

## GITKSAN PLANT CLASSIFICATION AND NOMENCLATURE

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**ABSTRACT.**— The Gitksan of northwestern British Columbia are speakers of an Interior Tsimshianic language. They live in a mountainous, densely forested environment transitional between the Northwest Coast and the Boreal interior plateau. Traditionally the Gitksan pursued a mixed fishing/hunting/ gathering subsistence strategy. The Gitksan have a roughly hierarchical classification of plants. The general domain 'plant kingdom' or 'floral form' is recognized but not overtly labelled. Within this, several broad groupings of the life form sort can be distinguished. Three of these are large groupings composed of a number of named subordinate generics: *gan* 'trees,' *sgan* 'plants,' and *maa'y* 'berry' or 'fruit plants.' 'Plants' include a diverse mixture of forms ranging from small trees to some perennial herbs, and prostrate sub-shrubs. The 'plant' and the 'berry' groups overlap extensively. The remainder are residual taxa which are empty, containing few or no named subtypes, though encompassing morphological and taxonomically diverse forms: *habasxw* 'grass' or 'hay,' *yens* 'leaves' or 'herbaceous plants,' *majagalee* 'flowers,' *umhlw* 'moss,' and *gayda ts'uuts* 'fungi.' A mixture of morphologic and utilitarian characters seems to underlie the system of plant classification. The relationship of partonomy to utility and classification is explored. Ninety distinct generics have been documented. Eighty-four represent vascular plants and six represent mosses, fungi and lichens.

**Keywords:** classification, Gitksan, ethnobotany, Canada, Northwest Coast

**RESUMEN.**— Los Gitksan hablan una lengua tsimsiana interior. Viven en una región montañosa y de bosques densos. Es una zona de transición entre la costa noroeste y la meseta interior sub-boreale de la Columbia Británica. Tradicionalmente, eran pescadores del salmón, cazeros, y recolectores de diversas plantas. Los Gitksan tienen una clasificación de plantas mas o menos jerárquica. El dominio de 'forma floral,' o sea del las plantas, no es marcado. Dentro de ello, varios agrupaciones generales se pueden distinguir. Tres son grupos grandes compuestos de genéricos subordinados numerosos: 'árboles' (*gan*), 'plantas' (*sgan*) y 'bayeros o fruteros' (*maa'y*). 'Plantas' incluyen a una mezcla de formas diversas desde árboles pequeños a hierbas perennias, y arbustos pequeños prostrados. Los grupos de 'plantas' y 'bayas' coinciden en parte. Los demás son grupos residuos 'vacíos,' de contener solamente de formas desnombradas, o de pocas formas nombradas, aunque contienen plantas de una variedad morfológica y taxonómica. Incluyen: 'gramíneas' o 'heno' (*habasxw*), 'hojas' o 'plantas herbáceas' (*yens*), 'flores' (*majagalee*), 'musgos' (*umhlw*), y 'hongos' (*gayda ts'uuts*). El sistema de clasificación de las plantas parece subyacer en una mezcla de caracteres morfológicas y utilitarias. Se exploran las relaciones entre la partonomía y la utilidad. Noventa genéricos han sido documentado. De ellos, ochenta y cuatro representan plantas vasculares, y seis representan musgos, hongos y líquenes.

**RÉSUMÉ.**— Les Gitksan du nord ouest de la Colombie britannique appartiennent à un groupe linguistique Tsimshianique de l'intérieur. Ils habitent un environnement montagneux, couvert de forêts épaisses, dans la région transitoire entre la côte nord ouest et le plateau boréal de l'intérieur. De tradition, les Gitksan pratiquaient une stratégie de subsistance mixte basée sur la pêche, la chasse, et la cueillette. Les Gitksan utilisent un système de classification végétale plus ou moins hiérarchique. Le domaine universel 'règne végétal' ou 'forme végétale' est reconnu mais des qualifications ne sont pas évidentes. À l'intérieur de ce domaine, on distingue plusieurs grandes divisions du genre forme vivant. Il s'agit, dans trois de ceux-ci, d'embranchements étendus regroupant plusieurs espèces secondaires désignées: *gan* 'arbres,' *sgan* 'plantes,' et *maa'y* 'baies' ou 'plantes fruitières.' Le groupe 'plantes' rassemble tout un éventail de formes, allant de petits arbres jusqu'à certaines herbes vivaces et des sous-arbrisseaux procombants. Les catégories 'plantes' et 'baies' se chevauchent beaucoup. Les autres groupements comprennent des formes résiduelles vides, c'est-à-dire dénouées de, ou ayant que peu de, sous-genres nommés, bien qu'elles renferment des formes morphologiquement et taxonomiquement différentes: *habasxw* 'herbes' ou 'foins,' *yens* 'feuilles' ou 'plantes herbacées,' *majagalee* 'fleurs,' *umhlw* 'mousse,' et *gayda ts'uuts* 'mycètes.' Un amalgame de caractères morphologiques et fonctionnels semble servir de base pour le système de classification végétale. Le rapport entre la paronymie et l'utilité d'une plante, et sa classification est étudiée. De parmi les 90 genres distincts documentés, 84 représentent des plantes vasculaires et 6 représentent des mousses, des mycètes, et des lichens.

## INTRODUCTION

The Gitksan of northwestern British Columbia are speakers of an Interior Tsimshianic language. They are in contact both with Coast Tsimshian and Nisga'a to the west and northwest, and interior Athapaskan peoples to the east and south north. They live in the drainage of the Skeena River in a mountainous, densely forested environment, transitional between the mild, wet northwest coast and the boreal interior forests. Traditional subsistence was a mixed fishing, hunting and gathering strategy, with summer dispersal and winter aggregation in large, permanent villages. Modern residence is primarily six villages along the central portion of the Skeena River and two of its tributaries, the Kitwanga and Kispiox Rivers (Figure 1) and in adjacent towns and cities. The modern villages are approximately in the same areas as precontact winter villages. In the recent past two villages further north on the Skeena River were also occupied. People of the three western villages speak a slightly different dialect than the three modern eastern villages. People of the two northern villages, now largely absorbed in the eastern villages, had some distinctive features of speech.

The Gitksan are skilled woodworkers. Traditionally they built plank houses and made dugout canoes as well as totem poles and many smaller wooden items. Other traditional plant uses included gathering of numerous types of berries, a few edible root types, a few green vegetable types, and tree inner bark or 'cambium' principally from hemlock and lodgepole pine for food; use of a number of types of roots, barks and other plant parts for medicines; and use of various barks, roots, and herbaceous plants for cordage, basketry, matting, and clothing.

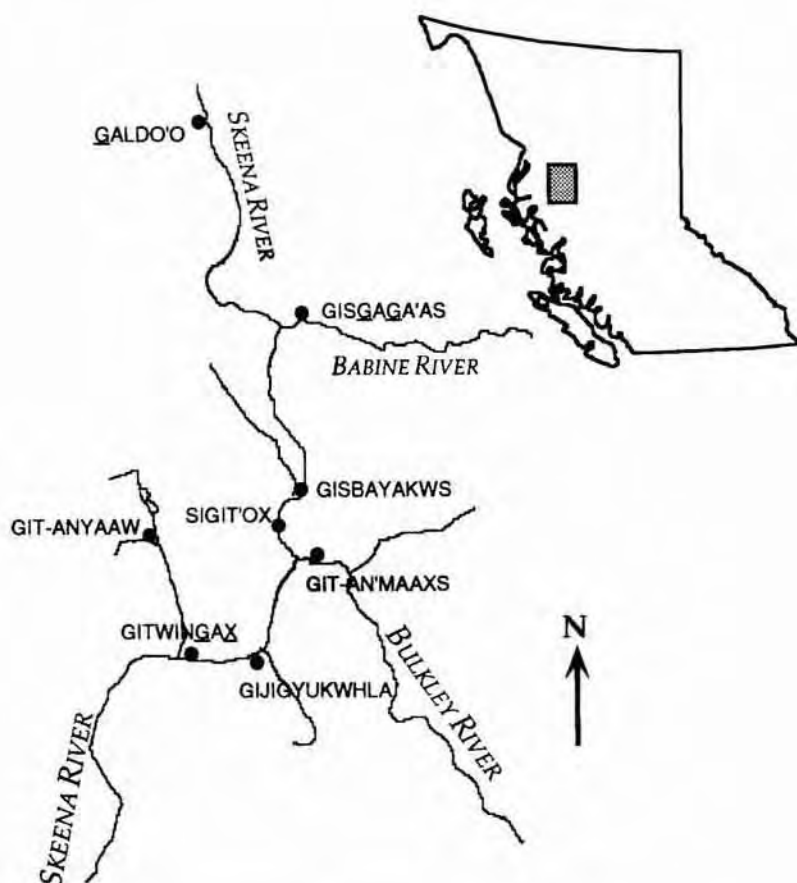


Figure 1.—Map showing locations of Gitksan territory and villages.

