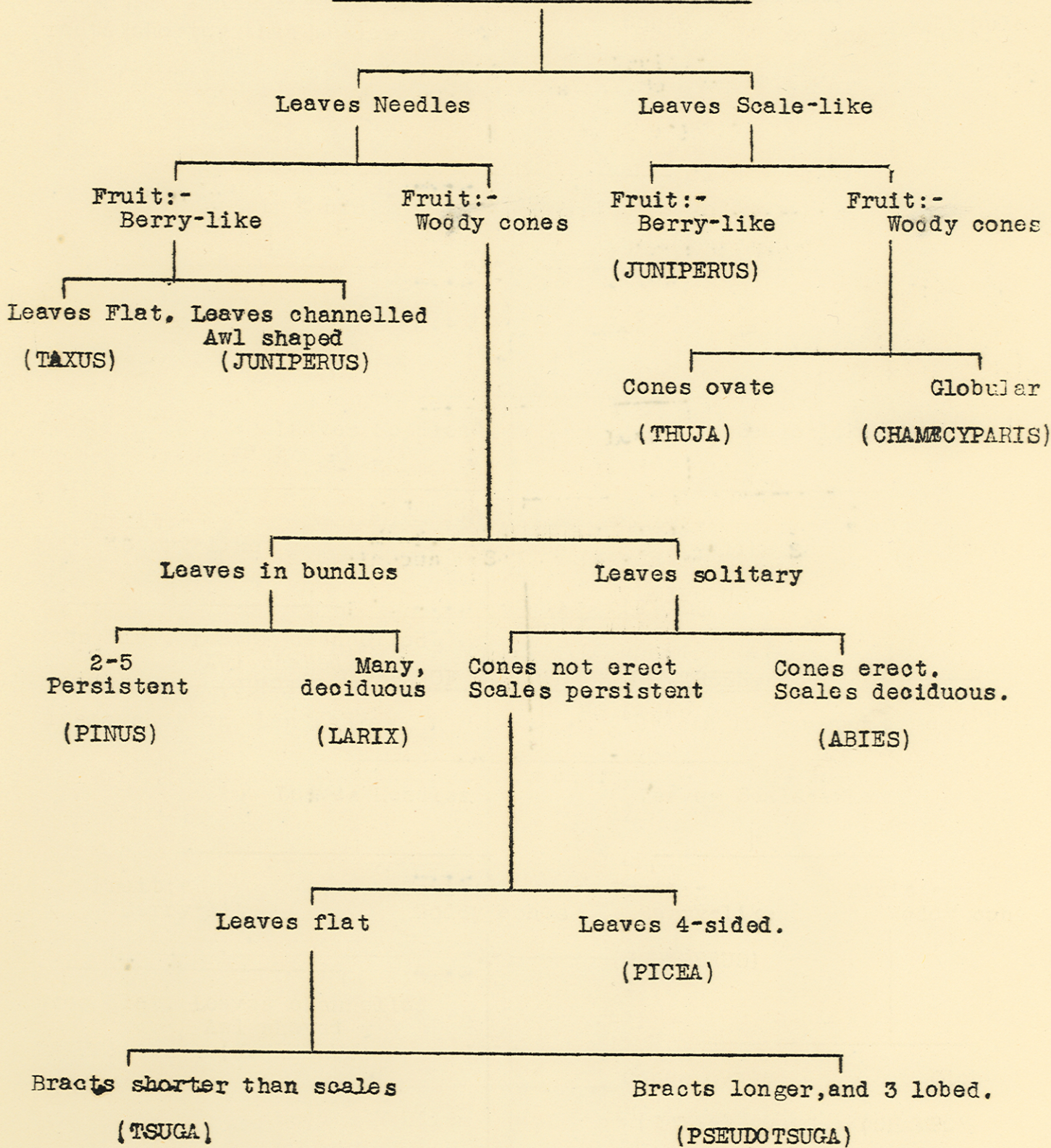
