

***Phellodendron chinense* Schneid.**

Rutaceae

Source of: huáng bǎi 黄柏

Chinese corktree inner bark



Summary Description

A fast-growing tree, 30-50 feet in height, hardy to Zone 3. The outer bark of the trunk gets corkier and more convoluted with age. Leaves are entire, oblong to 5 inches with a lance-like tip. After a few years of growth the tree produces flower buds along with the slender new leaves in April, followed by small greenish flowers in May-June. Clusters of green aromatic berries, resembling tiny round limes about ½ inch in diameter, gradually ripen in autumn and turn black. The ripe black berries of this species are wrinkled, oily, and held tightly to the pedicels well after leaf fall. **Caution:** Do not bother to plant the alternate species *Phellodendron amurense*, which is on the alien invasive species list. It has softer, more fragile fruit attractive to birds, and is known to disperse widely. Both species should be monitored for dispersion through seeds or suckering through roots.

Propagation

If sowing dried seeds, pour water at 140-160°F over the seeds and soak for 24 hours. Cold stratify for 30 days. If propagating from fruit, refrigerate the dried berries or whole cluster for at least 30 days. Pick off the berries, soak in water for 24-48 hours, press fruit to eject 2 or more seeds per fruit. Plant one or two seeds per cell in a 72c tray. Place tray in a humid 60-70°F location with bright indirect light. Germination could take several months; expose to varying temperatures.

Cultivation

Plant well-rooted seedlings in narrow quart pots with a rough-textured soil mix. After the roots reach the bottom opening of the quart, transplant to tall one-gallon tree pots. These may be held for two or more years before final planting. Choose a full sun to mostly sunny location with well-drained soil.

Harvest & Processing

Differing thicknesses and appearances of the imported huáng bǎi suggest that methods to strip the bark vary and are open to improvements in efficiency. Peel off large strips of outer bark from freshly cut sections of trunk, exposing the chrome yellow inner bark. Cut smaller, uniform-width strips of inner bark and peel away. Cut these strips into uniform length pieces (1-2 inches); dry at temperatures not exceeding 110°F. Experiment with methods to retain the bright yellow color of the pieces.

References

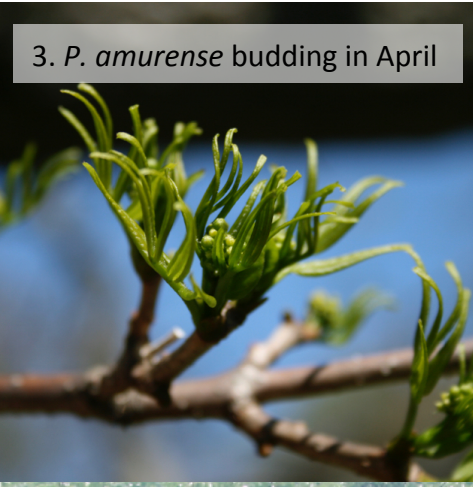
Flora of China: http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=200012469

Bensky *Materia Medica* page: 138

Alternate species

P. amurense

2. Photos 1-3 taken at Arnold Arboretum Harvard University



3. *P. amurense* budding in April



Above: Harvest of a 30-ft tree in August, 6 years after planting. Left: Harvest of ripe fruit clusters from a 12-ft tree, late December, 3 years after planting.

