

TRADITIONAL USE OF DEVIL'S-CLUB
(*OPLOPANAX HORRIDUS*; ARALIACEAE)
BY NATIVE PEOPLES IN WESTERN NORTH AMERICA

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ABSTRACT.—Devil's-club (*Oplopanax horridus*; Araliaceae) is a deciduous, spiny shrub which was and still is an important medicinal plant for many Indian peoples in western North America. Its traditional uses involve both physical and spiritual realms of medicine. The inner bark and roots were used to treat rheumatism and arthritis, stomach and digestive ailments, tuberculosis, colds, skin disorders, diabetes, and many other ailments. Extracts from it have marked hypoglycemic properties, but little else is known of its pharmacological attributes. It was taken by shamans, initiates, and others wishing to attain supernatural powers. Special protective powers were attributed to it, presumably because of its prickliness. Its wood was used for fishing lures and the charcoal as a pigment in a protective face paint for ceremonial dancers. Devil's-club was named in almost every Native language used within its geographic range. There are some 13 to 15 known separate etymons for it in more than 25 different languages. In most languages, the derivation of the name is presently unknown. More pharmacological research on this plant is needed.

" . . . Behold! there was a devil's-club tree larger than any other tree in the whole world. He [the son of Devil's-club] took his stone ax and felled the great devil's-club tree; and after it was down, he took all the sap and bark; and . . . he carried it down to his town . . . Then he started to wash his body with the bark of the devil's-club and its sap, and he ate some to purify himself. He did so for forty days . . . " (from a Tsimshian myth—Boas 1916:175).

INTRODUCTION

Devil's-club (*Oplopanax horridus* [J.E. Smith] Miq.; Araliaceae) is a well-known shrub of western North American forests. The stems and foliage are densely armed with stiff spines that " . . . break off at once on entering the skin or clothing and make life a burden to the prospector, explorer, or mountain-climber . . . " (Gorman 1896:73). Nevertheless, despite its sharp, menacing spines—or perhaps in part because of them—it was respected as a protective agent and important medicinal plant by many indigenous peoples in western North America. Few medicinal plants were more widely and consistently used within their geographic range. Devil's-club wood was also used in traditional fishing technology along the Northwest Coast and the charcoal was used as a decorative and protective pigment.

This paper summarizes the many uses of this plant in Native cultures, and stresses the medicinal properties implied by its widespread usage. It is potentially valuable to modern medicine because preliminary research (Justice 1966) indicates that at least some of the traditional remedies involving devil's-club may have a sound biochemical basis.

DISCUSSION

Botanical description of Devil's-Club

Oplopanax horridus is sometimes cited in botanical and ethnographic literature under the synonyms: *Fatsia horrida* Benth. & Hook., *Panax horridum* J.E. Smith, and *Echinopanax horridum* Decne. & Planch. It is in the ginseng family, only one other member of which is indigenous to western North America, namely *Aralia nudicaulis* L., wild sarsaparilla. Both plants are related to the true ginseng, *Panax quinquefolius* L. (syn. *Aralia*

quinquefolia Gray), well known in folk medicine and native to eastern North America. The Oriental ginseng, *P. ginseng* C.A. Mey, is even more prized in Chinese folk medicine (Li Shih-Chen 1973; National Academy of Sciences 1975:102).

Devil's-club is a deciduous shrub of 1-3 m (or more), with long, thick, ascending or decumbent stems and large, palmately lobed leaves with blades up to 40 cm or more wide, irregularly serrate margins, and long petioles (Fig. 1). They superficially resemble large maple leaves. The stems, petioles and leaf veins are densely armed with thin, sharp spines 5-10 mm long (Fig. 2) that are highly irritating and can fester when imbedded in the skin. Some individuals experience a severe allergic reaction to them. The small, greenish-white flowers bloom from May to July, depending on elevation and latitude. They are subsessile in compact umbels borne in elongate racemes or panicles up to 25 cm long. The fruits are bright red, fleshy berries, somewhat compressed, ellipsoid, and often spiny (Hitchcock et al. 1961 (Pt. 3):506).



FIG. 1—Devil's-club (*Oplopanax horridus*). Approximately 1/6 natural size.

This shrub often grows in dense, nearly impenetrable thickets in moist, rich soil in coniferous woods. It is especially common near streams and occurs from near sea level to subalpine elevations in the mountains. Its range extends from Alaska southwards along the coast and on the west side of the Cascade range to southern Oregon, and eastwards to the Rocky Mountains including parts of Idaho, Montana, and Alberta. It also occurs in a small enclave in northern Michigan and the Thunder Bay district of Ontario.

Another species of *Oplopanax*, *O. japonicus* (Nakai) Nakai (sometimes considered a subspecies of *O. horridus*), occurs in Japan. Hultén (1968:696) provides a distribution map for *O. horridus*. The somatic chromosome number for the species is $2n=48$ (Taylor and MacBryde 1977:53).

Devil's-club in Folk Medicine

In Native cultures of northwestern North America, health and the maintenance of well-being seem to assume two general aspects: 1) physical, i.e., the use of various



FIG.2— Devil's-club stem, showing thin, sharp spines. Approximately 1/5 natural size.

medicinal preparations, usually herbs, which are administered by herbal specialists within a family or village group; and 2) spiritual, i.e., the "magical" or supernatural practices of shamans, or "Indian doctors," who deal more with the evil spirits associated with illness than with its physical manifestations (Turner et al. 1980:150; Turner and Efrat In Press; Turner et al. In Press). Devil's-club played, and still plays, an important role in both of these types of medicine, although in some instances the two are so closely intermingled that separating them completely would be unrealistic. Nevertheless, for the purposes of this paper, it is a useful dichotomy and examples of the use of devil's-club in these two aspects of medicine are given in Tables 1 and 2 respectively.

"Physical" Attributes of Devil's-Club Medicine

The chemical properties of devil's-club, as they might relate to the uses in Table 1, have not been thoroughly investigated. Japanese researchers have isolated a sesquiterpene, a sesquiterpene alcohol, and a sesquiterpene ketone from the closely related *O. japonicus* ("haribuki"). These are, respectively, echinopanacen ($C_{15}H_{24}$), echinopanol ($C_{15}H_{25}OH$), and oplopanone ($C_{15}H_{26}O_2$) (Takeda et al. 1966:219). A derivative of oplopanone is used commercially in Japan as an antipyretic and antitussive drug for coughs and colds. Undoubtedly these compounds are also present in *O. horridus*, but further details of the chemical composition of this plant are apparently not known.

