Of all the wonders of nature, a tree in summer is perhaps the most remarkable; with the possible exception of a moose singing "Embraceable You" in spats. Woody Allen





## Conifers: Only 18

Pines (4)

Firs (5)

Spruces (2)

Hemlocks (2)

Yew (1)

Larches (2)

Cedars (2)

Playing in the

**Forest** 

Should

Help

You

Learn

Conifers



# Cascade Conifers

# DUMMIES

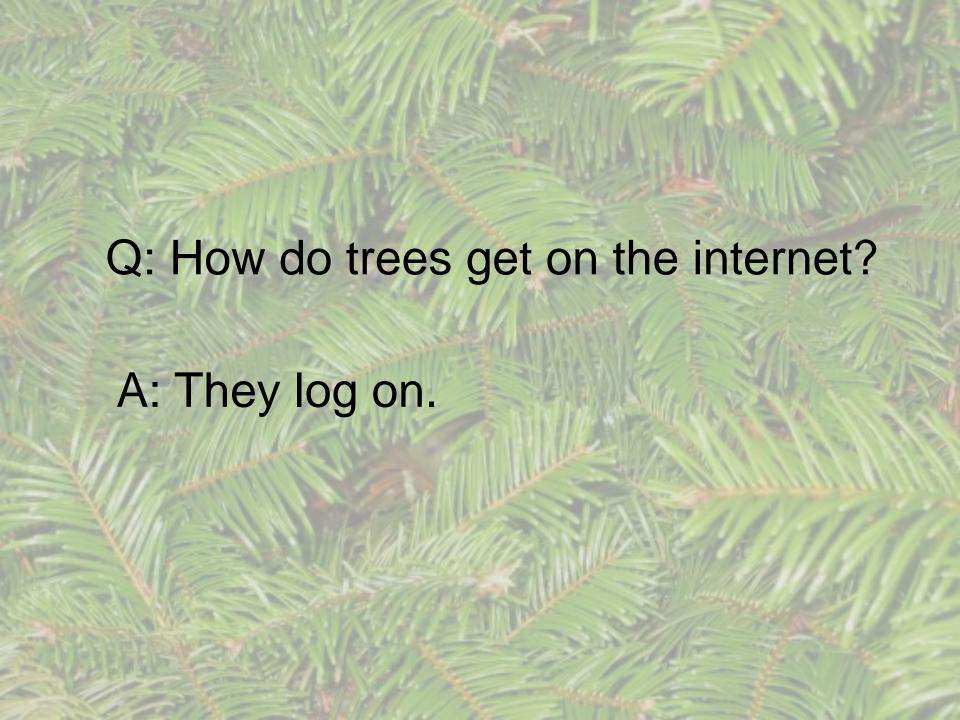
4th Edition

A Reference for the Rest of Us!

FREE-a Tipe of duotroios, coor-

**Paul Bunyan** 

The latest on how to save more, invest wisely, and plan for the future



#### Identification

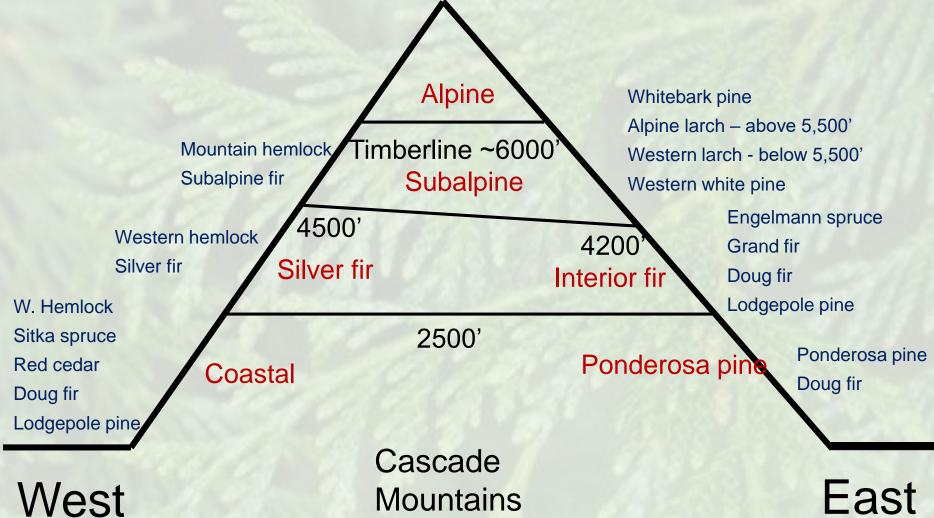
#### Emphasis on:

