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THIMBLEBERRY RESEARCH

LATIN NAME: *Rubus parviflorus* Nutt. (342-605, 35-172, 287-224)

OTHER LATIN NAMES: *Rubus nutkanus* Moc.(342-605); Genera names: *Ametron*, *Batidaea*, *Cardiobatus*, *Comarobatia*, *Comaropsis*, *Dalibardia*, *Manteia*, *Melanobatus*, *Parmena*, *Psychrobatia* (287-224); *Bossekia parviflora*, *Rubacer parviflorum* (376-273);

COMMON NAMES: Thimbleberry; Japanese Raspberry (376-273); k'wa'xwunl (Chehalis, "whole plant"), k'wa'x (Chehalis, "Berries"), k ku.'cnas (Cowlitz), ikilitc (Klallam), luluwa'ts (Makah), t'aqa'tcil (Quileute, whole plant), taqa'tcitl (Quileute, berries), xee'nis (Quinault), t'u'qumi'ltc (Samish), slaka'ats (Snohomish),

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slalaqu'ts

(Squaxin, whole plant), slala'q (Squaxin, berries), la'qa'ats (Swinomish), sla'ka (Upper Skagit), (46-34); Nou-t'ien-piao (Chinese, 343-383); Ko'o (Gitksan, 242-137); Dukdinkal (Carrier, 251-334, 280-74); Sxtsi (Nuxalk, shoots, 255-106); nisk'o'o (Gitksan, 133-74); Nou-t'ien-piao (Chinese, 343-383); siy'lhtsk'a7lh (Thompson, Lytton Form, 450-271);

PLANT DESCRIPTION: (Plant highly variable)

GENERAL: Shrub with erect, unarmed, puberulent and glandular branches; (342-605); Twigs stipitate-glandular (287-224); Shrub with many erect stems up to 2.5 meters tall. Stems with exfoliating flaky bark, unarmed, more or less stipitate glandular-hispid or pubescent, especially on young growth. (35-172) Erect stems up to 2.5 meter tall. Stems with exfoliating flaky bark, unarmed. (35-17). Bark becomes shreddy with age (85-21). 6-8 feet high thickets. Each year sends out new shoots and growth buds. An erect, many-stemmed, unarmed shrub, 0.5-1.5 m (1.5-5 ft) high. The bark is light brown, thin, and shredding. (137-247); Erect shrub, 1-3 m tall, forming dense patches from the spreading rootstock. Bark shredding with age, branches with minute, soft, gland-tipped hairs. (385-180);

LEAVES: Leaves palmately 3-5 lobed, cordate, twice dentate-serrate (342-605); leaf blade 5-25 cm; styles glabrous distally (287-224); Leaf blades large, soft, orbicular-reniform, palmately 3-7 lobed with deep basal sinus; lobes triangular, acute dentate, teeth ovate, mucronate, blades green and sparingly pilose on both sides or glandular-pruinose beneath; petioles about as long as the blades, stipitate-glandular. (35-172) Leaf blades large, soft, palmately 3-7 lobed. (35-17); Up to 10" long and shaped like Maple Leaf, but with soft and crinkled surface (1-260); Green and shiny above, lighter beneath. (8-31); The leaves are large, light green, and resemble maple leaves, with five pointed lobes. They are marginally toothed and finely fuzzy on both sides. (137-247); Leaves with palmate main veins and 5 lobes, irregularly sawtoothed, hairless to woolly haired, (5)10-15(25) cm long and broad. Leafstalks glandular-hairy. (385-180);