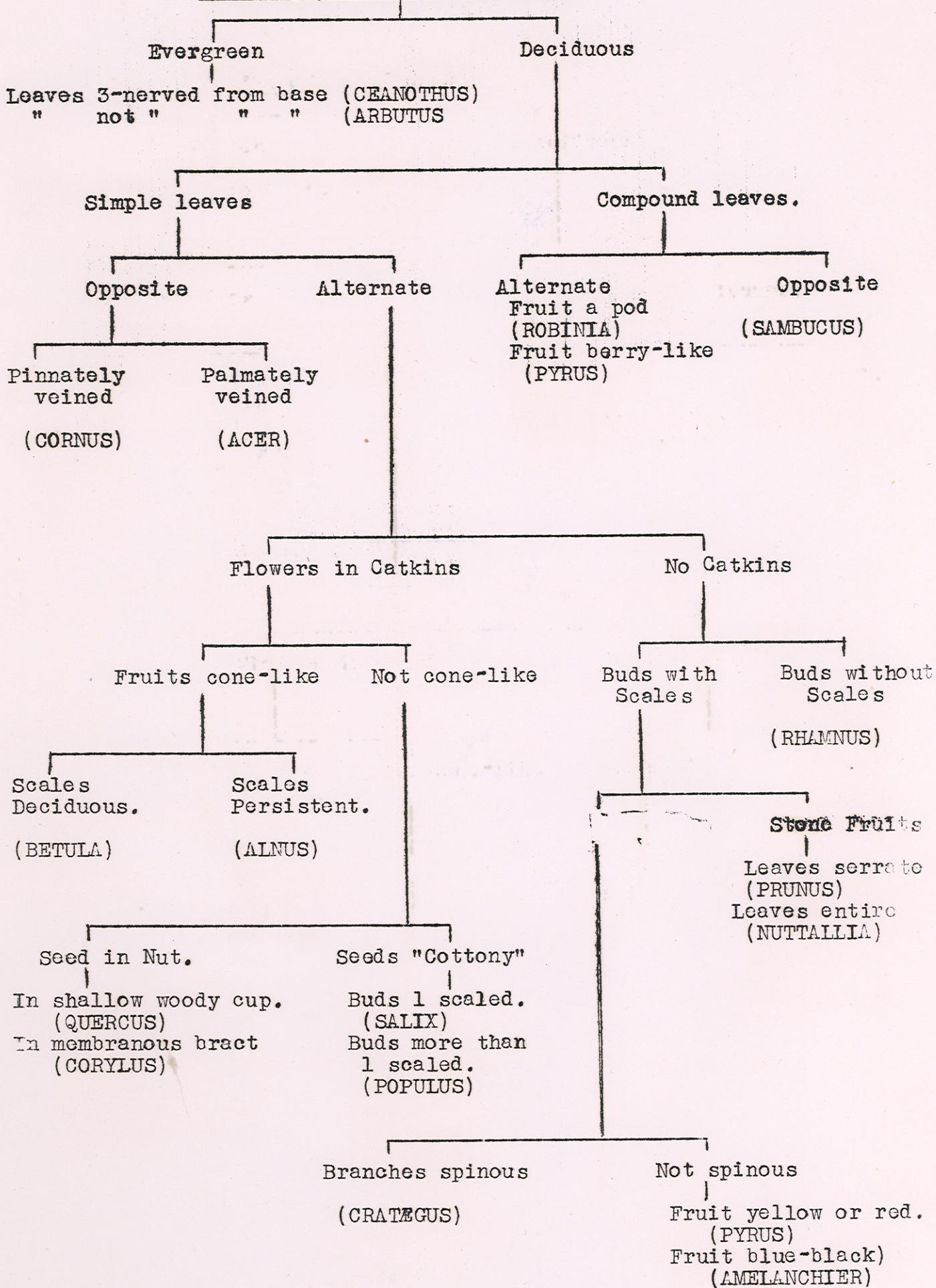