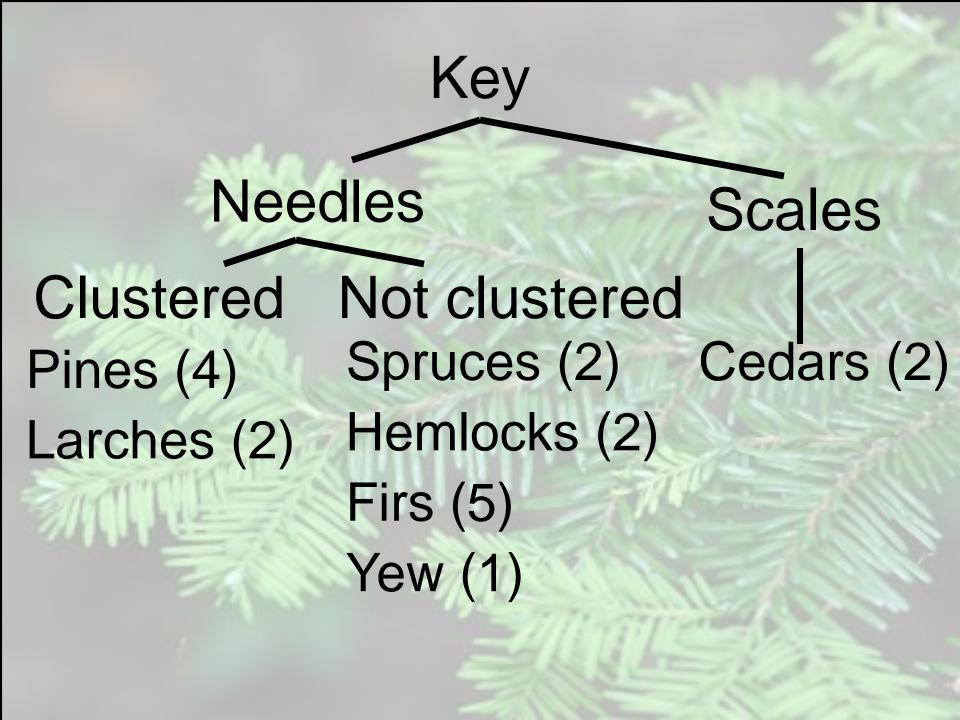
- Needles
- Cones
- Appearance
- Elevation & location

Not much emphasis on bark or size of tree

Conifers may try to trick you, especially in sunny areas

# Location: zones and predominant trees







#### Western Red Cedar

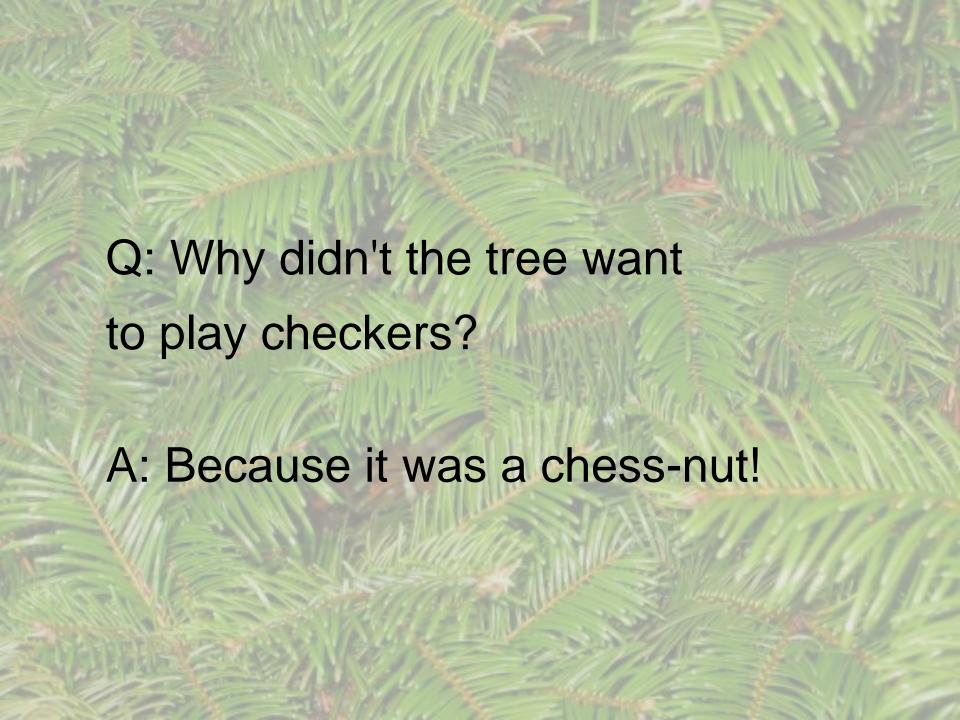
- Smooth scales when rubbed
- Reddish bark, rosebud cones
- Looks "happy", with uplifting branches – The "Happy" Cedar
- Generally below 4000'