FLOWERS: Flowers in terminal corymbs; calyx lobes oblong-ovate, long-caudate; petals white, mostly 5, oblong-obovate to obovate, 15-25 mm long; ovary pubescent; style glabrous (342-605); Flowers 2-9, loosely cymose (287-224); Inflorescence cymose-paniculate, 3-11 flowered. Sepals broadly ovate, abruptly caudate-acuminate, up to 15 mm long, white tomentose within, often stipitate-glandular on back, spreading. Petals white, ovate, up to 30 mm long. Stamens and carpels numerous; ovaries pubescent. (35-172) Petals white, ovate, up to 30 mm long. (35-17) Flower is larger in southern B.C., than northern B.C. (Lee). Blooms from April through August. Petals have a rumpled, crinkled appearance. (110-54); 3-5 flowers are usually

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in a cluster (1-260). Almost 2" across. Blooms May-July. (3-87); The flowers are large and white, in few- to many-flowered, terminal clusters. (137-247); Terminal corymb with 2-9 flowers, stalks glandular-hairy. Sepals narrowed at the tip into a long tail. Petals white, obovate to elliptical, 10-25 mm long. Flowers large, 2-4 cm across. Flowering: March-August. (385-180);

FRUITS/SEEDS: Fruit hemispheric, juicy, red, palatable. (342-605); Drupelets red, pubescent, soft, and rather insipid to taste (35-172); Ripen in June through August. Fruits green --> White --> Pink --> Bright Red. Shallowly cup-shaped and fall loose from stems easily when ripe. Shaped like 'buttons' (3-87) 'Multiple fruit'. Each section develops from an ovary, and all parts adhere loosely together to form the whole fruit. The fruit when ripe, readily separates from the cone-shaped white receptacle. (6-94); The fruits are bright red when ripe. They are shallowly cup-shaped and fall loose from their stems easily when ripe. Their taste varies with locality and weather conditions, but ideally they are sweet and flavourful, though somewhat seedy. (137-247); Fruit an aggregate of fleshy, red drupelets, which separate as a hollow, thimblelike unit from the receptacle when ripe. Fruiting: May-October. (385-180);

HABITAT: Woods, along streams. (342-605); Moist to dry, wooded to open areas from near sea level to subalpine (287-224); Open situation and edges of woods from sea-level to quite high altitudes (35-172); Rich deep bottomland. Smaller shrubs common on dry hillsides, to moderate altitude. (1-260) Coast to 8000' (6-93); Open woods, clearings, and along roadsides, often forming dense thickets. (137-247); Open woods and open slopes (376-273); Moist to dry places, open woods and canyons, in cutover areas and along roadsides. (385-180); Moist to dry, wooded to open areas from near sea level to subalpine. (287-224)

RANGE: Alaska to California, from coast to Great Lakes, Wyo, Colorado, New Mexico, and northern Mexico (287-224); Southern Alaska to Bruce Peninsula, Ontario, south to northern Mexico, New Mexico, Colorado, Wyoming, and northern Minnesota. Common throughout as far north as Lat. 55 degrees N. and along the Coast to southern Alaska. (35-172); Grows in wood and thickets in W. Ontario, Northern Michigan, Minnesota, South Dakota, and South Alaska, to Mexico, Arizona, California, and New Mexico. (28-205); Widespread in the lower two-thirds of the Province, south of latitude 55 degrees N; common along the Coast north to the Queen Charlotte Islands. (137-249) Canada south to Michigan, Mexico and California. Widespread through the Rocky Mountain area at medium to high elevations, at least up to 10,000 feet (376-273); From Alaska throughout California, east to western Ontario and the Great Lakes region, the Dakotas, Wyoming, Colorado, New Mexico, and northern Mexico; below 2600 m elevation. (385-180); Alaska to south californnia, from coast to Great Lakes, Wyo, Colorado, New Mexico, and Northern Mexico. (287-224);

CLASSIFICATION:

CLASS:

SUBCLASS:

SUPERORDER:

ORDER:

FAMILY: Rosaceae (Rose)

- Taxonomically a large and difficult genus of several hundred species. Almost cosmopolitan in distribution but best developed in the Northern Hemisphere.