GENERA OF B.C. GYMNOSPERM TREES.



GENERA OF B.C. ANGIOSPERM TREES



ABIES - TRUE FIRS (So-called "Balsams")

	Leaves of lower branches	Resin ducts of leaves	Stomata	Cones	Bracts
<u>A. grandis</u> , Lindl. (Grand Fir)	Usually 2-ranked Spreading horizontally	Near lower epiderm	On lower surface	Green	
<u>A. amabilis</u> (Dougl) Forbes. (Amabilis Fir).	Leaves on upper sides of branches more or less appressed to twigs.	Near lower epiderm	On lower surface	Purple	
<u>A. lasiocarpa</u> (Hook.) Nutt. (Alpine Fir.)	All leaves turned upwards	in mesophyll	On both surfaces	Purple	

ACER - MAPLES

	Leaves	Bundle scars	Fruit	Wings
<u>A. macrophyllum</u> Pursh (Large-leaved Maple.)	Deeply 3-5 lobed	5 or more	Bristly	Form angles of 70°-90°
<u>A. glabrum</u> , Torr. (Mountain Maple)	5-5 lobed	Usually 3	glabrous	Form angles of 70°-90°
<u>A. circinatum</u> , Pursh Pursh. (Vine Maple)	5-9 lobed	Usually 3	Glabrous	Spreading Horizontally

ALNUS - ALDERS

	Habit	Leaves	Peduncles	Flowers, etc.
<u>A. rhombifolia</u> , Nutt (White Alder)	Tree	Simply serrate	Shorter than the cone like fruits	Fruits not winged, stamens 2 or 3.
<u>A. rubra</u> , Bong. (Red Alder)	Trees	Doubly serrate teeth broad	Shorter than the cone like fruits	Winged fruits flowers appear before leaves Stamens 4.
<u>A. sitchensis</u> , (Regel). Sargent. (Sitka Alder.)	Shrubs or small trees	Sharply doubly- serrate teeth small	Equalling or longer than the cone-like fruits.	Winged fruits Flowers appear with leaves Stamens 4.
<u>A. tenuifolia</u> , Nutt. (Mountain Alder)	Shrub	Sharply- doubly- serrate	Shorter than the cone- like fruits	Fruits not winged. Flowers appear before leaves. Stamens 4.

A M E L A N C H I E R - JUNE-BERRY

A.alnifolia
Nutt.
"Saskatoon"

Only B.C. species attaining a tree-like habit.
Sometimes 20 feet high, more often shrubby.

ARBUTUS - MADRONA.

A.MENZIESII
Pursh.
(Madrona)

Only species in B.C.

B E T U L A - BIRCHES

	Habit	Bark	1st.yr.twigs	Leaves	Catkins.	
					Long	Thick.
<u>B.occidentalis</u> Hook (Western Birch).	Tree 100- 120 ft	Separ- able reddis- brown to grayish white.	Pubescent, few warty resinous glands.	3-4 inches long Apex pointed	1" 4 1" 2	1" 4 1" 2
<u>B.alashana</u> Sargent. (Western White Birch).	Tree 30- 80 ft	Separ- able reddish- brown to nearly white.	Glabrous thickly covered with resinous glands.	1 1/2-3" long Apex long pointed.	1"- to 1 1/4	1" 3 1" 2
<u>B.fontinalis</u> Sargent. (Mountain Birch).	Small tree. 30- 40	not separ- able dark brown	Covered with warty resinous glands	1-2" long Apex pointed	1" to 1 1/4	1 5 to 2 5
<u>B.glandulosa</u> Michx. (Dwarf Birch)	Shrub	Not separ- able Bark brown	With warty glands.	1/2-1" long Apex rounded	1" 2 to 1"	1" 4 1" 3
<u>B.alba papyrifera</u> Marsh. (Eastern White Birch)	B.C.records are doubtful. Probably a form of <u>B.occidentalis</u> .					

C E A N O T H U S - SNOWBUSH

C.vclutinus var.laevigatus, T.& G. (Snowbush)
Only native variety with tree like habit;
occasionally reaching 15-20 feet.