Extracts of *Oplopanax*, like those of its relative, ginseng, have marked hypoglycemic properties (Lewis and Elvin-Lewis 1977:218; Justice 1966:37). The hypoglycemic attributes undoubtedly contribute to the use of devil's-club to treat diabetes:

"Our attention was brought to this material through the examination by one of us of a surgical patient who on hospitalization, developed marked symptoms of diabetes. This person, it was learned, had kept in apparent good health for several years by oral doses of an infusion of this root bark, and is in fact still leading a normal life with the aid of this infusion" (Brocklesby and Large 1938:32).

TABLE 1.—*Medicinal Uses of Devil's-Club (Physical Aspects)**

Native Group	Details of Use	Reference
Tanaina (Kenai)	dec of st drunk for fever	Kari 1977:62
Tanaina (Upper Inlet)	dec of inner bk drunk for tuberculosis, stomach trouble, coughs, colds, and fever	Kari 1977:62
Tanaina (Upper Inlet)	inner bk of rt baked, powdered, used as poultice on swollen glands, boils, sores, other infections	Kari 1977:62
Eyak	dec (?) drunk as emetic, purgative	Smith 1973:330
Tlingit	warm dec of seal oil and inner bk drunk as emetic, cathartic	Smith 1973:330
Tlingit	inner bk chewed, tied onto wounds to relieve pain, prevent blood poisoning	Smith 1973:330
Tlingit	ashes used for sores	Krause 1956:284
Tlingit Kaigani Haida	inf of bk, rt drunk for general strength, colds, chest pains, arthritis, black eyes, gall stones, ulcers, constipation, tuberculosis	Justice 1966:36
Tlingit or Kaigani Haida	inf of inner bk drunk for cancer	Justice 1966:36
Tlingit or Kaigani Haida	inner bk chewed, spit on wounds as emergency analgesic	Justice 1966:36
Tlingit or Kaigani Haida	inner bk laid on skin over fracture to reduce pain, swelling	Justice 1966:36
Tlingit or Kaigani Haida	inner bk or rt dried, pulverized with pitch, applied to skin abrasions	Justice 1966:36
Tlingit, Haida or Tsimshian	dried inner bk laid into tooth cavity for pain relief	Justice 1966:36
Tlingit, Haida or Tsimshian	inner bk pulverized, mixed with oil, eaten for pain relief	Justice 1966:38
Haida	dec of inner bk in sea water solution drunk for 9 days for rheumatism, arthritis; laxative	Turner 1970:66

*The following abbreviations are used: dec - decoction; inf - infusion; st - stem(s); rt - root(s); and bk - bark.

TABLE 1.—Continued

Native Group	Details of Use	Reference
Haida	dec of inner bk drunk for “tuberculosis of the bone”	Turner 1970:66-68
Haida	bk chewed, juice swallowed for bad cold or general sickness	Turner 1970:66-68
Haida	berries rubbed on hair and scalp of children against lice, dandruff	Turner 1970:66-68
Haida	st used to beat rheumatic limbs as counter-irritant	Turner 1970:66-68
Tsimshian	dec drunk for unspecified illness	Smith 1973:330
Gitksan	dec of st taken as purgative in treating gonorrhoea	Smith 1928:62
Gitksan	dec of st taken to knit broken bones	Smith 1928:62
Gitksan	dec of st, with <i>Viburnum</i> , taken as diuretic, purgative for “strangury,” rupture, or any sickness	Smith 1928:62
Gitksan	bk mashed with fern rt, <i>Abies</i> bk, <i>Pinus</i> or <i>Picea</i> gum, <i>Lysichitum</i> rt, and applied warm to boils, ulcers, for rheumatism, lung haemorrhage	Smith 1928:62
Southern Carrier	dec of bk drunk as purgative before and after childbirth	Smith 1928:62
Northern Carrier	inner bk swallowed for stomach and intestinal cramps, esp. after taking a purgative; itself a purgative	Smith 1928:62
Central Carrier	inner bk swallowed for general sickness	Carrier Linguistic Committee 1973:82
Central Carrier	bk scraped, plastered over sore area	Carrier Linguistic Committee 1973:82
Carrier	bk used by women after childbirth; mashed, swallowed immediately after to help expell afterbirth	Morice 1893:132
Carrier	bk mashed, swallowed as purgative	Morice 1893:132
Bella Coola	inner bk, esp. of rt chewed as emetic; taken with water	Smith 1928:62

TABLE 1.—(Continued)

Native Group	Details of Use	Reference
Bella Coola	inf of st in sea water drunk as emetic	Smith 1928:62
Bella Coola	dec of st used in steambath for stomach trouble, rheumatism	Smith 1928:62
Bella Coola	dec of bk of rt and st drunk as purgative, and for rheumatism	Smith 1928:62
Bella Coola	dec of st with <i>Ribes</i> rt drunk as general tonic	Bouchard 1975-77:B., 5
Bella Coola	dec of inner bk or rt with <i>Sorbus</i> bk, <i>Ribes</i> st used for steambathing, e.g. for lameness	Bouchard 1975-77:B., 5a
Bella Coola	inf or dec of rt or st drunk or used in steambath for many illnesses	Bouchard 1975-77:B., 5a
Heiltsuq (Bella Bella)	inf of rt drunk for diabetes	MacDermott 1949:181
Heiltsuq (Bella Bella)	inf of inner bk drunk as laxative, used for bathing	B. Rigsby, pers. comm. 1981
Heiltsuq (Bella Bella)	inner bk chewed, then salt water drunk, as laxative	B. Rigsby, pers. comm. 1981
Southern Kwakiutl	4 pieces of rt held in mouth, juice swallowed, for stomach pains, constipation	Turner and Bell 1973:278
Southern Kwakiutl	inf of bk drunk for tuberculosis, other ailments	Turner and Bell 1973:278
Southern Kwakiutl	ashes mixed with oil, rubbed on swellings	Boas 1966:382
Southern Kwakiutl	dec of despined bk, with <i>Lomatium</i> seeds, or with sea water, urine, used in steambath for body pains	Turner and Bell 1973:278
Ohiat Nootka	dec used in bath for arthritis, rheumatism	Rollins 1972:25b
Nitinaht	inf of despined st drunk for arthritis	Turner et al. In Press
Nitinaht	inf of bk taken for rheumatism; with <i>Alnus</i> , <i>Abies</i> bk for tuberculosis	Rollins 1972:25b
Mainland Comox	bk, rt inf in bath as skin tonic	Bouchard 1973:7
Mainland Comox	inf of bk drunk to stop internal haemorrhaging, sometimes taken with <i>Ledum</i> tea	Bouchard 1973:7