- Flowers characteristically insect pollinated and frequently large and showy. Sepals and petals commonly five. Flowers simplest and least specialized for pollination, relaying on a large and wasteful production of pollen which attracts a wide range of insects, large and small. Besides producing pollen, 'rubus' also secretes nectar from a disk surrounding the carpels, freely exposed, thus helping to attract insects. (118-141)

SUB-FAMILY:

TRIBE:

GENUS: Rubus

- 13 species in B.C. (35-157)

FOOD USES:

NATIVE FOOD USES:

- 1945 Erna Gunther, Ethnobotany of Western Washington, 34. "The sprouts are eaten in early spring by the Makah, Klallam, Swinomish, Samish, and Upper Skagit. The Samish and Swinomish like to eat them

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with half-dried salmon eggs. The berries are eaten fresh by the Makah, Cowlitz, Swinomish, Samish, Chehalis, Snohomish, Quileute, Squaxin, Quinault, and Upper Skagit. The Quinault pick the berries unripe and let them stand in baskets. The Squaxin mix the fresh berries with blackberries. Thimbleberries are generally regarded as too soft for drying, but the Squaxin do it nevertheless, and store them in hard or soft baskets." (46-34)

- 1967 H.D. Harrington, Edible Native Plants of the Rocky Mountains, 275. "The leaves are sometimes used to make a tea by boiling them twenty to thirty minutes in water. The young shoots in the spring are said to make a good potherb like asparagus or spinach." (376-275)

- 1973 Li Shih-chen, Chinese Medicinal Herbs, 383. "These fruits are said to quiet the five viscera, strengthen the virile powers, increase the "yin", give force and vigor to the body, and promote fertility. They improve the complexion, promote the growth of hair, and cure fevers and colds. The shoots and leaves are used in the same cases as those of the Fu-p'en-tzu (Wild Raspberry). The fresh leaves are bruised and the juice employed in ophthalmia, especially the infectious kind. The root is used in decoction in ophthalmia and opacities following smallpox." (343-383)

- 1974 J.E. Underhill, Wild Berries of the Pacific Northwest, 92. "The berries ripen unevenly, therefore are difficult to pick in quantity." (37-92)

- 1975 Nancy J. Turner, Food Plants of British Columbia Indians, Part I, 215. "Thimbleberries were eaten by all Coastal Indian groups in the Province. The young sprouts were utalized as a green vegetables by all groups except the Haida. They were gathered in early spring to early summer, peeled, and eaten raw. They are sweet and juicy. Sproat (1868) in his writings on Nootka, remarked that during the summer "canoes may be seen laden with these shoots." (44-215)

- 1975 Nancy J. Turner, Food Plants of British Columbia Indians, Part I, 215. "The berries, having a coarse and seedy texture, lend themselves to drying. The Nootka made a special type of berry cake, laying out sticks of roasted clams in parallel fashion on a board, covering them with a layer of fresh thimbleberries, then another layer of strung clams, and so on. A length of plank was laid on top of the pile, and weights were then used to press the clams and thimbleberries together into a compact loaf, or, alternatively, a women sat on the plank, achieving the same results. The flattened clam-thimbleberry cake was sun-dried and stored for later use." (44-216)

- 1975 Nancy J. Turner, Food Plants of British Columbia Indians, Part I, 217. "The Kwakiutl picked

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thimbleberries when still hard and pink, with the stems still attached. They put these into a cedar-bark bag or a pillowcase, sprinkled a little water over them, and left them for a day or so until they were red. The ripe berries were then destemmed and eaten fresh, or dried in the usual fashion. The Bella Coola often cook thimbleberries with other types of berries such as wild raspberries before drying. They consider thimbleberries to be inferior to raspberries and blackcaps." (44-217)

- 1975 Russ Mohny, *Why Wild Edibles*, 295. "As a basis for Thimbleberry Jam, they are fine, but add another fruit to them for the added pectin and change in flavor. Gooseberries or crabapples are often added to the mass in the cooking kettle to improve the final product." (36-295)