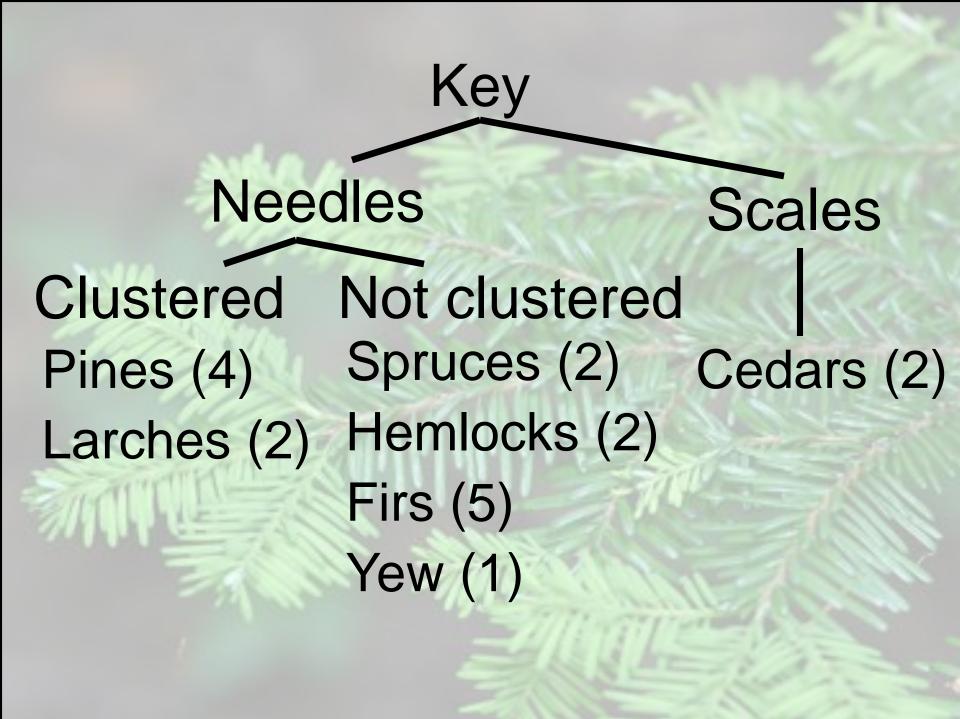


#### Alaska Yellow Cedar

- Other names are Alaska cedar, Nootka cypress
- Prickly when rubbed
- Droopy branches
- Looks sad The "Sad" Cedar
- West of Cascade crest
- Above 3,000'







#### Needles

Clustered

Pines (4)

Larches (2)

Not clustered

Spruces (2)

Hemlocks (2)

Firs (5)

Yew (1)

Needles: Clustered

Pines (4)

Larches (2)

### Lodgepole Pine

Lightweight wood and easy to peel bark made it preferred for tepees and log cabins.

Costal relative is known as Shore pine or Contorta (Twisted) pine.

- 2 needles
- Needles are 1-3"
- Above 3,000 in the mountains



#### Ponderosa Pine

Named by David Douglas for its ponderous size

- East of crest only
- Bark can look like jigsaw puzzle and may smell like vanilla or butterscotch
- 3 long needles, 5-10" in length
- Up to 5,000'







#### Western White Pine

Largest cones in Washington

- 5 needles
- Long cones 6-10" in length, often with a banana-like curve
- 3,000-5,000'





#### Whitebark Pine

Symbiotic relationship with the bird Clark's Nutcracker.