The classification system of the Gitksan is similar to other reported ethnobotanical classifications of indigenous groups from northwestern North America (Compton 1993; Gottesfeld 1993; Hunn 1982, Hunn and French 1984; Johnson-Gottesfeld and Hargus 1998; Turner 1974, 1987, 1989; Turner et al. 1990). The presence of berry plants, mosses and mushrooms as major plant groups along with the more widespread woody plant (or tree and shrub) and grerb (or herb and grass) life forms, seem typical of other classification systems found in this region, as does the loose and overlapping major plant groups found in Gitksan classification. Also similar to other northwestern North American classification systems is the presence of non-taxonomic relationships of affiliation (Turner 1989) or coordination (Hunn and French 1984) between classes. These types of relationship are not taxonomic in the strict sense (see discussion in Ellen 1993) in that classes of ostensibly the same level in the classification system are seen as somehow belonging together, or as being related to one another, without their being included in a superordinate grouping, or one being a kind of the other.

## METHODS

The data on which this synthesis is based were gathered over a period of thirteen years in a series of unstructured interviews with elders and other knowledgeable people regarding healing, medicinal plants and other plant uses, identification and naming of plants, and landscape classification, and several field trips to gather medicinal plants and plant foods. In 1996, I undertook a short series of more directed interviews. From 1985 to 1988, and sporadically in 1992-1995, some interviews were conducted with the assistance of Beverley Anderson, a Gitksan public health nurse, who also conducted interviews on her own and contributed a great deal of information to the project. I recorded information relevant to plant classification from 41 people: 22 men and 19 women. The majority of these were over 50 years old at the time of interviewing.

I elicited information about plant names and uses by a variety of methods. I often elicited plant information by bringing fresh specimens to elders and inquiring what specific plants were called, and what, if any, their uses were. I also used a looseleaf notebook of colour photos of local plants and plant parts such as berries, stems, petioles or rootstocks during interviews. Some data was obtained during field trips with elders about plants present in the immediate environment. Other plant data were volunteered spontaneously. I confirmed the identity of spontaneously described plants by reference to fresh plant material collected to confirm postulated identifications, and to "case" specimens (Bye 1986) of known identity (e.g. a dried plant rhizome carried as a charm) or by freehand sketches and verbal descriptions, later verified by showing a plant or specimen to an elder to confirm the identification. However, some Gitksan plant information may have been missed as I made no comprehensive attempt to elicit names of all botanical species present in Gitksan territory.<sup>1</sup> I also encountered some terms and/or descriptions and uses for which I could not identify the botanical species referent. I conducted interviews in English, or in Gitksan with a bilingual translator, with use of Gitksan plant names and other botanical terms.

I identified vascular plant specimens by reference to Hultén (1968), and Hitchcock and Cronquist (1973), supplemented by various publications by the Royal British Columbia Museum, and other more recent field guides. The Botany Division of the Royal British Columbia Museum assisted with identification of difficult vascular plant specimens. Bryophytes and fungi were identified with the assistance of the staff of the Cryptogamic Herbarium in the Biological Sciences Department of the University of Alberta. Vouchers are on deposit with the herbarium of the Royal British Columbia Museum (V) and the Vascular Plant Herbarium of the University of Alberta (ALTA), and in my personal collection.

## CLASSIFICATION

*Overview of Gitksan Plant Classification.*— The Gitksan have a roughly hierarchical classification of plants (Figure 2). The general domain of "plant kingdom" or "floral form" is unlabelled. Within this, several broad groupings of the life form sort can be distinguished. The classic definition of life form includes plant groupings

TABLE 1.– Gitksan Generics.

Gitksan Generics	English Name	Latin name(s)
<b>amgiikw</b>	western hemlock	<i>Tsuga heterophylla</i> (Raf.) Sarg.
<b>giikw</b>	western hemlock	<i>Tsuga heterophylla</i>
<b>amhaawak</b>	paper birch	<i>Betula papyrifera</i> Marsh
<b>haawak</b>	paper birch	<i>Betula papyrifera</i>
<b>amhat'a'l</b>	western red cedar	<i>Thuja plicata</i> Donn ex D.Don
<b>amk'ooxst</b>	trembling aspen	<i>Populus tremuloides</i> Michx.
<b>amluux</b>	alder	<i>Alnus incana</i> (L.) Moench and <i>A. rubra</i> Bong.
<b>luux</b>	alder	<i>Alnus incana</i> (L.) and <i>A. rubra</i>
<b>am'mal</b> (E)/ <b>am'mel</b> (W)	black cottonwood	<i>Populus balsamifera</i> ssp. <i>trichocarpa</i> (Torrey & Gray) Brayshaw
<b>amwasan</b>	lowland willow trees	<i>Salix</i> spp.
<b>'waasan</b> (E)/ <b>'waasen</b> (W)	willow	<i>Salix</i> spp.
<b>ax</b>	spiny woodfern	<i>Dryopteris expansa</i> (K.B.Presl) Fraser-Jenkins and Jermy
<b>hlgandihl ax</b>	spiny woodfern plant (stem)	<i>Dryopteris expansa</i>
<b>sganax</b>	spiny woodfern plant	<i>Dryopteris expansa</i>
<b>baxbok'</b> (E only)	dandelion	<i>Taraxacum officinale</i> Weber
<b>belena 'watsx</b> (E)	clubmoss	<i>Lycopodium clavatum</i> L., <i>L. annotinum</i> L., <i>L. complanatum</i> L., <i>L. dendroideum</i> Michx.
<b>belena 'wetsx</b> (W)	clubmoss	<i>Lycopodium clavatum</i> , <i>L. annotinum</i> , <i>L. complanatum</i> , <i>L. dendroideum</i>
<b>damtx</b> (E)/ <b>demtx</b> (W)	'inedible fern root'	<i>Athyrium filix femina</i> (L.) Roth, <i>Dryopteris filix-mas</i> (L.) Schott, small <i>D. expansa</i>
<b>dilawsa</b>	northern gooseberry	<i>Ribes oxycanthoides</i> L.
<b>diuxw</b>	'birch fungus'	<i>Inonotus obliquus</i> (Pers: Fr.) Pilat and <i>Fomes igniarius</i> (L. ex Fries) Kickx
<b>eluuts'ook', haluuts'ook'</b>	chokecherry	<i>Prunus virginiana</i> L. var <i>melanocarpa</i> (Nels.) Sarg.
<b>sgan'eluuts'ook'</b>	chokecherry	<i>Prunus virginiana</i> L. var <i>melanocarpa</i>
<b>gaanaxws</b>	a 'braided' looking moss or liverwort	[unknown]
<b>gadimis</b>	black huckleberry (black fruited)	<i>Vaccinium membranaceum</i> Dougl.
<b>gahldaats</b>	yellow pond lily	<i>Nuphar polysepalum</i> Englm.
<b>gale'e, k'ale'e</b>	rose (hips)	<i>Rosa acicularis</i> Lindl.
<b>sgank'ale'est</b> (W)	rose bush	<i>Rosa acicularis</i> Lindl.
<b>gam</b>	saskatoon	<i>Amelanchier alnifolia</i> Nutt.
<b>sgangam</b> (E)	saskatoon bush	<i>Amelanchier alnifolia</i>
<b>sgangem</b> (W)	saskatoon bush	<i>Amelanchier alnifolia</i>
<b>gapk'oyp</b>	bunchberry	<i>Cornus canadensis</i> L.
<b>sgangapk'oyp</b>	bunchberry plant	<i>Cornus canadensis</i>
<b>gasx</b>	riceroot lily	<i>Fritillaria camschatcensis</i> (L.) Ker-Gawl
<b>gayda ts'uuts</b>	fungus, mushroom	basidiomycete and ascomycete fruiting bodies
<b>gesgan</b>	'tree hair'	<i>Bryoria</i> spp.