- 1978 Szczawinski & Turner, *Wild Coffee & Tea Substitutes of Canada* #2, 89. "BERRY-LEAF TEA: Place a generous handful of leaves and twigs into a warmed teapot, pour boiling water over, and steep the mixture for 5 to 10 minutes. Sweeten with honey or sugar to taste. Mix with mint for variety. Use fresh leaves or dried leaves, or combination (not wilted). Crush some fresh berries and add them to add colour and flavour." (98-89)

- 1978 Nancy J. Turner, *Food Plants of British Columbia Indians*, Part II, 204. "Thimbleberries ripen in June and July and were eaten by all of the Indian groups of the central and southern Interior. They were, and still are, very popular; some people consider them superior in flavour to wild raspberries and wild strawberries. However, being soft and juicy, they are difficult to pick and were therefore seldom gathered in large enough quantities to be dried for winter storage. Sometimes they were mixed in with wild raspberries or blackcap. The Thompson peeled and ate young thimbleberry shoots in spring, either raw or cooked with meat in a stew." (103-204)

- 1979 Maria House, *Plantae Occidentalis*, 93. "Eaten fresh, boiled, or dried in cakes by Coast Salish Indians." (106-93)

- 1980 The People of 'Ksan, *Gathering What the Great Nature Provided*, 74. "Thimbleberries (nisk'o'o) are eaten fresh, usually mixed with other kinds of berries. They do not dry well or keep when preserved in grease. By themselves, thimbleberries are dry and not very tasty." (133-74)

- 1980 The People of 'Ksan, *Gathering What the Great Nature Provided*, 76. "Nisk'o'o (thimbleberry leaf or berry) is a children's dessert or snack. Freshly cooked or crushed berries are put into a thimbleberry leaf which has been folded to form a cone-shaped holder. The children suck the berries out of the small end

of the cone or nibble them off the top." (133-76)

- 1981 Hilary Stewart, Wild Teas, Coffees, & Cordials, 118. "Leaves of thimbleberry can be picked from spring through fall, but the old leaves of late fall make the best tea." (198-119)

- 1982 Bradford Angiers, Field Guide to Edible Wild Plants, 182. "Berries soft and juicy. A rich source of vitamin C." (14-182)

- 1990 Nancy J. Turner, Thompson Ethnobotany, Royal British Columbia Museum, pg. 271. "The young shoots of thimbleberry were gathered in the spring, usually in April, and eaten." (450-271)

- 1990 Nancy J. Turner, Thompson Ethnobotany, Royal British Columbia Museum, pg. 271. "...And then in the springtime they take thimbleberry shoots. They gather that in a bunch like this [big fistful], and then they do it like this [toasting briefly] over the fire until it's nice and soft. And they clean the leaves off and they cut it up like this, and they put some - maybe four, five [pieces about 0.3m or 1 ft long] - on each plate...where they're going to eat fish...They're [the sprouts] generally good and fat. And then they eat some fish [e.g., dried salmon], a little bit of fish, and then when they've got through eating fish, they eat that...They eat that for breakfast or for lunch...And lots of times [when] they're walking along, they eat it. Two things they use, that one and the salmonberry shoots..." (450-271)

- 1990 Nancy J. Turner, Thompson Ethnobotany, Royal British Columbia Museum, pg. 272. "The berries were named after their property of reducing in volume after being kept in a basket for a period of time. They were eaten fresh with fish." (450-272)

RECIPES

1. THIMBLEBERRY JAM:

Try this recipe for making a simple, but tasty, jam: Gather two cups of thimbleberries and combine in a saucepan with 1 1/2 cups of sugar. Bring to a boil and boil rapidly for 20 minutes. Add lemon juice of one lemon and boil again until jelly stage is reached (5-10 minutes). Pour into hot, sterilized jars and seal with

melted paraffin. Store in a cool place. This recipe produces about 3 medium sized jars of jam. (114-179)