- 5 needles, tightly bundled,
  1-3" in length
- Cones 2-3" but rarely seen
- 5000'+, at timberline





#### Western Larch

Yellow needles in fall

- 3-sided needles in bundles of 15-25, > 2" long
- Up to 6,000', central/south
  Cascades, and NE corner of
  Washington, Idaho
- Grows tall and straight



### **Alpine Larch**

Yellow needles in fall

- 4 sided, clustered needles 20-40, 1-2" long
- 5500+, at timberline, central/north
  Cascades
- Grows where it is too cold, rocky, snowy, windy, for other conifers



#### Needles

Clustered

Pines (4)

Larches (2)

Not clustered

Spruces (2)

Hemlocks (2)

Firs (5)

Yew (1)



## Sitka Spruce

- Spikey, flat, needles (won't "roll")
- Paper thin, 3" cones
- Coast and Puget Sound Iowlands, within reach of ocean fog. (< 700')</li>



## **Engelmann Spruce**

- Needles are less spikey and square-shaped (will roll between fingers)
- Cones are paper thin, 3"
- Cascades & Eastern
  Washington mountains
- 3,000-6,000 feet



# Western Hemlock Washington State tree

- Droopy crown
- Tiny cones < 1" in length</li>
- Short flat needles of 3 lengths, mostly flattened on twig.
- Below 4,000'



#### **Mountain Hemlock**

- Droopy crown
- Short flat needles of two lengths
- 2" cones.
- Needles radiate from all sides of twig like a bottle brush.
- The "Sparkle" Hemlock
- 4,000+ to timberline



#### **Pacific Silver Fir**

- Side-by-side needles with row down spine (ski jumpers)
- 3-6" cones, upright, green to Purple
- Underside of needle is pale (silver)
- Above 3,000'





### **Grand Fir**

Flat branches used for bedding by Lewis and Clark

- Needles lie in flatted rows, bare twig. 3 needle lengths.
- Dark, shiny green needles needles have grapefruit smell & taste.
- Upright cones fall apart at maturity
- Up to 5,000'



## Subalpine Fir

- Needles curve to densely crowd top of twig
- · Upright, purple-to-gray, cones
- Tree has steepled appearance
- 4,000' to timberline





### **Noble Fir**

Named by Douglas for its beauty and majesty

- Blue-green needles, bent like hockey sticks.
- Whiskery bracts on upright cones, at tree-top, 4-6" in length
- Mostly south of Rainier
- Above 2,000'





## Douglas Fir

Not a fir, not a hemlock

- Needles stick out in all directions but can lie flat.
- Mouse tail bracts on cones
- Up to 5,000'
- When in doubt of conifer ID, guess Douglas Fir – correct 80% of time



## Pacific Yew (bush)

- Side-by-side short, flat, needles: non-prickly, glossy dark green top
- · No cones is a hardwood
- Red aril (seed coat) tastes like mild cherry Jello. Seed is poisonous!
- Below 5,000' in wet shady areas