TABLE 1.—Gitksan Generics.

Gitksan Generics	English Name	Latin name(s)
giis/giist	mountain alder	<i>Alnus crispa</i> (Ait.) Pursh.
gwilahl gana'w	lungwort, 'frog blankets'	<i>Lobaria pulmonaria</i> and <i>L. oregana</i>
gwul litxwit	large leaved avens, 'evergreens'	<i>Geum macrophyllum</i> Willd.
ha'mook	cow parsnip, 'wild rhubarb'	<i>Heracleum lanatum</i> Michx.
haast	fireweed	<i>Epilobium angustifolium</i> L.
hagimgasxw	peavine, 'wild sweet peas'	<i>Lathyrus nevadensis</i> Wats. and <i>L. ochroleucus</i> Hook.
hap'iba'a	bracken fern, tall fern	<i>Pteridium aquilinum</i> (L.) Kuhn
habasxw	grass, hay	graminoid plants; Poaceae, Cyperaceae, Typhaceae?
habasxum t'ax	cattails, bullrush, sedge?	Large graminoid plants in lakes <i>Typha latifolia</i> , <i>Scirpus</i> spp., <i>Carex</i> ?
haxwdakw (E)	yew and/or Rocky Mountain juniper	<i>Taxus brevifolia</i> Nutt. and/or <i>Juniperus scopulorum</i> Sarg.
sganhaxdek (W)	yew and/or Rocky Mountain juniper	<i>Taxus brevifolia</i> and/or <i>Juniperus scopulorum</i>
hinak	skunk cabbage	<i>Lysichiton americanum</i> Hultén & St. John
hisgahldaatsxw	wild calla or water arum	<i>Calla palustris</i> L.
hisha'mookxwit	Northern rein orchid	<i>Platanthera hyperborea</i> (L.) Lindl.
hisdemktxwt	licorice root fern	<i>Polypodium glycyrrhiza</i> D.C. Eat.
hismaawintxw	horsetails and scouring rushes	<i>Equisetum arvense</i> L., <i>E. variegatum</i> Schlecht., <i>E. hyemale</i> L., <i>E. sylvaticum</i> L.
hisgamaawin	horsetails and scouring rushes	<i>Equisetum arvense</i> , <i>E. variegatum</i>
hissgank'ots	small false solomon's seal	<i>Smilacina stellata</i> (L.) Desf. and <i>?trifoliata</i> (L.) Desf.
hissgant'imi'yt	wintergreens and false box	<i>Chimaphila umbellata</i> (L.) Bart.; <i>Pachystima myrsinites</i> (Pursh.) Raf.
hlguu gan	? timberline mountain hemlock	<i>Tsuga mertensiana</i> (Bong.) Carr. ? (stunted high elevation specimens)
hlit'	swamp currant	<i>Ribes lacustre</i> (Pers.) Poir.
hoo'oks/hoo'oxs	subalpine fir, 'balsam'	<i>Abies lasiocarpa</i> (Hook) Nutt.
hoobixs 'wiigat	Queen's cup or beadleily	<i>Clintonia uniflora</i> (Schult.) Kunth.
hu'ums (E)/wa'umst (W)	devil's club	<i>Oplopanax horridum</i> (Smith) Miq.
ihlee'em ts'ak	red columbine and Indian paintbrush	<i>Aquilegia formosa</i> Fisch. and <i>Castilleja miniata</i> Dougl.
is	soapberry	<i>Shepherdia canadensis</i> (L.) Nutt.
sgan'is	soapberry bush	<i>Shepherdia canadensis</i>
isxum sga'nixw (E)	Sitka valerian; wild mint?	<i>Valeriana sitchensis</i> Bong.; <i>Mentha arvensis</i> L.?
isxum sk'ooks (W)	Sitka valerian	<i>Valeriana sitchensis</i>
k'awts	'carrots'	<i>Daucus carota</i> L.; <i>Lupinus ?nootkatensis</i> Donn
k'ooxst	Douglas maple	<i>Acer glabrum</i> Torr. var. <i>Douglasii</i> (Hook.) Dippel
k'ots	false Solomon's Seal	<i>Smilacina racemosa</i> (L.) Desf.
laxsa laxnok	juniper	<i>Juniperus communis</i> L. and <i>J. scopulorum</i> Sarg.
sgannaxnok	juniper	<i>Juniperus communis</i> and <i>J. scopulorum</i>



TABLE 1.—Gitksan Generics.

Gitksan Generics	English Name	Latin name(s)
leek	spreading dogbane, 'nylon plant'	<i>Apocynum androsimaeifolium</i> L.
sganleek	spreading dogbane, 'nylon plant'	<i>Apocynum androsimaeifolium</i>
ligimtxhl gan	'tree fur', 'black tree moss'	<i>Bryoria</i> spp.
loots'	red elderberry	<i>Sambucus racemosa</i> L.
maa'ya gaak	black twinberry, 'crowberry'	<i>Lonicera involucrata</i> (Rich.) Banks
sganmaa'yagaak	black twinberry bush	<i>Lonicera involucrata</i>
maa'ya luulak'	snowberry, 'ghostberry'	<i>Symphoricarpos albus</i> (L.) Blake
maa'uhl litsxw	Queen's cup or beadlily	<i>Clintonia uniflora</i>
maa'yim hagwilhuxw	strawberry bramble	<i>Rubus pedatus</i> J.E. Smith
maa'ytxwhl smax (E)	wild sarsaparilla	<i>Aralia nudicaulis</i> L.
maa'ytxwhl smex (W)	wild sarsaparilla	<i>Aralia nudicaulis</i>
maawin	meadow horsetail	<i>Equisetum pratense</i> Ehrh.
majagalee	'flower'	residual taxon comprising herbaceous plants with conspicuous flowers
maskwa luuluk (E)	puffball	<i>Lycoperdon</i> spp. and perhaps others, such as <i>Bovista pila</i>
'mesxwa luulak (W)		
maa'y welgan	wild blue currants	<i>Ribes laxiflorum</i> Pursh.
maa'ya ganaa'w	'frogberries'	<i>Rubus pubescens</i> Raf.
maa'ya smex	Queen's cup or beadlily	<i>Clintonia uniflora</i>
mihlxw	'charred', birch fungus	<i>Inonotus obliquus</i> and <i>Fomes ignarius</i>
mii'kooxst/miik'ooxs	salmonberry	<i>Rubus spectabilis</i> Pursh.
miigan	highbush blueberry	<i>Vaccinium ovalifolium</i> Sm.
miigunt	wild strawberry	<i>Fragaria virginiana</i> Duchesne
miidoots	wild strawberry	<i>Fragaria virginiana</i>
mii'oot	bog cranberry and ? lowbush cranberry	<i>Oxycoccus microcarpus</i> Turez. and perhaps <i>V. vitis-idaea</i> L.
miits'ook'	chokecherry	<i>Prunus virginiana</i> var <i>melanocarpa</i>
milkst	Pacific crabapple	<i>Malus fuscus</i> (Raf.) Schneid.
sganmilkst	Pacific crabapple tree	<i>Malus fuscus</i>
miyahl (E)	lowbush blueberry	<i>Vaccinium caespitosum</i> Michx.
miyehl (W)		
naasik'	raspberry	<i>Rubus idaeus</i> L.
nisk'o'o	thimbleberry	<i>Rubus parviflorus</i> Nutt.
sdetxs	stinging nettle	<i>Urtica dioica</i> L.
seeks	spruce	<i>Picea engelmannii</i> Parry, <i>P. glauca</i> (Moench.) Voss, <i>P. x lutzii</i> , and <i>P. mariana</i> (Mill) Brit., Sterns & Prognna
sgandaxdo'ohl	Labrador tea, 'swamp tea'	<i>Ledum groenlandicum</i> Oeder

TABLE 1.—Gitksan Generics.