TABLE 1.—(Continued)

Native Group	Details of Use	Reference
Sechelt	inf of inner bk used in steambath for lameness, arthritis, rheumatism	Bouchard 1977:9; Rollins 1972:25a
Sechelt	weak dec of inner bk, rt drunk for diabetes	Bouchard 1978:8
Sechelt	dec of bk, rt used as wash for skin disease	Rollins 1972:25a
Sechelt	inf of inner bk drunk as "tonic"	Bouchard 1977:8
Sechelt	charcoal, with oil, poultice for burns	Bouchard 1977:8
Sechelt	dec of bk, rt taken for rheumatism, other ailments	Turner and Timmers 1972:8
Sechelt	dec of bk, rt applied externally for skin disease	Turner and Timmers 1972:8
Squamish	dec of inner bk, with <i>Abies</i> , taken for diabetes	Bouchard and Turner 1976:71-72
Squamish	inner bk used in steambath for rheumatism	Rollins 1972:25a
Squamish	inner bk chewed to clear throat	Bouchard and Turner 1976:71-72
Cowichan Halkomelem	used in sweatbath to drive away sickness, for colds, conditioning	Rollins 1972:3
Cowichan Halkomelem	dec of bk drunk for measles, esp. in children	Rollins 1972:10
Upriver Halkomelem	st taken for arthritis	Galloway 1979:7
Lummi	inner bk laid on women's breasts to stop excessive lactation	Gunther 1973:41
Skagit	dec of bk, with <i>Chimaphila</i> , <i>Rhamnus</i> , drunk for tuberculosis, and to start post-partum menstrual flow	Gunther 1973:41
Cowlitz	dec of bk drunk for colds; used to wash rheumatic limbs	Gunther 1973:41
Quileute	plant as unspecified medicine	Reagan 1934:65
Lillooet	dec of despiqed st drunk for arthritis	Turner 1972:13
Thompson	inf of st drunk for indigestion, stomach troubles; dec as tonic, blood purifier	Turner et al. In Press

TABLE 1.—(Continued)

Native Group	Details of Use	Reference
Thompson	charcoal mixed with grease, as salve for swellings, sores	Steedman 1930:459
Thompson	inf of despined st drunk for flu, weight loss, and other ailments	Annie York, pers. comm. 1981
Okanagan-Colville	inf of rt or despined st drunk for tuberculosis, dry cough	Turner et al. 1980:73
Shuswap	dec drunk by some women for several days after childbirth	Teit 1909:584
Kootenay	dec taken as medicine for any illness	Hart et al. 1981:54
Crow, Cheyenne	? rt smoked with tobacco for headache (ident. uncertain in orig. source - Blankinship, 1905:12)	Johnston 1970:316
Sahaptin	dec of wood, inner bk drunk for "tuberculosis" (splitting blood)	D. French, pers. comm. 1981

TABLE 2.—*Uses of Devil's-Club in "Spiritual" Medicine**

Native Group	Details of Use	Reference
Eyak	important in magic	Smith 1973:330
Tlingit	rt eaten by novice shamans for purification	Krause 1956:195
Tlingit	st used to whip suspected witches	Krause 1956:203
? Tlingit	dried bk mixed with red ochre as love charm	Justice 1966:36
Tlingit	rt chewed by shamans to augment hypnotic powers	Gorman 1896:73
Haida	st hung over doorways to protect against witchcraft	Turner 1970:67
Haida	st eaten, with <i>Moneses</i> to gain supernatural powers	Swanton 1905:212
Haida	st, bk eaten to bring luck in gambling	Newcombe, unpubl., ca. 1901
Haida	st, bk chewed for ritual purification of gamblers, hunters, sick people	Newcombe, unpubl., ca. 1901

*For abbreviations used, see Table 1 footnote

TABLE 2.—(Continued)

Native Group	Details of Use	Reference
Tsimshian	inf of inner bk for removing odours (see also Table 4)	M. Seguin, pers. comm. 1981
Tsimshian	dec drunk, used in bath to gain supernatural power	Barbeau 1961:73
Tsimshian	inner bk chewed, rubbed on body to bring luck in hunting	Boas 1916:172
Bella Coola	st charm against supernatural power	Turner 1973:201
Bella Coola	st hung in house, used as fumigant, to ward off "strong sickness"	Bouchard 1975- 77:B., 5
Southern Kwakiutl	st attributed magical powers	Turner and Bell 1973:278
Southern Kwakiutl	st hung with <i>Veratrum</i> rt around child's neck to ward off sickness	Turner and Bell 1973:274
Central Nootka	ashes mixed with water drunk for strength	Fenn et al. 1979:35
Nitinaht	charcoal used in protective face paint for ceremonial dancers	Turner et al, In Press
Upriver Halkomelem	charred st, mixed with grease, used as protective face paint	Galloway 1979
Lummi	charcoal used, often with red ochre, as ceremonial face paint; associated with death	J. Thomas, pers. comm. 1981
Okanagan- Colville	medicine (see Table 1) must be made in secret; would lose effectiveness if even another person's shadow passed over it	Turner et al. 1980:73
Crow, Cheyenne, Blackfoot	? used by medicine-men in their incanta- tions (ident. uncertain - see Table 1)	Johnston 1970:316

A similar observation was made by another doctor, G.E. Darby, at Bella Bella, who reported that the local Indians and at least one non-Indian were using an infusion of the roots for diabetes (MacDermot 1949). Margaret Siwallace, a Kimsquit woman living at Bella Coola, also knew of a local Caucasian woman who took devil's-club (probably as an infusion) for diabetes (Turner 1973:201).