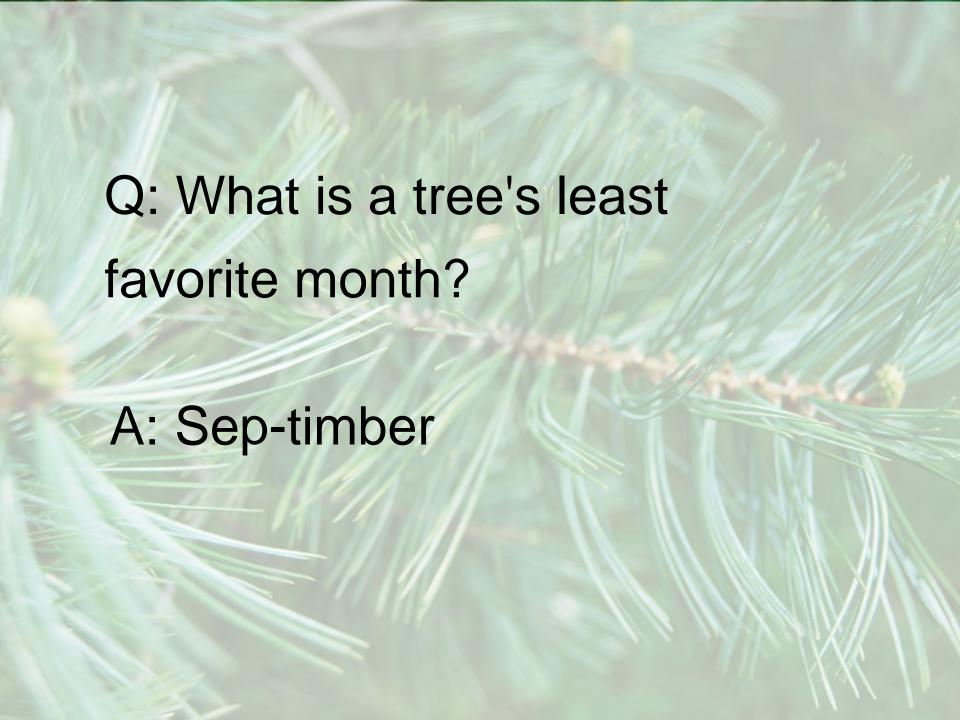






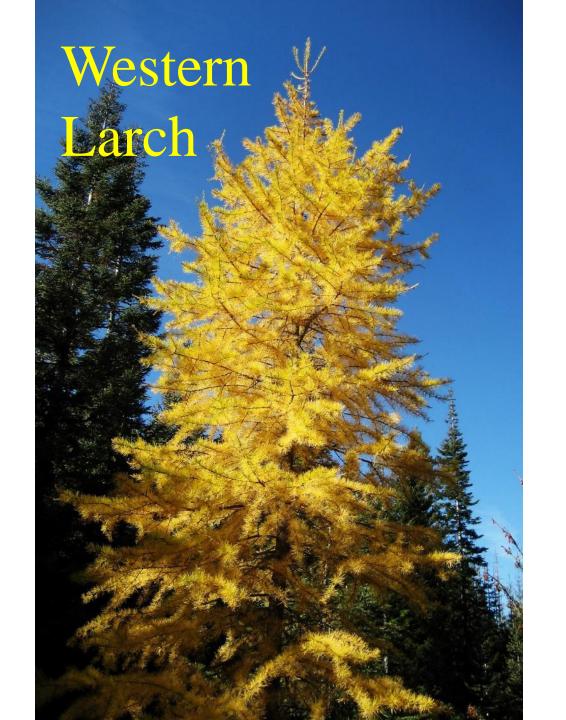
Q: Where does a tree like to spend the night?