Gitksan Generics	English Name	Latin name(s)
sgansa'angitl'	mountain ash	<i>Sorbus sitchensis</i> Greene and <i>S. scopulina</i> Roem.
sgants'ak' (E)	beaked hazelnut	<i>Corylus cornuta</i> Marsh.
sgantsek' (W)		
sgants'imwil'oo'o	swamp currant	<i>Ribes lacustre</i>
sgantya'ytxw	snowberry	<i>Symphoricarpos albus</i>
sgantye'ytxw	fool's huckleberry	<i>Menziesia ferruginea</i> Smith
sgansnaw	pincherry	<i>Prunus pensylvanica</i> L.
sgansnax	black hawthorn, 'thornberry'	<i>Crataegus douglasii</i> Lindl.
sgants'iks	Indian or False hellebore	<i>Veratrum viride</i> Ait.
malgwasxw (E)	the root of the Indian hellebore	the root of <i>Veratrum viride</i> <sup>1</sup>
melgwasxw (W)	the root of the Indian hellebore	the root of <i>Veratrum viride</i>
sginist	lodgepole pine	<i>Pinus contorta</i> Dougl.
simgan	western red cedar	<i>Thuja plicata</i>
simmaa'y	black huckleberry	<i>Vaccinium membranaceum</i>
sbikst (W)	highbush cranberry	<i>Viburnum edule</i> (Michx.) Raf.
tiim laalax'u	Labrador tea, 'swamp tea'	<i>Ledum groenlandicum</i>
t'imi'yt	kinnikinnick	<i>Artostaphylos uva-ursi</i> (L.) Spreng.
sgant'imi'yt	kinnikinnick plant	<i>Artostaphylos uva-ursi</i>
t'ipyeeest	stonecrop	<i>Sedum divergens</i> Wats.
ts'anksa gaak	nodding onion	<i>Allium cernuum</i> Roth.
ts'eex	juniper (about knee to mid-thigh high)	<i>Juniperus communis</i> ? and <i>J. scopulorum</i>
ts'idipxs	highbush cranberry	<i>Viburnum edule</i>
sgantsidipxst	highbush cranberry bush	<i>Viburnum edule</i>
umhlxum miinhl gan	moss underneath the trees	terrestrial forest floor Musci
umhlxw	moss; diaper moss	<i>Sphagnum magellanicum</i> (long, pale) and perhaps other spp.; Musci in general
umhlxum 'yip	moss-on-soil; terrestrial mosses	terrestrial Musci
wihl	yellow cedar	<i>Chamaecyparis nootkatensis</i> (D. Don) Spach
xaadaax	unknown spiky plant with three parts	
xhlaahl	red osier dogwood	<i>Cornus stolonifera</i> Michx.
xhle'e	amabilis fir	<i>Abies amabilis</i> (Dougl.) Forbes
xsduu'lixs	baneberry, fairy bells and twisted stalk	<i>Disporum hookeri</i> (Torr.) Nicholson, <i>Actaea rubra</i> (Ait.) Willd. and
sgansxsduu'lixs	baneberry, fairy bells and twisted stalk	<i>Streptopus amplexifolius</i> (L.) DC.
xsneenauntwxt	yarrow and pearly everlasting	<i>Achillea millefolium</i> L. and <i>Anaphalis margaritacea</i> (L.) B. & H.
'yans (E) / 'yens (W)	'leaves', herbaceous plants	



that are morphologically based, encompass a number of named generics, and are transitive (Atran 1985, 1990; Berlin 1992; Brown 1994).

An adequate terminology for major plant groupings which do not satisfy these conditions is problematic. Some authors of the "intellectualist" school would maintain that groupings based on other criteria are not part of the general purpose ethnobiological classification of a cultural group (Atran 1990; Berlin 1992; Brown 1984).

Others, such as Eugene Hunn (1982), Nancy Turner (1987), Brian Morris (1984) and Alejandro de Ávila (personal communication 1995), whose positions have sometimes been characterized as "utilitarian" would suggest that *a priori* limiting consideration to morphologically based life forms may obscure understanding the ordering of the cognitive domain as experienced by members of the study community. In a previous paper (Johnson-Gottesfeld and Hargus 1998), I chose to retain the term life form for major plant groupings, despite some differences in defining characters from authors such as Berlin (1992), Atran (1985, 1990) and Brown (1984). In light of possible confusion caused by retention of the term life form while rejecting important aspects of the original authors' criteria, I will here adopt the more neutral "major plant group" to include all large groupings of plants, whether based on morphological gestalt or other characters, and whether encom-

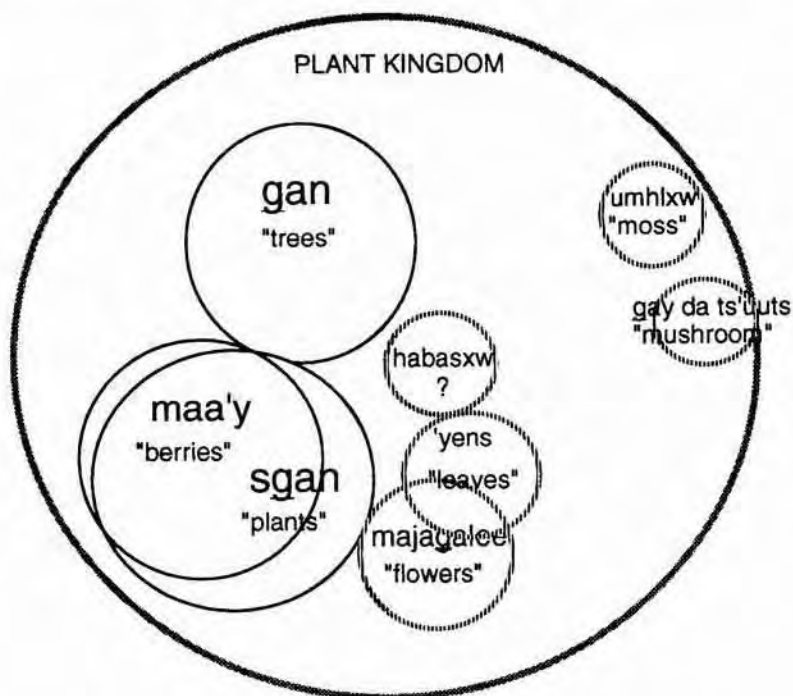


Figure 2.—Gitksan Plant Classification: schematic relationship of broad plant classes. Major plant classes which contain contrast sets of numerous named generics are bounded with solid black lines. "Empty life forms" are shown with vertical dashed lines. The semantic domain "floral form" or "plant kingdom" is outlined in gray.