Another study (Graham and Noble 1955), reported by Justice (1966:37), found that the dried roots and stalks of devil's-club contained a drug that substantially inhibited the effects of a pregnant mare's serum upon the growth of a rat's ovaries; this property may well relate to the use of devil's-club as a post-partum treatment for women (Table 1).

MacDermot (1949:181) noted that the plant has "... apparently a hygroscopic and detumescent effect on swellings," but did not elaborate. His comment may be based on



FIG. 3—Dried, de-spined devil's-club sticks, kept for use as medicine for flu, excess weight loss, and other ailments, by Annie York, a Thompson woman from Spuzzum, B.C. Approximately 1/4 natural size.

One was a Chief of one of the Alaskan villages who took it for a red, painfully swollen finger that was unreleived by the prescribed treatment of aspirin, raising the hand, and heat. He took one glass of devil's-club extract, which relieved the symptoms completely in eight hours. Another was a case of four teenagers who used the dried inner bark laid directly into a tooth cavity and experienced prompt pain relief. Adult males reported that they had applied the stalk strips to axe wounds received in the bush, sufficiently relieving the pain to enable them to continue on until they came to medical attention. Yet another case is described by Justice (1966:38) where a male patient with metastatic adenocarcinoma [secondary malignant tumour] was discharged from the hospital with a few month's prognosis and a terminal supply of morphine. Three years later, he had regained his health and strength after extensive treatment with devil's-club extract.

However, Justice (1966:38) also notes instances where devil's-club had no noticeable effect as a medicine. A patient with advanced rheumatoid arthritis and ankylosis of most of her small joints reported no benefit from the extract. A 54-year-old woman with Hodgkins disease was taking the extract regularly and was also receiving more conventional medical treatment at the hospital but no mention was made of the status of her condition, with the implication that the treatments were having no apparent effect.

Although devil's-club extract is not known to be toxic to humans or animals, people who drink it regularly report that upon beginning the treatment one may have diarrhea and feel very weak, and that greater weakness is experienced if alcoholic beverages are taken concurrently (Justice 1966:37). Furthermore, hares given the devil's-club extract in the tests by Brocklesby and Large (1938) had more fatty degeneration of the liver than control animals. No increased tolerance was observed after repeated tests. Effects on the liver of humans are presently unknown.

personal observation, or may simply be his conclusions from knowledge of how it was used.

The fresh plant and extracts made from it have a characteristic sweetish odour. The late George Young, a Haida man from Skidegate who had taken the "devil's-club treatment" for arthritis, apparently with remarkable success, recalled that shortly after one had drunk the decoction of devil's-club, he could smell it from his joints (Turner 1970).

Annie York, a Thompson woman from Spuzzum in the Fraser Canyon, keeps a supply of de-spined, dried devil's-club sticks on hand to use when required (Fig. 3). She makes an infusion by steeping four short (2-3 cm) pieces in about a liter of boiling water. This is taken in doses of about 125 ml (i.e., half a cupful) before meals, to relieve weight loss, flu, and other ailments. She warns that it can cause too much weight gain. She had heard that the roots could be taken for diabetes (A. York, personal communication 1981).

Aside from Young's and York's, there have been many testimonies as to the efficacy of devil's-club as a medicine. Justice (1966:38) notes several.

"Spiritual" Aspects of Devil's-club Medicine

The various protective and purifying properties attributed to devil's-club, as shown in Table 2, seem closely related to its laxative and emetic properties, and to its most striking physical feature—its prickliness.

External and internal cleansing was of paramount importance in Native cultures in the quest for guardian spirit power (to bring success in hunting, gambling and other activities), in the acquisition of shamanistic powers, and for living in general. For example, ritual scrubbing and bathing, fasting, and the drinking of cathartic tonics often accompanied the adulthood training of young men and women reaching puberty (Turner et al. In Press).

Hence, it is difficult to distinguish between the use of the cathartic qualities of devil's-club as a physical treatment for sickness and their use as a psychological aid to obtain supernatural powers. As Justice (1966:37) points out, the hypoglycemic properties of the plant may well have promoted the abilities of shamans (and initiates) to enter a trance-like state, conducive to having visions of supernatural spirits. He further notes that, "The legend [see later discussion] of the shaman's increased strength after one week of only the extract [of devil's-club] for food may be related to increasing tolerance to the hypoglycemic effects."

The prickly, or "sharp" quality of devil's-club seems closely associated with the plant's ability to provide immunity against "witchcraft", evil spirits, or people with malicious intent and to bring luck and "power" to the user of the plant (Table 2). A similar protective role is assumed by other species of thorny or prickly plants in western Native cultures. These include: wild roses (*Rosa* spp.), Rocky Mountain juniper (*Juniperus scopulorum* Sarg.), Oregon-grape (*Berberis aquifolium* Pursh), black hawthorn (*Crateagus douglasii* Lindl.), swamp gooseberry (*Ribes lacustre* Poir.), thistles (*Cirsium* spp.), and trailing wild blackberry (*Rubus ursinus* Cham. & Schlecht.) [Rollins 1972; Turner and Bell 1971; Turner 1973; Turner et al. 1980, In Press]. With all of these plants, including devil's-club, it is not the prickles or spines per se that give protection; rather it is some innate quality that is manifested in an infusion or decoction of the plant (Turner et al. 1981:131), or even in smoke from burning it (Turner 1973:206).

The close relationship of the protective powers of devil's-club with its prickliness is alluded to by John Thomas, a Nitinaht speaker from the west coast of Vancouver Island:

"The reason they use this kind of wood [as charcoal face paint for ceremonial dancers — see Table 2] is because it's sharp. When you see somebody with that kind of paint, you couldn't look them in the eye, their power is so strong . . ." (Turner et al. In Press).

John Thomas (personal communication, 1981) also explained that within his own group (Nitinaht), and among neighbouring Coast Salish groups, devil's-club is considered "sacred." Along with red ochre paint, it is considered to be a link between the ordinary, or profane world, and the supernatural, or the spirit world. He pointed out that in a recent reburial ceremony at Lummi, Washington (Coast Salish territory), which was filmed and shown on local television, devil's-club charcoal and red ochre were used both as face paint and sprinkled over the graves.