A: In a seedy motel

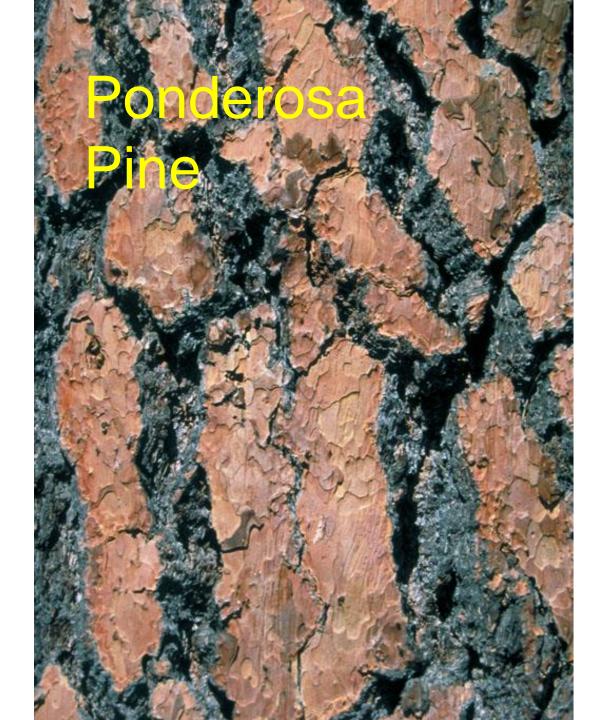






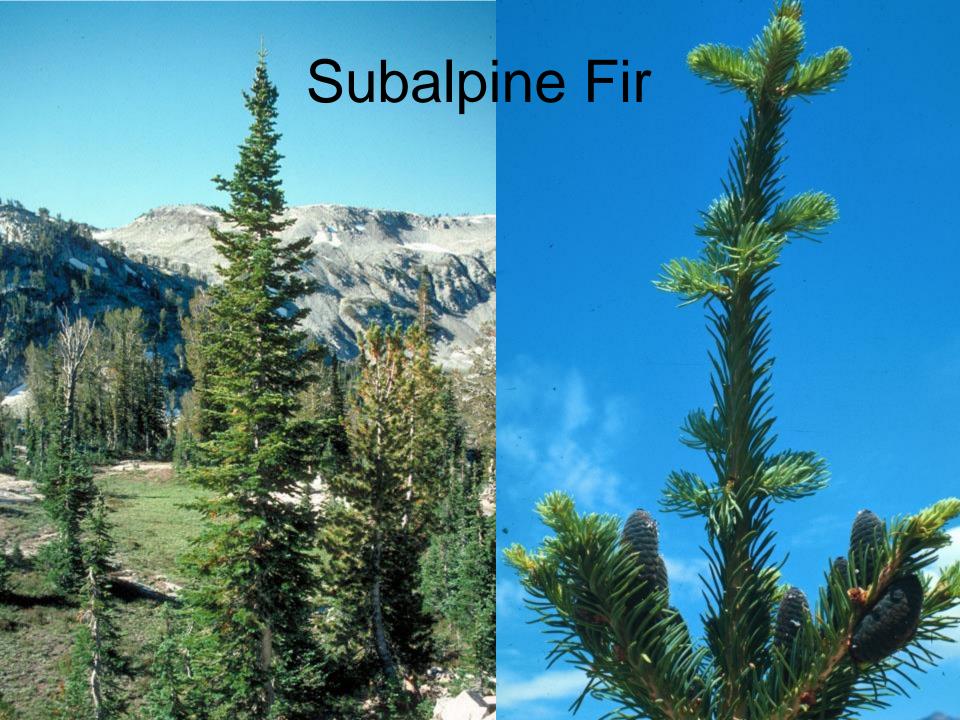












Q: What did the beaver say to the tree?

A: It's been nice gnawing you

On-line reference – nwconifers.com

Excellent conifer hike — Crystal Peak, Mt Rainier NP

Time fir me to leaf yew

18 Cascade Conifers	Description	Elevation	Cones	Needles	Stomata	Other
Douglas Fir	Bottle brush	Up to 4500	3-4 in, 3 pt bracts	1 in, flat, pointy tip	2 bottom	Not true fir
Western Hemlock	Droopy top	Up to 4500	.575 in	Unequal 3	2 bottom	State tree
Mountain Hemlock	Less droopy	Over 4000	1-3 in	More equal2	Top & btm	larger cone
Silver Fir Loves up	Pale btm need	2000-5000	3.5-6 in	Sides & top	2 bottom	Silver bark
Grand Fir	2 rows of needles	2000-5000	2-4.5 in, grn-brn	Equal, side by side	2 bottom	needles not sharp
Noble Fir	Blue green	3000-5000	4-7 in, bracts	4 sides, top groove	2 top	Rainier and south
Subalpine Fir	Bottle brush	Over 4500	2.5-4 in	Equal	2 top, faint	Steeple
Ponderosa Pine	Distinctive	Up to 4500	3-6 in	3 5-10 in	- 1950 - 34	East only
Lodgepole Pine			1-2 in	2 1-3 in		L = 2
Western White Pine		Up to 5000	6-11 in	5, splayed		W = 5
Whitebark Pine		5000+	2-3 in	5, stouter, bundled		W = 5
Sitka Spruce	Coastal most	Up to 2000	2.5-4 in	Prickly	2 top	
Engelmann Spruce	Mountains	3000-6000	1.5-2.5 in	4 sides, prickly, blue green	Top & bottom	Can roll needles, East most
Western Red Cedar	Reddish bark	Up to 4000	.5 in, rosebud	Smooth scales		West mostly
Alaska (Yellow) Cedar	Droopy branches	3000-6500	.5 in, roundish	Prickly scales		West only, krummholz
Alpine Larch	High elev	Over 5000	Bracts	Clusters	4-sided need	East only
Western Larch	Deciduous	3000-5000	Bracts	Clusters	3-sided need	East only
Pacific Yew Sharp	Bush in shade	Up to 8000	Red berry	Like Grand	No stomata	West only