TABLE 2.—Major Plant Group Affiliations of Gitksan Generics

Gan	'Trees'	Sgan	'Plants'	M'aay	'Berries'	'Yans/'Yens	'Leaves'
am'mal (E)	cottonwood	sgan nagnok	juniper	maa'ya gaak	black twinberry	ts'anksa gaak (?)	nodding onion
am'mel (W)	cottonwood	sgansxduu'lixs	'bear's berries'	maa'yhl litsxw	Queen's cup	'yans (E)	'leaves'
amk'ooxst	aspen	sgandaxdo'ohl	Labrador tea	maa'yim hagwiluxw	strawberry bramble	'yens (W)	'leaves'
am'wasaan	willow tree	sganmaa'yagaak	black twinberry	maa'ytxwhl smiax (E)	'bear's berries'	sdetxs (?)	stinging nettle
amgiikw	hemlock	sgansa'angitl'	mountain ash	maa'ytxwhl smex (W)	'bear's berries'		
amhaawak	birch	sgant'imi'yt	kinnikinnik	maa'y welgan	blue currant		
haawak	birch	sgants'ak' (E)	hazel bush	maa'ya ganaa'w	trailing raspberry		
amhat'a'l	red cedar	sgants'imwil'oo'o	swamp currant	maa'ya smex	Queen's cup		
amluux	alder tree	sgantya'ytxw (E)	snowberry bush	maa'ya luulak' (W)	snowberry		
giist (?)	mountain alder	sgantye'ytxw (W)	fool's huckleberry	miik'ooxst	salmonberry		
hoo'oks (E)	subalpine fir	sgan'ax	woodfern plant	miidoots	strawberry		
hoo'oxs (W)	subalpine fir	sgan'eluuts'ook	chokecherry tree	miigan	highbush blueberry		
hluugan	mountain hemlock	sgangam (E)	saskatoon bush	miigunt	strawberry		
k'ooxst	Douglas maple	sgangem (W)	saskatoon bush	miik'ooxs	salmonberry		
seek	spruce	sgangak'oyp	bunchberry plant	miits'ook'	chokecherry		
sginist	pine	sganhaxdek	'bow plant'	milkst	wild crabapple		
simgan	red cedar	sganis	soapberry bush	'miyahl (E)	lowbush blueberry		
wihl	yellow cedar	sgankale'est	rose bush	'miyehl (W)	lowbush blueberry		
		sganleek	dogbane plant	naasik'	raspberry		
		sganmilkst	crabapple tree	nisk'o'o	thimbleberry		
		sgansnaw	pincherry tree	is	soapberry		
		sgansnax	hawthorne bush	dilawsa	gooseberry		
		sgantsek' (W)	hazel bush	gale'e/k'ale'e	rose hips		
		sgantsiks	Indian hellebore plant	gam	saskatoon		
		sgantsidipxst	highbush cranberry	gadimis	black huckleberry (black fruit)		
		hissgant'imi'yt (?)	wintergreens etc.	simmaa'y	black huckleberry general and dark bronze fruited form		
		sganloots'	red elderberry	ts'idipxs	highbush cranberry		
				sbikst	highbush cranberry		
				k'ots (?)	Solomon's seal		
				t'ipyeeest (?)	'lavaberries'		
				t'imi'yt (?)	kinnikinnik		
				loots' (?)	red elderry		
Majagalee	'flowers'	Habasxw	'grass'	Gayda ts'uuts	'fungus'	Umhlxw	'moss'
majagalee	'wildflower'	habasxw	'hay' or grass	gayda ts'uuts	fungus	umhlxum miinh	'moss under trees'
ihlee'em ts'ak	'bleeding nose'	habasxum t'ax	lake grass	'maskwa luuluk' (E)	Lycoperdon spp.	umhlxw	moss
xsneenauntwxt	yarrow/ everlasting			mihlxwhl	'birch fungus'	umhlxum 'yiip	'moss on soil'
hagimgasxw	'wiping plant'			diuxw	'birch fungus'	gaanaxws	unidentified falcate

passing a relatively large contrast set of generics, or few to none. I consider these groups to contrast at the level of Berlin's life form rank (1992).

Three of the Gitksan major plant groups are large groupings encompassing a number of named subordinate generics: *gan* 'trees' (approximately 15 types),<sup>2</sup> *sgan* 'plants' (approximately 26 types), and *maa'y* 'fruit plants' (approximately 26 types) (see Table 2). The remainder are residual taxa which are empty in the sense of Turner (1974), containing few or no named subtypes (ranging from 4 to 0), though comprising forms of morphological and taxonomic diversity: *habasxw* 'grass' or 'hay,' *yans/yens* 'leaves' or 'herbaceous plants,' *majagalee* 'flowers,' *umhlw* 'moss,' and *gayda ts'uuts* 'fungi'. The precise nature of these groupings is open to debate; one could also perhaps consider them unaffiliated generics of distinctive habit (cf. Berlin 1992), or small intermediate groupings. As indicated in Figure 2, fungi seem to be peripheral to the concept of 'plant' and are not similar to any other types of plants,<sup>3</sup> which indeed reflects their fundamentally distinct biology and is paralleled by the modern scientific classification of fungi as a separate kingdom, of equal rank with 'plant' and 'animal.'<sup>4</sup> Lichens may form an unaffiliated intermediate; no overall term linking the several named classes was offered by consultants, and no mention of similarity to other types of plants was made.

Within the major plant groups are found numerous generics, or basic kinds, which roughly correspond to the species and/or genera of the scientific botanical classification system (see Table 1). A smaller number of covert intermediate groupings of generics are also found (see discussion below). Some generics, and some intermediate groupings may not be subsumed in major plant groups, and may in fact be unaffiliated, a situation reported by other authors (Berlin 1992; Taller de Tradiccion Oral and Beaucage 1987).

*Major Plant Groups.*—*Gan*, Gitksan trees, (see Table 2) comprise forms that are tall and woody, which are used for their wood and/or bark for technological purposes and for medicine or food. Height relative to people, large size and woodiness appear to be the primary diagnostic characters. The word *gan* is employed to indicate forest, 'among the trees' (*spagaytgan*). It is also the term for the tissue wood. Many tree names are of the formula 'good for \_\_\_\_' (*am* \_\_\_\_). Three examples are *am 'mal* (cottonwood, 'good for canoe'), *am k'ooxst* (aspen, 'good for maple'), and *amgiikw* (hemlock, 'good for hemlock'). Other names of this type can be found in Tables 1 and 2. This type of name is only found for tree species, though not every tree has a name of this type.

*Sgan* 'plants,' seems to be a more heterogeneous grouping; I have included plants in this group for which consultants spontaneously used the 'plant' term *sgan* as part of the name when discussing the plant. Morphologically, these range from small trees and large shrubs, to small shrubs and evergreen perennial subshrubs, to large herbs, including at least one fern species. The boundaries between *sgan* 'plant,' and *yans/yens* 'leaves,' may be somewhat fuzzy, and some smaller herbaceous forms such as *Cornus canadensis* (*sgangapk'oyp*) are included in *sgan* (see Table 1 for a complete listing of Gitksan, English and scientific names of species). Taxonomically, gymnosperms, dicotyledonous and monocotyledonous angiosperms and ferns are included in this diverse class. Although consultants consistently offer 'plant' as the translation of the term *sgan*, Tarpent has analysed /*sgan*/ to mean 'support' (Compton *et al.* 1997). On deeper probing, some con-

sultants suggest a linkage between *sgan* and 'stem,' which is consistent with Tarpent's interpretation.

Plants in this grouping are often called by the name without the preceding 'plant' term, as *loots*' instead of *sganloots*'. Taxa in this grouping overlap extensively with the 'berry' grouping; most, or perhaps all 'berries' are also 'plants.' In fact, in some cases the name, when used without the preceding *sgan* suggests the berry rather than the entire organism, as *t'imi'yt* (*kinnikinnick* fruit) versus *sgant'imi'yt* (*kinnikinnick* plant). Which term is used depends on the situation in part, i.e., whether the plant body or the fruits are the focus of attention.

The third evident grouping of plants is that of fruit-bearing species, or 'berries,' (*maa'y*).<sup>5</sup> The primacy of berries in the Gitksan diet is reflected in the importance of having berries as a perceptual character of plants. I was often asked, for example, when presenting fresh plant specimens for identification, what the 'berry' was like, or if it had berries. The berry grouping contains the largest number of named types; at least ten of these are shared with the 'plant' group (see Table 2). This grouping is clearly focussed on edible fruits; plants with inedible berries such as black twinberry, *Lonicera involucrata*, seem to be peripheral members of the class.