C H A M E C Y P A R I S - YELLOW "CEDAR", FALSE CYPRESS

C. nootkatensis, (Lamb.) Spach. Yellow "Cedar".
Only native species in B.C.

CORNUS - DOGWOOD

	Habit	Hairs on leaves and young shoots.	Flowers	Fruits
<u>C.Nuttallii</u> , Audb. (Nuttall's Dogwood).	Trees up to 100 ft.	Appressed	With large showy white bracts	Red in globular heads
<u>C.pubescens</u> , Nutt. (Western Dogwood)	Shrubs 6-26 feet	Spreading	Corymb of small white flowers.	White or lead colored drupes

CORYLUS - HAZEL, FILBERT

	Habit	Leaves	Involucral bracts
<u>C.rostrata</u> , Ait (Eastern or Beaked Hazel)	Shrubs to trees 4-35 ft.	Sub-orbicular to obovate	Form long tubular beak about twice length of nut.
<u>C.rostrata</u> var. <u>californica</u> , DC.	Shrubs to trees 4-35 ft.	Ovate or narrowly oval.	Form short beak about half as long as nut.




CRATEGUS - HAWTHORNS.

	Spines	Fruits.
<u>C.Douglasii</u> , Lindl (Short-spined Hawthorn)	$\frac{3}{4}$ - $\frac{11}{2}$ inches long.	Black
<u>C.columbiana</u> , Lindl. (Long-spined Hawthorn)	$\frac{11}{4}$ - $\frac{21}{2}$ inches long.	Red

JUNIPERUS - RED "CEDAR"

	Habit	Leaves
<u>J.Scopulorum</u> , Sargent (Red "Cedar")	Small tree	Scale-like on mature twigs.
<u>J.communis</u> var. <u>montana</u> , L. (Common Juniper)	Shrub or low tree	All needle-like and sharp pointed.

L A R I X - LARCHES

	Young twigs	Leaves	Bracts	Distribution
<u>A. Lyallii</u> Parl. (Alpine Larch)	Densely hairy		Longer than scales	Rockies Alpine.
<u>L. occidentalis</u> Nuttall. (Western Larch)	Sparsely hairy, or glabrous		Longer than scales	East of Cascades. Sub-alpine
<u>L. americana</u> Michx. (Tamarack), American Larch	Often with glaucous bloom		Shorter than scales	Liard region N.E., B.C.

N U T T A L L I A - INDIAN PLUM

<u>N. cerasiformis</u> T. & G. (Indian Plum)	Only one species in B.C. Sometimes forms clumps 15-20 feet high.
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P I C E A - SPRUCES

	Habit	Branchlets	Cones	Scales	Bracts	Distr.
<u>P. mariana</u> (Mill) B.S.P. (Black Spruce)	Small trees	Hairy	Persisting several years 1" long.	Erose	Oval erose	Northern B.C.
<u>P. canadensis</u> (Mill) B.S.P. (White Spruce)	Medium trees	Usually glabrous	Deciduous 1-2 1/2 inches	Usually Entire Obovate Rounded at apex	Ovate Erose	Northern B.C.
<u>P. Engelmanni</u> (Parry) Engelm. (Engelmann Spruce)	Large trees	Hairy	Deciduous 1 1/4 - 2 1/2	Rhombic Laciniate to Erose, rarely entire.	Ovate Erose	East of Cascades.
<u>P. sitchensis</u> (Bong), Carr. (Sitka Spruce)	Large trees	Glabrous	Deciduous 2 - 3 1/2 inches	Rhombic Erose to laciniate	Lanceolate Entire or slightly erose	Chiefly in Coast region

P I N U S - PINES

	Leaves	Cones	Scales	Distribution
<u>P. contorta</u> Dougl. (Lodge-pole Pine, Jack Pine).	2 in bundle, 1-3 inches long.	Ovoid 1-2 inches long	Usually with prickles	Coast and Interior.
<u>P. ponderosa</u> Dougl. (Yellow Pine, Bull Pine.)	3 in bundle. 4-6 inches long.	Ovoid 3-5 1/2 inches long.	With prickles	Interior.