Similarly, a Cowichan (Halkomelem Coast Salish) man described a sweat-bath for purification of a "sick" person who had been made ill by a malicious Indian doctor from another area. First, a canoe was filled with "sharp things," including thistle, devil's-club, black hawthorn, and other thorny plants. Water was poured onto these plants, a bulrush mat laid down to protect the patient, and the sick person laid down in the water on the mat. Then hot rocks were placed in the water-filled canoe until the heat was unbearable. The thorns in the plants were thought to prickle and drive sickness out of the bather (Rollins 1972:25a).

The protective or supernatural powers attributed to devil's-club are also reflected in Northwest Coast mythology and oral tradition, particularly among the Haida, Tsimshian, and Tlingit. A good example of this is in a story told by the late Willie Matthews, a Haida speaker and Hereditary Chief of Masset on the Queen Charlotte Islands: One of his ancestors had been fasting out in the forest for several days. Eventually, he came across a giant devil's-club plant with a trunk about 0.5 m (1½ ft.) in diameter and leaves almost 2 m (5 ft.) across. He ate the inner bark from it, and immediately lost consciousness. Upon awakening, he saw a supernatural being, similar to a "fairy," who was thenceforth his guardian spirit. Ever since then, Willie Matthews' family had many names alluding to "fairies". A Tsimshian myth, quoted in part at the beginning of this paper, provides a similar episode (Boas 1916:172), as does a Tlingit myth recounted by Swanton (1909:136).

There are many other mythological references to hunters and others seeking purification or supernatural help by eating devil's-club or drinking or bathing in an infusion of the plant (Barbeau 1953:414, 1961:73; Boas 1912:166-7; Krause 1956:188; Swanton 1905:212, 1909:308). In a Tlingit myth, devil's-club and red [ochre ?] paint were found at the entrance to a supernatural house (Swanton 1909:95), and later, a woman being pursued threw a devil's-club stick behind her and it immediately grew into a dense thicket of devil's-club (Swanton 1909:95). In another, similar account, a devil's-club comb was dropped to become a thicket, thus obstructing pursuers (Swanton 1909:383).

Summary of Medicinal Uses

There is a remarkable consistency in the various medicinal uses of devil's-club, even among cultural groups that are totally distinct linguistically and geographically. In Table 3, medicinal uses are summarized by cultural groups, with the most widespread applications shown first. It can be seen that the use of devil's-club in treating arthritis and (or) rheumatism is, or was, almost universal along the Northwest coast. It is likely that its use was even more widespread than indicated, since several coastal groups, including Coast Tsimshian, Haisla, and Heiltsuk (Bella Bella), have been little studied ethnobotanically. The use of devil's-club as a dermatological aid is also widespread, as is its use in treating ailments of the respiratory and digestive systems.

TABLE 3.—*Summary of Medicinal Uses of Devil's-Club**

Type of Ailment	Native Groups using Devil's-Club as Treatment
Arthritis and (or) rheumatism	Tlingit and (or) Kaigani Haida; Haida; Gitksan; Bella Coola; Southern Kwakiutl; Nootka; Nitinaht; Squamish; Sechelt; Halkomelem (Upper Stalo); Cowlitz; Lillooet
Protection and (or) Purification	Tsetsaut; Eyak; Tlingit; Haida; Tsimshian; Bella Coola; Heiltsuk; Southern Kwakiutl; Nootka; Nitinaht; Halkomelem; Lummi (and probably other Salish groups - cf. Table 4)
General tonic or unspecified illness	Tlingit; Haida; Gitksan; Bella Coola; Southern Kwakiutl; Sechelt; Halkomelem (Cowichan); Thompson; Central Carrier; Kootenay
Dermatological aid (wounds, burns, infections, etc.)	Tanaina; Tlingit and (or) Kaigani Haida; Gitksan; Comox (Mainland); Sechelt; Thompson; Central Carrier; (? Sahaptin)

*References for individual groups given in Tables 1 and 2

TABLE 3.—(Continued)

Type of Ailment	Native Groups using Devil's-Club as Treatment
Stomach and Digestive tract	Tanaina; Tlingit and (or) Kaigani Haida; Bella Coola; Heiltsuq; Southern Kwakiutl; Thompson; Northern Carrier
Tuberculosis	Tanaina; Tlingit and (or) Kaigani Haida; Haida; Kwakiutl; Nitinaht; Skagit; Okanagan-Colville
Cold or cough	Tanaina; Tlingit and (or) Kaigani Haida; Haida; Squamish; Halkomelem (Cowichan); Cowlitz; Okanagan-Colville
Purgative or emetic	Eyak; Tlingit and (or) Kaigani Haida; Haida; Gitksan; Bella Coola; Carrier
Childbirth (Post-partum)	Carrier (Central and Southern); Skagit; Lummi; Shuswap
Diabetes	Heiltsuq (Bella Bella); Sechelt; Squamish; (Bella Coola—knew from use by non-Indians); Thompson
Internal haemorrhaging	Gitksan; Mainland Comox
Broken bones	Tlingit and (or) Kaigani Haida; Gitksan
Analgesic	Tlingit and (or) Kaigani Haida
Measles	Halkomelem (Cowichan)
Gonorrhoea	Gitksan
Fever	Tanaina
Dandruff, lice	Haida
Headache	? Crow, Cheyenne (probably mistaken identification)

Other Uses of Devil's-Club in Native Cultures

In Table 4, various non-medicinal uses of devil's-club are summarized. The wood, which is soft and lightweight, was often used to make various kinds of fishing lures. Devil's-club lures are said to have the property of spinning through the water as if they were alive, and were apparently very effective. The Nitinaht people used it for at least two types of lures, one of which—the cod-fish lure—was actually named after devil's-club (Turner et al., In Press). It consisted of a streamlined piece of cedar with a flat strip of devil's-club lashed around it endwise, forming two rounded wings which gave a propeller-like motion to the lure (Fig. 4). The lure was thrust down into the water from a canoe with the aid of a long pole. It was then dislodged and allowed to spin to the surface. Cod-fish, hungry or curious, would follow it up, and were then speared by the waiting fisherman. The second type of lure consisted of a small, fish-shaped piece of devil's-club wood to which a hook was fixed and a line attached. This was drawn through the water and functioned in the same way as a modern fish-shaped lure. It was especially good for catching "sea-bass" (Turner et al. In Press).