The empty major plant categories seem to be ecologically important groupings of plants of distinctive morphology which are of little economic importance; within or associated with these life forms may be a few types of economic importance, which appear to serve as prototypes. For example, in the moss grouping, which includes all terrestrial and aquatic or wetland moss species as well as perhaps morphologically similar vascular plant forms such as *Huperzia selago*,<sup>6</sup> the prototype is clearly "diaper moss" (*umhlw*), large pale *Sphagnum* species which grow in wetlands and were traditionally important for diapering and menstrual needs (Johnson-Gottesfeld and Vitt 1996). As is common in folk classifications, the prototype is unmarked (e.g., Ellen 1993: 83,85; Gottesfeld 1993; Johnson-Gottesfeld and Hargus 1998; Hunn and French 1984; Turner 1987). Mosses from other environments are designated by descriptive phrases 'moss-on-soil' (Jeff Harris Sr. interview notes 10/19/87) or 'moss-under the tree' (e.g., *Rhytidiadelphus triquetrus*, a forest floor "feather" moss) (Olive Ryan interview notes 7/25/95). One moss or liverwort (uncollected), reputed to form good waterproof bedding or thatch, has its own name.<sup>7</sup>

The fungus grouping comprises "mushrooms," the fleshy fruiting bodies of basidiomycetes and some ascomycetes, and "conks" (bracket or shelf fungi), the woody perennial fruiting bodies of polypores, woodrotting fungi. They are all referred to as *gayda ts'uuts*' 'bird hat' or metaphorically 'penis,' whether fleshy mushrooms on soil or woody polypores on trees or rotting logs. The two types distinguished by generic names are polypores on birch trunk which could be glossed in English 'birch fungus,' and certain puffballs, which are called 'ghost fart' *masxwa luulak*' (E)/*mesxwa luukak*' (W).<sup>8</sup> 'Birch fungus' is called by two alternate terms, *mihlxw* 'charred,' or *diuxw*; it comprises at least two distinct Linnean species, the cinder conk *Inonotus obliquus* (Gottesfeld 1992) and *Fomes ignarius*. Similar appearing species growing on hemlock trunks, for example, have no distinctive name, and are simply called *gayda ts'uuts*'. Despite the great variety and

abundance of fungal species in the environment, and their seasonal salience, only the species growing on birch, which have economic use, and the perceptually salient and uncanny puffballs are named. No species of fleshy fungi were traditionally eaten by the Gitksan.

The situation with the three major plant groups encompassing herbaceous species is not entirely clear. They are groupings which cluster around the prominence of plant organs, i.e., the possession of conspicuous flowers or large leaves with no woody stem, or habit (in the botanical sense, that is, characteristic form of growth, particularly for graminoid plants). Few herbaceous types have economic uses or are distinguished with names, and a certain degree of overlap may be present between classes, for example, '*yans*/'*yens* 'leaves' and *habasxw* 'hay,' or '*yans*/'*yens* 'leaves' and *majagalee* 'flower,' depending on the focus of discussion.

Graminoid plants in recent times have had two economic uses: a certain 'swamp' or lakeshore type (probably a sedge or bulrush) was used for a type of basketry, and since the introduction of domestic livestock, grasses and sedges have had importance as winter feed and pasturage.

'*Yans*/'*yens* 'leaves' seems significant as a residue of small and inconspicuous plants, and ecologically describes herbaceous ground cover or undergrowth. No named generics were unequivocally associated with this group. Luke Fowler told Harlan Smith in 1926 that the introduced dandelion (*Taraxacum officinale*) was '*yens*.'<sup>9</sup> Sometimes the term '*yens*' can be translated "plant"; the topical section in a bilingual Gitksan dictionary entitled (in English) "Names of Trees, Plants, and Flowers" used the term '*yens*' along with *gangan* 'trees' and *majagalee* 'flowers' in the Gitksan title.<sup>10</sup>

TABLE 3.—Plants Identified as 'Flowers' by Harlan Smith's Consultants in 1925-26

Latin Name	Common Name	Smith's orthography	Gitksan term
<i>Mentha arvensis</i>	field mint	mezerul	<b>majagalee</b>
<i>Heuchera glabra</i>	alum root	skan mezerul	<b>sgan majagalee</b>
<i>Parnassia palustris</i> var. <i>montanensis</i>	grass-of-parnassus	skan mizerlay	<b>sgan majagalee</b>
<i>Corydalis aurea</i>	golden corydalis	megerle	<b>majagalee</b>
<i>Clematis columbiana</i>	Virgins-bower	mezerul	<b>majagalee</b>

*Majagalee* 'flowers' are conspicuous in season, especially in environments like subalpine meadows or alpine tundra. The term applies both to the plant organ, as in the rose, which has flowers, but for the Gitksan, is not a 'flower,' and to what would be called in English "wildflowers." A few flower types have names, and will be discussed as examples in the *Generics* section (see also Table 2). The common and conspicuous red columbine and Indian paintbrush are designated *ihlee'em ts'ak* 'bleeding nose.' It is probably the perceptual salience of these forms because of their brilliant colour which causes them to be named; symbolic significance is also possible. Another generic which may be a 'flower' is *xsneenauntwxt*, which is composed of two common white flowered composite species of similar stature, pearly everlasting (*Anaphalis margaritacea*) and yarrow (*Achillea millefolium*). The



two peavine species (*Lathyrus nevadensis* and *L. ochroleucus*), common understory herbs with vivid purple or cream flowers, are a third possible 'flower' generic. They are lumped by the Gitsan as *hagimgasxw* 'wiping plant,' named for their use in wiping the slime off of salmon skin during fish processing.

In the 1925 and 1926 Harlan Smith collected names for various plants we would call wildflowers, including in addition to those mentioned above, mountain avens (*Dryas drummondii*), sweet cicely (*Osmorrhiza* spp.), goatsbeard (*Aruncus sylvestris*), and others. The names in general are either descriptive of uses ('wiping plant' for peavine) or are coordinate ('resembling spreading dogbane' for goatsbeard and sweet cicely). In addition, there were five species simply called 'flowers' or, interestingly 'flower plant' (Table 3), and a number of types which had no names (Table 8).

The prototypes of the two most economically important major plant groups, *gan* 'trees,' and *maa'y* 'berries,' are named 'real or true': *simgan* 'real tree' or 'wood,' the western red-cedar *Thuja plicata*, and *simmaa'y* 'real or true berry,' the black huckleberry *Vaccinium membranaceum*.

TABLE 4.—Plants of Unknown Affiliation

Gitksan name	English meaning	probably <i>sgan</i>	ambiguous or other
<i>gahldaats</i>	yellow pond lily		✓
<i>gasx</i>	riceroot lily	✓	
<i>haast</i>	fireweed	✓	
<i>ha'mook</i>	cow parsnip	✓	
<i>hagimgasxw</i>	peavine		✓
<i>hoobixs 'wiigat</i>	Queen's cup		✓
<i>isxum sgan'isxw</i> (E)	'smelly plant' valerian, mint?	✓	
<i>isxum sk'ooks</i> (W)	'smelly plant' valerian, mint?	✓	
<i>k'awts</i>	'wild carrots' and carrots	✓	
<i>wa'umst</i>	devil's club	✓	
<i>xsneenauntwxt</i>	yarrow and everlasting		✓
<i>xhlaahl</i>	red osier	✓	
<i>hisgahldaatsxw</i>	water arum, calla lily		✓

The major plant group affiliation of a number of taxa remains unclear (Table 4), including distinctive, important, and widespread plants such as devil's club. Whether, for example, its unique morphology and impressive spininess, actually create a unique and unaffiliated position, or whether its singularity and salience simply make reference to a major plant grouping unnecessary because of its very familiarity, remains unclear. Other plants whose affiliations with "life forms" are unclear include large fleshy herbs whose roots, rhizomes or underground parts are used: yellow pond lily, an important medicinal plant, and cow parsnip, important both for medicinal roots and for its edible stems.

In 1996 I conducted several interviews to address the issue of classification of these ambiguous plants, and the nature or meaning of the general term *sgan*. When I asked the most elderly and fluent consultant I interviewed in 1996 whether one could say *sgan* \_\_\_ for several plants of ambiguous affiliation, she appeared to find



the question odd, and simply repeated the plant names without *sgan*, confirming that in ordinary speech there are a series of plants with which one cannot generally substitute *sgan* + name for the name itself (O. Ryan 9/10/96 and 9/20/96.)

