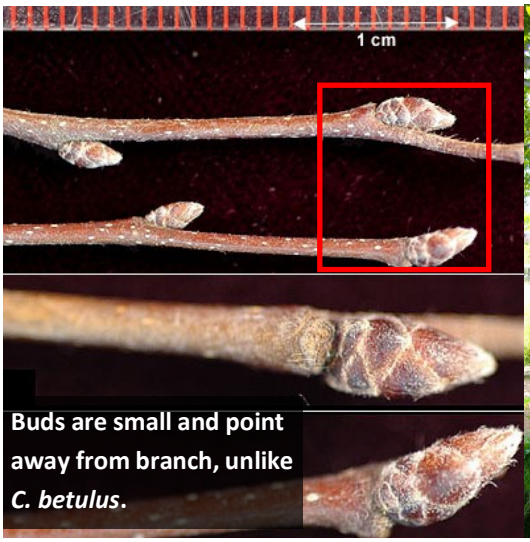


Bracts are 3-pronged and smooth, unlike C. caroliniana which are toothed. Leaves have prominent veins.

Bracts for *C. caroliniana*

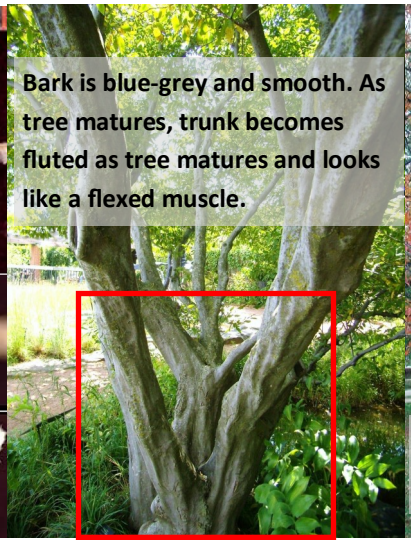
Fastigiate varieties are commonly planted. Form tends to be tightly branched and uniform.

Carpinus caroliniana—American hornbeam



1 cm

Buds are small and point away from branch, unlike *C. betulus*.



Bark is blue-grey and smooth. As tree matures, trunk becomes fluted as tree matures and looks like a flexed muscle.

Tree is small and often has codominant stems. Form is round and irregular.

Carpinus japonica—Japanese hornbeam

Leaves are very narrow. Veins are prominent and deeply impressed on leaf surface, creating a pleated appearance.

Carpinus japonica

Japanese Hornbeam

Bracts held more tightly to fruit than *C. Betulus* or *C. caroliniana*

Tree is small and form is more vase-shaped than other hornbeams.

Hornbeams look very similar. Key identifying features are miniscule and trees are extremely variable. Fastigiate European hornbeam cultivars are commonly planted in Portland but the natural form is planted as well and looks almost identical to American hornbeam. If you are unsure, take a sample! If Urban Forestry staff is stumped, we'll send it to the experts at Hoyt Arboretum.