2. THIMBLEBERRY TARTS: (247-99)

4 egg whites	1 cup sugar
1/2 teaspoon vinegar	4 cups whipped cream
1 teaspoon vanilla	2 cups Thimbleberries
Dash of salt	1/2 cup quick-cooking oatmeal

Preheat oven to 275~. Cover a cookie sheet with plain white paper. Beat the egg whites; gradually add vinegar, vanilla and salt. Continue beating until frothy. Slowly add sugar, beating hard after each addition. Continue until the meringue stands in peaks. Gently fold in oatmeal. Make 7 or 8 mounds of the meringue on the paper-covered cookie sheet. Using a spoon, form hollows in the centers of the mounds and shape their sides until they look like tart shells. Bake 45 to 60 minutes. Allow to cool for an hour or more. Combine the whipped cream with the berries and fill the tartlike shells.

(Alaska Magazine, Alaska Wild Berry Guide & Cookbook, 99)

3. THIMBLEBERRY WHIP: (247-134)

1 quart, approximately, thimbleberries	1/2 cup sugar
Dash of Salt	2 stiffly beaten egg whites
	1 tablespoon lemon juice

Force thimbleberries through a fine sieve until you have 1 cup of puree. Heat the puree with the sugar and salt until the sugar is dissolved. Gradually pour this over the stiffly beaten egg whites, beating constantly. Add lemon juice and pile into parfait glasses. You may wish to layer the dessert with fresh whole berries with a few on the top for garnish and chill before serving.

(Alaska Magazine, Alaska Wild Berry Guide & Cookbook, 134)

4. THIMBLEBERRY PIE: (86-11)

1 can of sweetened condensed milk
1/2 cup of lemon juice
1 cup of thimbleberries
1/2 cup of heavy whipped cream

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2 tablespoons of powdered sugar
1 tablespoon of Vanilla
1 eight-inch cracker pie crust

Use one of the prepared crusts or make your own. Wash and measure the berries, careful not to break them. Pour the milk into a medium sized mixing bowl, add the lemon juice, mix well, add the berries, stir, and pour into the pie crust. Bake at 425~ for 35 to 45 minutes or until crust is brown and fruit is cooked. Time may vary with ripeness of the berries. Serve warm with heavy cream or cold milk.

(1977 Marmelade Black, It's the Berries, 11.)

OTHER RECIPES:

- WINE-MAKING: (37-37)

MEDICINAL USES:

NATIVE MEDICINAL USES:

- 1945 Erna Gunther, Ethnobotany of Western Washington, 35. "The Makah collect the leaves in the fall, boil them, and drink the tea for anemia and strengthening the blood. The Cowlitz powder the dried leaves and apply them to burns to avoid a scar, while the Upper Skagit burn the leaves and mix the ashes with grease to put on swellings." (46-35)

- 1977 Virgil J. Vogel, American Indian Medicine, 282. "The Kwakiutls boiled blackberry vines and roots with Thimbleberry for a drink given to patients vomiting and spitting blood." (146-282, 15-135, 147-137)

- 1990 Nancy J. Turner, Thompson Ethnobotany, Royal British Columbia Museum, pg. 272. "The green insect galls found on the stems of this plant are called [a-bunch-of-little-round-things]. They were burned and the ashes rubbed on a baby's navel when it would not heal." (450-272)

CHINESE MEDICINE:

- 1973 Li Shih-chen, Chinese Medicinal Herbs, 383. "These fruits are said to quiet the five viscera, strengthen the virile powers, increase the yin, give force and vigor to the body, and promote fertility

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(impotence in the male and sterility in the female). They improve the complexion, promote the growth of hair, and cure fevers and colds. The shoots and leaves are used in the same cases as those of the Fu-p'en-tzu (Rubus tokkura, Chinese wild raspberry). The fresh leaves are bruised and the juice employed in ophthalmia, especially the infectious kind. The root is used in decoction in ophthalmia and opacities following smallpox." (343-383)

MATERIAL USES:

SOAP:

- 1945 Erna Gunther, Ethnobotany of Western Washington, 35. "The bark is boiled and used as soap by the Cowlitz. The Quileute use the leaves to wrap cooked elderberries for storage. The Quinault use these leaves together with skunk cabbage leaves to line baskets in preserving elderberries." (46-35)

TO LINE BASKETS:

- 1973 Carrier Linguistic Committee, Plants of the Carrier Country, 74. "The thimbleberry flower is white, but the berries become red. The leaves are large, and are good to dry berries on." (280-74)

- 1978 Nancy J. Turner, Food Plants of British Columbia Indians, 204. "The large maple-like leaves were often used as temporary containers, as liners for baskets, and separators for different kinds of berries in the same basket, and as a surface on which to dry berries." (103-204)

DYEING:

- 1977 Judy McGrath, Dyes From Lichens & Plants, 40. "DYEING: Use 1 to 2 lbs of young shoots per pound of fiber. Place shoots in a suitable container and cover with lukewarm water. Let stand several hours or overnight, then slowly bring to a boil and simmer for 40 minutes. Strain material out of dyebath and cool. Add clean, wet, fiber and simmer 30 minutes or more, depending on shade of color desired. Remove fibers and rinse. Lastly, use an afterbath of iron (green vitriol, ferrous sulfate, coppern) to deepen your colour." (111-40,50,55)

- 1979 Nancy J. Turner, Plants In British Columbia Indian Technology, 249. "The large, maple-like leaves were used by the Okanagan to line steam-cooking pits, and by the Shuswap and Carrier to cover

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baskets of berries, to separate different kinds of berries in the same basket, and for drying berries on. Sometimes a makeshift berry-picking container was made by pinning the terminal lobes of a leaf together with a stick to produce a small cup.....The Cowlitz boiled the bark and used it as a soap. The berries were sometimes used as a stain; the Blackfoot of Alberta dyed tanned robes with them and applied them to arrow quivers to colour and straighten them." (137-249)

HISTORY/BELIEFS:

- First described by John Meares (1788). (106-93)
- 1974 J.E. Underhill, Wild Berries of the Pacific Northwest, 92. "Thimbleberry stalks are often attacked by tiny insects that lay their eggs within the stalks. The eggs hatch into grubs that feed within the stalks, getting up irritation. The irritation causes the plant to grow a large swollen gall, and may make the stem assume grotesque and curious shapes. Flower arrangers sometimes gather these galled stalks in winter, and may value them highly. (37-92)
- 1976 Lewis Clark, Wild Flowers of the Pacific Northwest, 260. "Parvus (Latin) = Few in number or quantity." (1-260)

STORY QUOTES:

- 1791 John Meares, Voyages made in the years 1788 and 1789 from China to the N.W. Coast of America. "On the Rocky Islands, and in the woods (of Nootka and Barkly Sounds)...is a species of raspberry of the most delicious flavor, and far superior to any fruit of that kind we had ever before tasted. It grows on a larger bush than our European raspberry, and is free of thorns; but the fruit itself is so delicate, that a shower of rain washes it entirely away." (16-260)

ILLUSTRATIONS:

- Fair B/W picture + distribution Map (342-605)
- Good B/W picture (287-224)
- Excellent B/W picture (35-173)
- Excellent total picture in B/W (376-274)
- Old Woodcut from 1560 in B/W (392-224)

- Fair B/W & Good Color (247-26)

The information in these articles is primarily for reference and education. They are not intended to be a substitute for the advice of a physician. The instructor does not advocate self-diagnosis or self-medication; He urges anyone with continuing symptoms, however minor, to seek medical advice. The reader should be aware that any plant substance, whether used as food or medicine, externally or internally, may cause an allergic reaction in some people.

Maurice L.B. Oates Jr., M.A.
(Ya'-ga-hlo'o)

BOOKS NOT CHECKED OFF:

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Species: *Rubus parviflorus*, Nutt.