A second consultant, the daughter of the elder mentioned above, felt that none of the plants on my list of 12 forms could be called *sgan* \_\_\_\_.<sup>12</sup> For her, the word *sgan* carries connotations of the annual cycle and the bearing of fruit, rather than necessarily a sense of stature (J. Ryan 9/10/96.) The aquatic habit of yellow pond lily gave one consultant some hesitation, and she indicated that for her, *sgan* carries a terrestrial and upright connotation, usually with woody or distinct stems (B. Anderson 9/7/96). Familiarity was suggested by one consultant as the reason that devil's club, rice-root lily (*Fritillaria camschatcensis*) and fireweed (*Epilobium angustifolium*) were not generally referred to as *sgan* (Art Mathews Jr 9/15/96.) Another consultant used appropriate Gitksan questions to elucidate the affiliation of various plants (S. Howard notes 9/14/96). Her response suggests that, depending on stature, one could ask :

*Gwilx la gan de tun?* What kind of tree is this?

*Sgan gwi tun?* What kind of a plant is this?

*Gwilx la 'yens si tun?* What kind of 'leaves' is this?

She indicated that for her *xhlaahl* (red osier dogwood), *gasx* (rice-root lily), and *ha'mook* (cow parsnip) are *sgan*. Art Mathews indicated a possible ecological slant: if one wanted to talk about a bear walking through cow parsnip, one would say that the bear is in the *sganha'mook* (transcript 9/15/96.)

Some of the terms on my initial list seem to fit into the broader classification scheme with more or less ease, such as red osier dogwood and Sitka valerian. Others, as suggested above, probably are grouped with *sgan*, but are highly salient and important plants, as well as somewhat distinctive in morphology. A last grouping includes unusual plants such as the emergent aquatics yellow pond lily and water arum, the fleshy leaved stonecrop, and low growing herbaceous plants such as Queen's cup, which may in fact be unaffiliated, or not members of *sgan*. Queen's cup may be a berry, or perhaps a 'leaf' or 'flower,' but in the absence of evidence which indicates how it is perceived by Gitksan people, I prefer to consider it and other ambiguous forms unaffiliated.

*Intermediates.*—Below the major plant group or life-form rank, one can distinguish a jumble of covert groupings and isolated generics, which may or may not be included in any superordinate classes below the general rank of "plant kingdom" or "floral form." Several such groupings are suggested in Table 5. Some covert groupings seem to be cross-cutting, as indicated by the fact that evergreen conifers are found in both the *sgan* and *gan* groupings (coniferous trees being *gan* and the shrubby or small tree *Juniperus* species being *sgan*). Similar patterns of relationship of intermediate groupings to life forms are found among the Sierra Nahuatl (Taller de Tradición Oral and Beaucage 1987.) Other small clusters may be indicated by coordinate naming patterns, such as the horsetails, or the aquatic grouping formed by yellow pond lily and wild calla (Figure 3). These clusters of plants have distinctive habits, and, in the case of the pond lily group, habitats.

By the criteria employed by Taylor (1990) evergreen coniferous trees would be

TABLE 5.—Postulated Intermediate Groupings

'ferns'	
damtx (E)/demtx (W)	inedible fernrootstock, <i>Athyrium filix foemina</i> , <i>Dryopteris felix-mas</i> , and <i>D. expansa</i> , in part
ax	edible fern rootstock, <i>Dryopteris expansa</i> in part
hap'iba'a	bracken, <i>Pteridium aquilinum</i>
hisdemktxwt	licorice root fern, <i>Polypodium glycyrrhiza</i>
'clubmosses'	
belena 'watsx (E)/belena 'wetsx (W)	various <i>Lycopodium</i> spp.
xaadax	unknown
'horsetails'	
hismaawintxw	various <i>Equisetum</i> spp.
maawin	<i>Equisetum hiemale</i> and <i>pratense</i>
'conifers or evergreens'	
amgiikw	hemlock, <i>Tsuga heterophylla</i>
hoo'oxs	'balsam', subalpine fir, <i>Abies lasiocarpa</i>
seeks	spruce <i>Picea x Lutzii</i>
sgannaxnok or laxsa laxnok	common and rocky mountain juniper, <i>Juniperus communis</i> and <i>J. scopulorum</i>
sginist	lodgepole pine, <i>Pinus contorta</i>
simgan or amhat'a'l	western red cedar, <i>Thuja plicata</i>
wihl	yellow cedar, <i>Chamaecyparis nootkatensis</i>
xhlee'e	amabilis fir, <i>Abies amabilis</i>
'alders'	
giist	'mountain alder', <i>Alnus crispa</i>
amluux	alder, <i>Alnus incana</i> and <i>A. rubra</i>
'willows'	
xhlaahl	'red willow', <i>Cornus stolonifera</i>
'waasan and am'waasan	willow, <i>Salix</i> spp.
? giist	'grey willow', <i>Alnus incana</i>
'kinnikinnick and relatives'	
sgant'imi'yt	kinnikinnick <i>Arctostaphylos uva-ursi</i> ; and low bush cranberry? <i>Vaccinium vitis-idaea</i>
hisgant'imi'yt	prince's pine, <i>Chimaphila umbellata</i> ; false box, <i>Pachystima myrsinites</i> ; and ?wintergreens, ? <i>Pyrola</i> spp.
'bear's berries'	
maa'ytwhl smex	wild sarsaparilla, <i>Aralia nudicaulis</i>
maa'ya smex	Queen's cup <i>Clintonia uniflora</i> ; rosy twisted-stalk <i>Streptopus roseus</i> ; star-flowered Solomon's seal, <i>Smilacina stellata</i> ; and ?three-leaved Solomon's seal, ? <i>S. trifoliata</i>
xsduu'lixs	baneberry, <i>Actaea rubra</i> ; clasping-leaved twisted-stalk, <i>Streptopus amplexifolius</i> , and Hooker's ferry bells, <i>Disporum hookeri</i>
hissgank'ots	star-flowered Solomon's seal, <i>Smilacina stellata</i> ; and ?three leaved Solomon's seal, ? <i>S. trifolia</i>
lichens	
gesgan	'tree hair', arboreal fruticose lichens
ligimthl gan	'tree fur', arboreal fruticose lichens
gwilalh ganaa'w	'frog blankets', <i>Lobaria</i> spp.

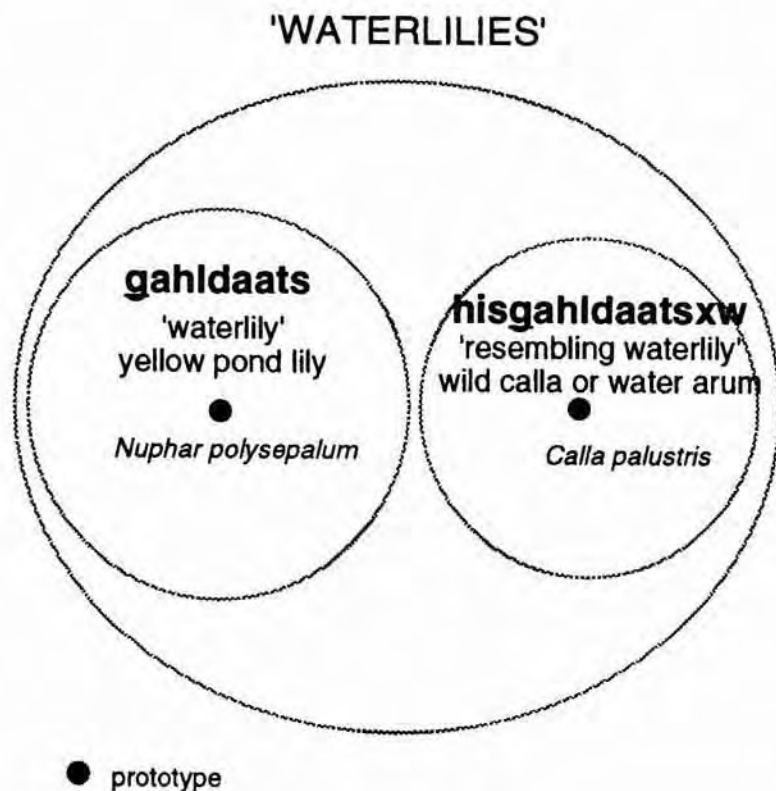


Figure 3.—Coordinate naming: waterlilies.

considered to be a covert intermediate grouping. This is indicated by the term *laxs*, which means 'conifer bough.' This term applies to trees such as spruce, and also to the low shrubby common juniper, included in the 'plant' life form. The term 'cone' (*meek*) might yield a different grouping, as it applies to the cones of any coniferous species, and also to the cone-like woody female catkins of the alders (commonly called 'cone' in English as well); however, I think that modern Gitksan speakers do not group alder with evergreen conifers, despite the superficial similarity of the reproductive structure, as, indeed modern English speakers also do not consider them of a group.