P I N U S - PINES. (Continued)

	Leaves	Cones	Scales	Distribution
<u>P. monticola</u> Dougl. (Western White Pine)	5 in bundle 2-4 inches long.	Cylindrical green 5-11 inches long.	Thin No prickles	General
<u>P. albicaulis</u> Engelm. (White-bark Pine)	5 in bundle 1-3 inches long.	Ovoid to sub-globose. Purple $\frac{1}{2}$ -3 inches long. Not opening widely at maturity.	Very thick fleshy. No prickles.	Alpine and Northern.
<u>P. flexilis</u> James. (Lumber Pine)	5 in bundle 1-3 inches long.	Ovoid 3-8 inches long. Opening widely at maturity	Very thick No prickles	Mountains East of Cascades.

P O P U L U S - POPLAR, COTTONWOOD, ASPEN.

	Leaf stalk.	Stamens	Stigmas
<u>P. tremuloides</u> Michx. (Aspen)	Compressed laterally	6-12	2
<u>P. trichocarpa</u> T. & G. (Black Cottonwood)	Terete (Cylindrical)	40-60	3
<u>P. balsamifera</u> L. (Balm of Gilead.) (Tacamahac)	Terete (Cylindrical)	20-30	2

P R U N U S - CHERRIES.

	Leaves	Flowers	Fruits
<u>P. emarginata</u> Douglas. (Wild Cherry)	Usually obtuse	In corymbs of 6-12 greenish white flowers.	Red to almost black. $\frac{1}{4}$ " - $\frac{1}{2}$ " dia.
<u>P. pennsylvanica</u> Linn. (Bird Cherry)	Usually acuminate; (rarely acute)	in umbels (rarely corymbs) of 3-5 creamy white flowers.	Light red $\frac{1}{4}$ inch diameter.
<u>P. demissa</u> Nutt. (Bird Cherry)	Abruptly acuminate	Racemes of many pure white flowers.	Nearly black $\frac{1}{4}$ " - $\frac{1}{2}$ " dia

P S E U D O T S U G A - DOUGLAS FIR.

<u>P. taxifolia</u> (Lamb.) Britton (Douglas Fir)	Only one species in British Columbia. (Known also as P. Douglasii, and P. mucronata.)
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P Y R U S - APPLE, MOUNTAIN ASH.

	Habit	Leaves
<u>P. diversifolia</u> Bong. (Wild Crab Apple)	Tree	Simple
<u>P. aucuparia</u> (L.) Bhrh. (Rowan-tree) (Introduced)	Tree	Compound
<u>P. occidentalis</u> Wats (Western Mountain Ash.)	Shrub	Dull, compound, serrate at apex only.
<u>P. sitchensis</u> (Roem.) Piper. (Sitka Mountain Ash.)	Shrub	Shinning, compound, serrate from near the base.

Q U E R C U S - Oak

<u>Q. Garryana</u> Douglas (Garry Oak)	Only one species in British Columbia
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R H A M N U S - CASCARA-TREE

<u>R. Purshiana</u> DC. (Cascara-tree).	Only one arborescent species in B.C.
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R O B I N I A - LOCUST, FALSE-ACACIA

<u>R. Pseud-Acacia</u> L. (False-Acacia)	An introduced tree which spreads readily by seeds and suckers.
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S A L I X - WILLOWS.

Of more than 40 kinds of native Willows in British Columbia, about 12 kinds become arborescent.

	Height	Twigs	Leaves	Stamens	Ovary	Catkin
<u>S. sitchensis</u> Sanson (Sitka Willow)	25- 30 ft	Dark, reddish brown, with hoary tomentum.	Conduplicate glabrate above lust- rous tomen- tose beneath	1.	In flower pubes- cent.	Slender on short tomen- tose branc- lets
<u>S. Hookeriana</u> Sarg. (Hooker's Willow.	20- 30 ft.	Dark, reddish brown, with hoary tomentum	Pubescent above, tomentose beneath.	2.	In flower pubes- cent in fruit glab- rous	Thick more or less curv- ed; on short tomen- tose branc- lets.