TABLE 4.—*Other (Non-medicinal) Uses of Devil's-Club*

Native Group	Part of Plant	Details of Use	Reference
Haida	wood	used to make black-cod lures	Turner 1970:67
Tsimshian	inner bark	infusion used for removing odours, e.g., for washing fishing nets that were not catching any fish, and were suspected of having been carelessly or maliciously urinated or defecated on.	M. Seguin, pers. comm. 1981
Heiltsuq and/or Tsimshian	leaves, with spines singed off	used in bunches, like steel wool, in water, to remove human scent from hunters	B. Rigsby, pers. comm. 1981
Nootka (Hesquiat)	wood	used to make fish lures and octopus spears	Turner & Efrat In Press
Nootka (Hesquiat)	bark	shavings boiled in water with various kinds of berries to make stain for basket materials and other objects	Turner & Efrat In Press
Nootka (Manhousat)	wood	used for fish lures for greenlings and rockfish	Ellis & Turner 1976:7
Nitinaht	wood	used for cod and "sea-bass" lures	Turner et al. In Press
Nitinaht	charcoal	ceremonial face paint (see Table 2)	Turner et al. In Press
Makah	wood	used for fishing lures, e.g., for "bass"	S. Gill, pers. comm. 1981
Clallam	wood	used for fish lures for bass and other fish	Fleischer 1980:197; Gunther 1973:41
Lummi	charcoal	ceremonial face paint (see Table 2)	Gunther 1973:41; John Thomas, pers. comm. 1982
Straits Salish	charcoal	ceremonial face paint (black) or bluish coloured tattoo pigment	Turner & Bell 1971:78
Upper Cowlitz (Taitnapam dialect, Yakima)	bark	dried, pulverized for baby talc or perfume	Gunther 1973:41

TABLE 4.—(Continued)

Native Group	Part of Plant	Details of Use	Reference
Green River	bark	dried, pulverized as deodorant	Gunther 1973:41
Squamish	charcoal	used recently as black face paint (mixed with bear grease)	Bouchard & Turner 1976:72
Halkomelem (Upper Stalo)	charcoal	ceremonial face paint	John Thomas, pers. comm. 1981

The uses as face paint, perfume, baby talc, deodorant, and even in preparing a stain for basket materials and other objects (Table 4) may actually relate to the "protective" powers attributed to the plant (Table 2), although the protective aspect was not alluded to in the references cited in the former table. John Thomas (personal communication 1981) confirmed that the Lummi and other Coast Salish peoples who used the face paint in ceremonial dances were, and are, well aware of the underlying, protective purpose of its use (see also previous discussion).

Devil's-club, in at least two Northwest coast cultures, was associated with bears. The Tlingit apparently based their original use of the plant as medicine on the observation of two bears attempting to soothe battle wounds by chewing devil's-club roots (Justice 1966:36). The Bella Coola people called the fruits "grizzly's high-bush cranberries (*Viburnum edule* Raf.),", or simply "grizzly's fruit or berries" (Turner 1973:201), and believed that grizzlies ate the berries and used the branches for bedding. Additionally, at least one Sahaptin person believed that devil's-club is eaten by bears (D. French, personal communication 1981).

Among the Haida, "Devil's-Club" was both a place name (a village on the Queen Charlotte Islands) and the name of a Chief (C.F. Newcombe unpubl., ca. 1903). The importance of devil's-club is reflected by the fact that throughout its range it had a name in almost every Native language spoken. The distribution of nomenclatural recognition and use of devil's-club in Native cultures in western North America is shown in Figure 5. The various Native names are listed in Table 5. From a preliminary inspection, one can distinguish some 13 to 15 separate etymons (i.e., names with a single, unique source). Several of the Salishan languages (e.g., Lillooet, Thompson, Comox, Sechelt, and Squamish; Halkomelem and Straits Salish; Green River, Skagit, and Swinomish; and probably Shuswap and Okanagan), and the three Tsimshian languages (Coast Tsimshian, Nisgha, and Gitksan), have names of the same etymon (i.e., of common origin), but no such relationships can be seen in the names from languages of different families. Even Niti-naht and Nootka, closely related languages of the Wakashan Family that share many words of common origin, have distinct, unrelated names for devil's-club.

Many of the names for devil's-club have a "plant" suffix incorporated [e.g., -mapt (Nootka); -apt (Niti-naht); -ay (Comox and Sechelt); -ełp (Halkomelem); -až (Lillooet); and -wu?k "wood, bush" (Kootenay)]. But for the majority of names the stem of the word has no obvious meaning; its derivation has been forgotten or obscured with time. Exceptions are the Bella Coola, Tanaina, Niti-naht, Sahaptin, and Shuswap names, whose meanings are given in Table 5. This situation seems to indicate a long-standing association of the plant within the various languages and cultures, particularly those such as Haida, Southern Kwakiutl, and Nootka, where the name is unrelated to that in any other language.

