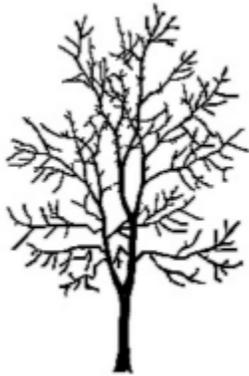


# Bitter cherry (Vb) - *Prunus emarginata*

Tree Species > Bitter cherry



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# BC Distribution of Bitter cherry (Vb)

Range of Bitter cherry



Bursting flower buds on a bitter cherry

# Geographic Range and Ecological Amplitudes

## Description

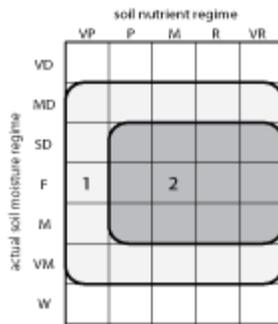
Bitter cherry is a small-, less often, medium-sized (<15 m tall), deciduous broad-leaved tree, at maturity with a narrow crown, slender stem, ascending branches, and smooth, dark reddish-brown bark. Bitter cherry is not grown for timber production, as its wood is of little commercial value. In continental temperate climates, it hybridizes frequently with pin cherry (*Prunus pensylvanica* L. f.).

## Geographic Range

Geographic element:  
Western North American/mainly Pacific and less Cordilleran

Distribution in Western North America:  
**central** and **south** in the Pacific region; central and south in the Cordilleran region

## Ecological Amplitudes



generalized edaphic amplitude of bitter cherry according to actual soil moisture and nutrient regimes

### Climatic amplitude:

(subalpine boreal) - montane boreal - cool temperate - **cool** and **warm mesothermal**

### Orographic amplitude:

submontane - montane - (subalpine)

### Occurrence in biogeoclimatic zones:

(lower ESSF), (MS), (SBS), (SBPS), (PP), (IDF), ICH, **CDF**, CWH

### Edaphic Amplitude

#### Range of soil moisture regimes:

(moderately dry) - slightly dry - fresh - moist – (very moist)

#### Range of soil nutrient regimes:

(very poor) - poor - medium - rich - very rich

## Tolerance and Damaging Agents

### Root System Characteristics

Bitter cherry has a shallow root system with many lateral branches.

### Tolerances

tolerance to	tolerance class	comments
low light	M	frequent in open canopy stands
frost	M	frost not a major concern in cool mesothermal climates
heat	M	frequent on insolated sites
water deficit	L	infrequent on dry sites
water surplus	H	tolerates flooding and a strongly fluctuating water table
nutrient (mainly N) deficiency	H	frequent in acid, very poor soils

### Associated tree species and successional role

In British Columbia, bitter cherry grows very scattered in coniferous or hardwood stands in the early stages of secondary succession. It is less frequent in the intermediate stages as its life span is only up to 80 years.

### Silvical Characteristics

characteristic	interpretive class	comments
reproduction capacity	H	a prolific seed producer
seed dissemination capacity	H	distributed by birds
potential for natural regeneration in low light	L	practically nil in the absence of adequate light and seedbeds
potential for natural regeneration in the open	H	providing the presence of exposed mineral soil

potential initial growth rate (<5 years)	H	up to 2 m in one season in cuttings
response of advance regeneration to release	na	advance regeneration does not develop in the absence of adequate light and seedbeds
self-pruning capacity in dense stands	na	dense stands are very infrequent
crown spatial requirements	H	wide crowns
light conditions beneath closed-canopy, mature stands	na	closed-canopy stands are very infrequent
potential productivity	na	non-crop species
longevity	L	occasionally >50 years, up to 80 years

## Genetics and Notes

### Notes

The early growth of bitter cherry is rapid but later, especially in high-density stands, bitter cherry is overgrown by more shade-tolerant tree species. Although not grown commercially for timber production, it is a useful component in early seral stages as it protects the soil, and many birds and mammals eat its fruit, buds, or foliage and twigs. However, its fruit are too bitter for the human palate without the addition of ten times the amount of sugar.