S A L I X - WILLOWS. (Continued)

	Height	Twigs	Leaves	Stamens	Ovary	Catkins
<u>S. Nuttallii</u> Sarg. (Nuttall's or Scouler's Willow)	20- 30 ft.	Slender more or less pen- dulous, 1st. yr. yellowish orange, 2nd. yr. reddish brown.	Involute Pubescen- glabrate	2	In flower hoary pubescent	Nearly sessile on short tomentose branchlet
<u>S. Nuttallii</u> var <u>brachystachys</u> Sarg.	40- 70 ft.	Stouter than type. Roughened by leaf- scars.	Involute. Pubescent -glabrate	2	In flower hoary pubescent	Ditto. often strongly curved
<u>S. Bebbiana</u> Sarg. (Bebb's Willow)	25 ft.	Brown Pubescent -glabrate.	Conduplic- ate. glabrate above glaucous beneath.	2	Villous	On short <u>leafy</u> branches.
<u>S. sessilifolia</u> Nutt. (Silver leaf Willow)	30 ft.	Reddish brown, at first hoary pubescent.	Involute, Glabrous or puber- ulent above, Silky Villous beneath.	2	Villous	Terminal and axillary on <u>leafy</u> branches.
<u>S. cordata</u> Muhl. (Heart-leaved or Diamond Willow.)	15- 50 ft.	Puberulent or glabrous	Involute. Green and glabrous both sides	2	Glabrous	Terminal on short leaf branches
<u>S. cordata</u> var. <u>MacKenzie's</u> Hook. (MacKenzie's Willow).	15- 18 ft.	Shining yellow, glabrous.	Involute. Glabrous above, glab. and <u>glaucous</u> beneath.	2	Glabrous	Terminal on short leafy branches.
<u>S. fluviatilis</u> Nutt. (Long-leaved Willow)	20- 70 ft.	Orange to purplish red, glabrous.	Involute. Glabrous. Long and narrow.	2	Glabrous or pubescent	Terminal and axillary on leafy branches.
<u>S. fluviatilis</u> var. <u>argyrophylla</u> Sarg. (Sand-bar Willow)	25 ft.	Orange to purplish red. Glabrous	Involute. Silky tomentose (Pale)	2	Silky tomentose (Pale)	Terminal on leafy branches.

SALIX - WILLOWS (Continued)

	Height	Twigs	Leaves	Stamens	Ovary	Catkins
<u>S. lasiandra</u> Benth. (Cracked-bark Willow).	60 ft.	Reddish yellow. Slightly pubescent	Involute 2 or more glands on petiole	5-9	Glabrous	On leafy shoot
<u>S. amygdaloides</u> Anders. (Almond Willow)	60-70 ft.	Orange brown Glabrous	Revolute no glands on petiole	5-9	Glabrous.	On leafy shoots.

SAMBUCUS - ELDER, BOURTREE

	Inflorescence	Berries
<u>S. glauca</u> , Nutt. (Blue Elderberry)	Flat topped,	Black covered with white bloom
<u>S. racemosa</u> , L. (Red Elderberry)	Pyramidal	Red
<u>S. melanocarpa</u> , A. Gray (Black Elderberry)	Pyramidal	Black with no bloom.

TAXUS - YEW

<u>T. brevifolia</u> , Nutt. (Yew Tree)	Only one native species in British Columbia.
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THUJA - GIANT "CEDAR" ARBOR-VITE

<u>T. plicata</u> , Donn (Giant "Cedar")	Only one native species in B.C. Locally called "Red Cedar" and "White Cedar". (There are no true Cedars native on this continent)
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TSUGA - HEMLOCK SPRUCE

	Leaves	Cones
<u>T. heterophylla</u> , (Raf) Sarg. (Western Hemlock)	Usually 2-ranked. Stomata on lower surface only. Flat on upper surface	Ovoid
<u>T. Mertensiana</u> , (Bong) Sarg. (Mountain or Black Hemlock)	Not 2-ranked. Stomata on both surfaces. Convex or keeled on upper surface.	oblong-cylindrical