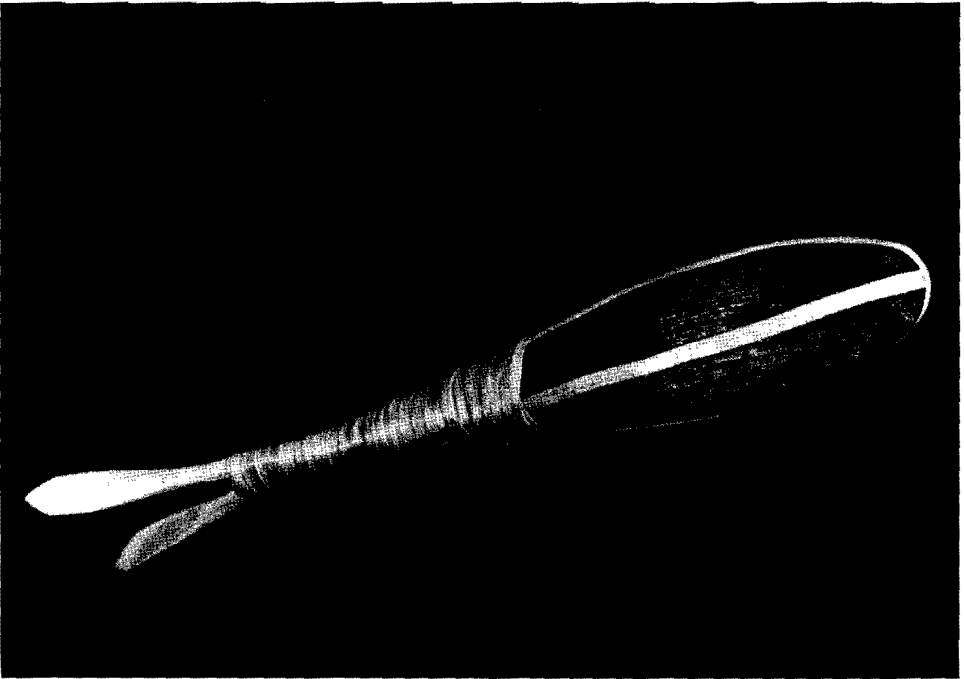


FIG. 4—Cod-fish lure used by Nitinaht and Nootka peoples. The elongated piece of wood is western red cedar (*Thuja plicata*), and the lashing of Sitka spruce root (*Picea sitchensis*). The two propeller-like appendages, which extend around the cedar wood, are almost certainly of devil's-club wood, although the material is not identified in the cataloguing material. (Lure collected ca. 1911 at Dodge's Cove, Vancouver Island, by C. F. Newcombe; photo by R. Bethell, Catalogue No. 2224, Ethnology Division, British Columbia Provincial Museum.) Approximately 2/3 natural size.

TABLE 5.—Names for Devil's-Club in Western North American Indian Languages*

Language Family	Language	Name	Reference
Athapaskan	Tanaina	heshkeghka'a ("thorn big big"), or heshkegh ("thorn big") (also refers to wild rose in Outer and Upper Inlet dialects)	Kari 1977:62
Athapaskan	Tlingit	slAxt! ächta	Swanton 1909:383 Krause 1956:254
Athapaskan	Carrier	hwu 1 rə1	Morice 1892-3:132
Haida	Haida (Skidegate and Masset)	c'i tənjaw (xII)	Turner & Levine 1972a:9 and 1972b:11
Tsimshian	Coast Tsimshian	wooms	Boas 1912:260; M. Seguin, pers. comm. 1981; Dunn 1978:110

*Orthography of original reference source has been retained

TABLE 5.—(Continued)

Language Family	Language	Name	Reference
Tsimshian	Nisgha	wuʔums, or waʔums	B. Rigsby, pers. comm. 1981
Tsimshian	Gitksan	huʔums, or wuʔums	Hindle and Rigsby 1973:18; B. Rigsby, pers. comm. 1981
Wakashan	Heiltsuq, or Bella Bella	wiq́ás	B. Rigsby, pers. comm. 1981
Wakashan	Southern Kwakiutl	ixwmí	Turner and Bell 1973:278
Wakashan	Nootka (Hesquiat, Manhousat)	há • pá • † mapt	Turner and Efrat In Press; Ellis and Turner 1976:7
Wakashan	Nitinaht	ʕayx ^w q ^w apt (“cod-fish lure plant”)	Turner et al. In Press
Wakashan	Makah	ʔa • ʔa † bap	S. Gill, pers. comm. 1981
Salish	Bella Coola	tsk’alhk ^w (cf. stsk’ Douglas-fir bark slivers), or sk’alhk	Turner 1973:201
Salish (Coast)	Comox (Mainland)	ch’í7t’ay	R. Bouchard Unpubl. field notes 1973-76
Salish (Coast)	Sechelt	ch’é7at’ay (or ch’á7at’ay)	Turner and Timmers 1972:8; Bouchard 1977-78
Salish (Coast)	Squamish	ch’átiyá’	Bouchard and Turner 1976:71-72
Salish (Interior)	Lillooet	k’átlaž	Turner 1972:13
Salish (Interior)	Thompson	k’étyeʔ	Turner et al. In Prep.
Salish (Coast)	Halkomelem (Cowichan)	q ^w á ʔpə † p	Turner and Bell 1971:78

TABLE 5—(Continued)

Language Family	Language	Name	Reference
Salish (Coast)	Halkomelem (Upriver)	qwó:pełhp	Galloway 1979:7
Salish (Coast)	Straits	qwá?płłp	Turner and Bell 1971:78
Salish (Coast)	Lummi	qwu'n'numpt	Gunther 1973:41
Salish (Coast)	Clallam	puqłč	Fleischer 1980:207
Salish (Coast)	Green River	xaxadi'a'ts	Gunther 1973:41
Salish (Coast)	Skagit	xadi'ats	Gunther 1973:41
Salish (Coast)	Swinomish	xadi'ats	Gunther 1973:41
Salish (Coast)	Upper Cowlitz (Taitnapam dialect of Yakima)	sqaipqa'ipas	Gunther 1973:41
Salish (Coast)	Snuqualmi	tcitca'tc lu'i	Gunther 1973:41
Chimakuan	Quileute	che-chah-pulth	Reagan 1934:55
Salish (Interior)	Shuswap	xwuxwalekw (refers to the clean smell of branch; cf. xw7uxw "any smell")	Palmer 1975:58
Salish (Interior)	Okanagan-Colville	xaxagá'łhp (sometimes also refers to <i>Ribes</i> , <i>lacustre</i>), or xwuxwugway'łhp	Turner et al. 1980:73
Kootenay	Kootenay	nałiyfaxawu?k	Hart et al. 1981:53
Sahaptin	Sahaptin (Warm Springs)	x'našwaakuł ('currant [prob. <i>R. lacustre</i>]-like')	D. French, pers. comm. 1981
Sahaptin	Sahaptin (Columbia River)	shkapkápnuwash	Hunn 1979:12

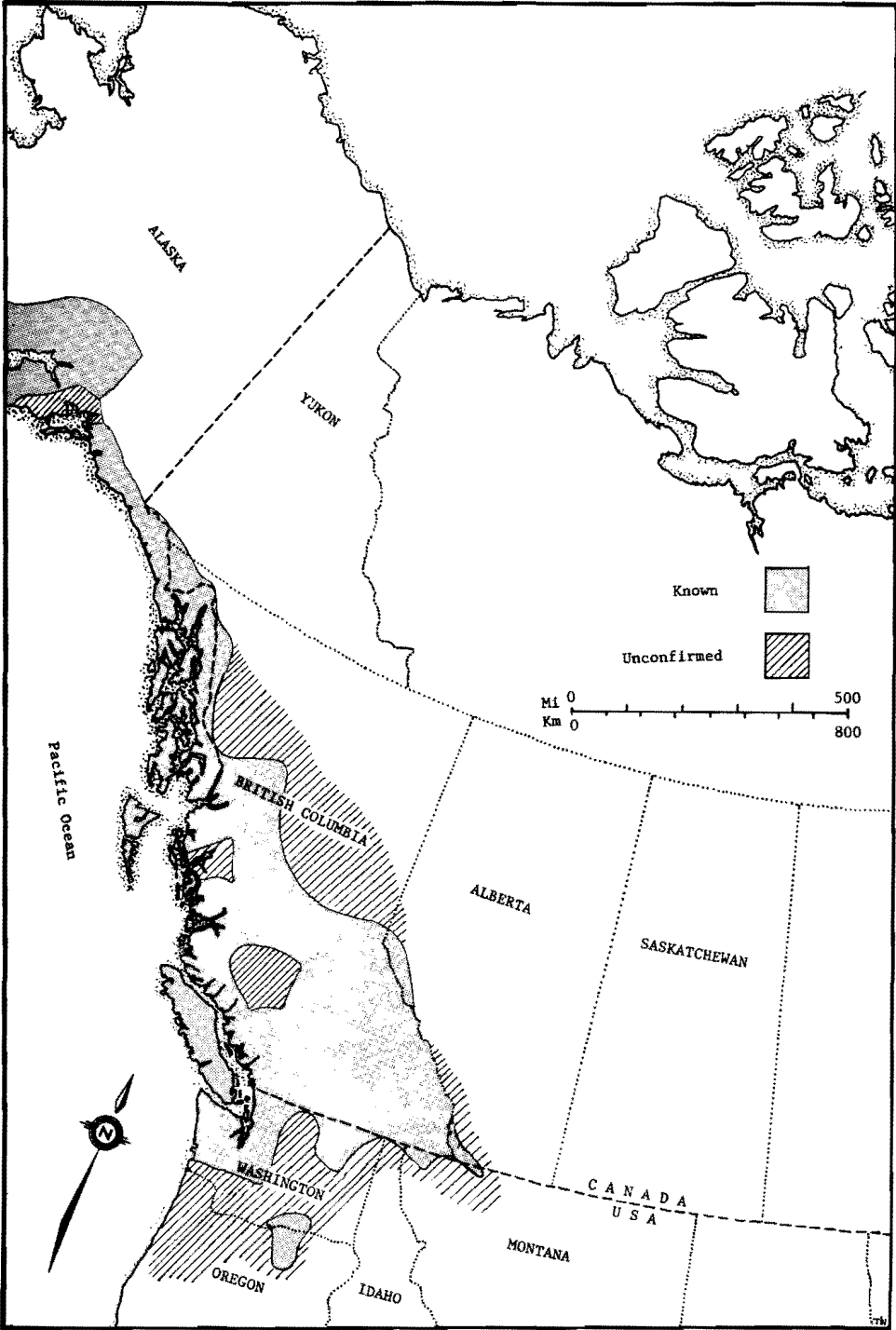


FIG. 5—The distribution of nomenclatural recognition and use of devil's-club in Native cultures in western North America.

CONCLUSION

The many medicinal uses of devil's-club may have originated from the protective qualities attributed to it because of its spines, and also from its cathartic properties. Its unusual odour may also have invited medicinal experimentation. It is also possible that its use by animals, such as the fighting bears observed by the Tlingit (Justice 1966: 36) prompted its use by people. Other herbal medicines, such as fern fronds used by the Hesquiat on the west coast of Vancouver Island, were also said to have originated from use by animals (Turner and Efrat In Press).

Although the medicinal use of devil's-club is widespread in western North America, the peoples of the northern Northwest Coast, particularly the Haida and Tlingit, seem to have had the greatest number of medicinal uses for it, and among these groups and the Tsimshian, it played a prominent role in mythology. This could be an indication that at least some of its medicinal uses diffused from north to south and from the coast to the interior. But the fact that many other languages have specific, unique names for the plant indicates that knowledge of it must have been long-standing in many areas. The use of the charcoal as face paint, both protective and decorative, for ceremonial dancers seems centered in the territories of the central Coast Salish and Nitinaht peoples, as does the use of the wood in making fishing lures.

In those language groups having a common eytmon for devil's-club, it is difficult to determine whether the names evolved independently during the course of natural differentiation of the languages, or whether the name was borrowed after the languages had already diffused. The latter would be obvious in languages from different families, but for this species, related names are found only in related languages within the same family. It is likely that the origins of both its names and uses have been permanently obscured and are thus untraceable.

The use of devil's-club among Native peoples has continued, and in some areas may actually be on the increase as interest in cultural heritage among younger generations is revived (Justice 1966:38). Sometimes the elders who formerly used it are unable to go out and collect it anymore, but do use it whenever they can get it from others.

Devil's-club charcoal is still being used as a protective face paint for ceremonial dancers (John Thomas, personal communication 1981). Sometimes vaseline is substituted for the animal fat traditionally used as a base for it (Gunther 1973:41). In the early 1970's, some Haida people still kept a stick of devil's-club under their mattresses or across the top of their doorways to protect the household against evil influences.

The effectiveness of devil's-club as a medicine for arthritis, skin ailments, malignant tumours, and other types of afflictions requires further investigation. It is remarkable, considering the widespread and continuing usage of devil's-club among Native and even non-Native peoples, that its chemical composition and pharmacological properties have not been more thoroughly studied to date.

There is always a danger in placing too much trust or faith in a medicine such as devil's-club. Justice (1966:38) cites an example at Yakutat in Alaska, where a female cancer control program was rejected, presumably because of the belief in the efficacy of devil's-club as a cancer treatment. Nevertheless, assuming that attitude and positive feeling about a medical treatment are important to its success, consideration should be given to the incorporation of well-tried traditional remedies, such as devil's-club, with modern scientific treatments in medical programs involving North American Native Peoples.

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The photograph in Figure 4 is reproduced with the permission of the Ethnology Division, British Columbia Provincial Museum. The other photographs and the map are by Robert D. Turner.

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