The three Linnean species of alder, grouped in two indigenous generics, are perceived as similar (Figure 4). Both possess the distinctive alder 'cones' (*meek*). Similarly, the linguistic confusion for Gitksan speaker in English between 'red willow' and 'yellow willow' or simply willow, indicates a possible grouping comprised of *Salix* species and *Cornus stolonifera*. The overlap of their uses in basketry as well as similarity of habitat and growth form of shrubby willows with red osier dogwood may be the basis for this grouping.<sup>12</sup>

Three generics of fern are also perceived as similar based on distinctive plant habit; a fourth smaller generic is named in coordinate fashion (Figure 5). These are

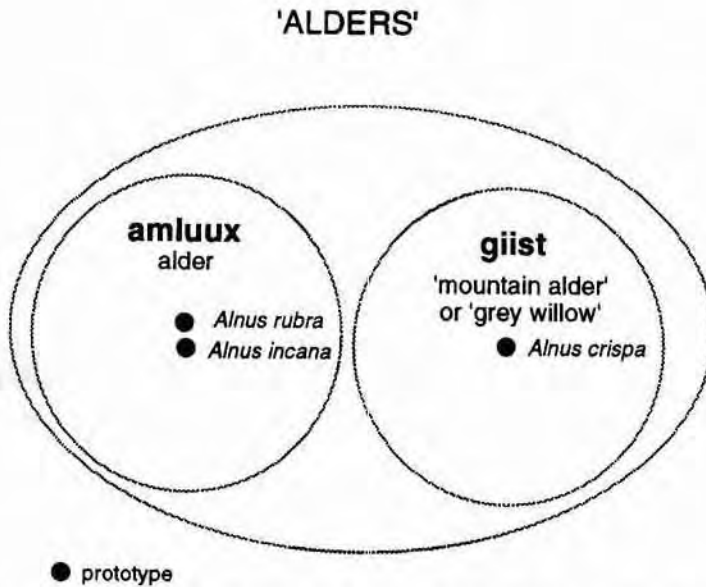


Figure 4.— Distribution of scientific species of *Alnus* in relation to the two Gitksan generics within the postulated intermediate 'alder.'

*ax* 'edible fern root' (spiny woodfern, *Dryopteris expansa*, in part), *damtx* 'inedible fern root' (*Dryopteris expansa* with small rhizomes, *Athyrium filix-femina*, lady fern, and *Dryopteris felix-mas*, male fern), and *hap' iba'a* (bracken fern, *Pteridium aquilinum*).<sup>13</sup> They are distinguished, perhaps, because only *ax* has an edible rhizome, which was formerly an important winter carbohydrate food. The small and locally uncommon licorice fern (*Polypodium glycyrrhiza*) was called by one consultant *hisdemktxwt* in recognition of its similarity in habit to the larger fern species, but its small size would preclude confusion with *ax*. The name means 'resembling *demkt* (inedible fern root).'

"Clubmosses" may perhaps be considered an intermediate grouping. Four botanical species of clubmoss (*Lycopodium clavatum*, *L. annotinum*, *L. complanatum* and *L. obscurum*) are all designated *belena* 'watsx(E)/ -'wetsx(W). The small alpine species *Lycopodium sitchense* was not designated by this term. Perhaps allied to these would be the fir clubmoss, *Huperzia selago*, considered by one consultant to be similar to the elusive taxon *xaadax* (David Green notes 7/24/95). However, another consultant considered this clubmoss to be an aberrant member of *umhlw*, 'moss', which simply happened to have its several branches come together to form a single stem at the base, with a root apparent below (O. Ryan notes 7/25/95).

A grouping of inedible berries, called in English "bear's berries" *maa'ya smex*, includes the Gitksan generics *maa'ytwhl smex* 'bear's berries,' *maa'ya smex* also 'bear's berries,' and *xsduu'lixs* 'teardrops' (Figure 6). *Maa'ytwhl smex* is a medicinal plant, wild sarsaparilla, *Aralia nudicaulis*, which has dark inedible berries. *Maa'ya smex* includes several other species with inedible berries, such as *Clintonia uniflora* and some of the species that also can be called *xsduu'lixs*. *Xsduu'lixs* is

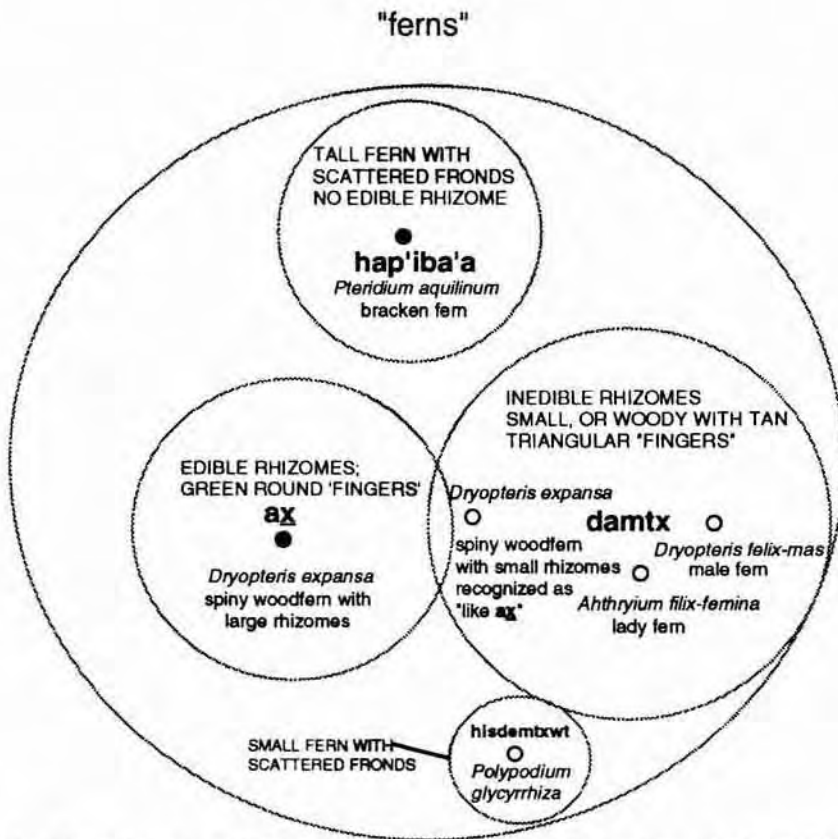


Figure 5.— "Fern" intermediate showing characters which differentiate the three Gitksan generics of large fern, and the small, uncommon coordinate *hisdemktwt*.

a sort of catch-all for red-fruited large leaved herbs with leafy stems, and has no use, though the species are relatively common and conspicuous. *Smilacina ?stellata*, called *hisgank'ots* or resembling large false solomon's seal is included in the intermediate 'bear's berries' by Art Mathews, who writes, "This berry is one of the bear berries." (Mathews n.d.)

A last possible covert grouping includes the several lichen forms named by the Gitksan. These aberrant, morphologically and ecologically unique forms are sometimes lumped by ecologists with bryophytes, as "bryoids." Taxonomic botanists emphasize their connection with fungi, which provide the gross morphology of lichen "species." The Gitksan appear not to connect the arboreal 'tree hair' or 'tree fur' and 'frog blankets' (lungwort, *Lobaria* spp.) types with any other types of plants.<sup>14</sup>

*Generics.*— There are a number of basic kinds of plants recognized and named by the Gitksan (Table 1). These are generics in the sense of Berlin (1992) and other authors, or basic kinds in the sense of Taylor (1990). All of the local tree species (in the English and botanical senses) and the majority of woody shrubs are distinguished and named by the Gitksan. Likewise, most species of plants, whether



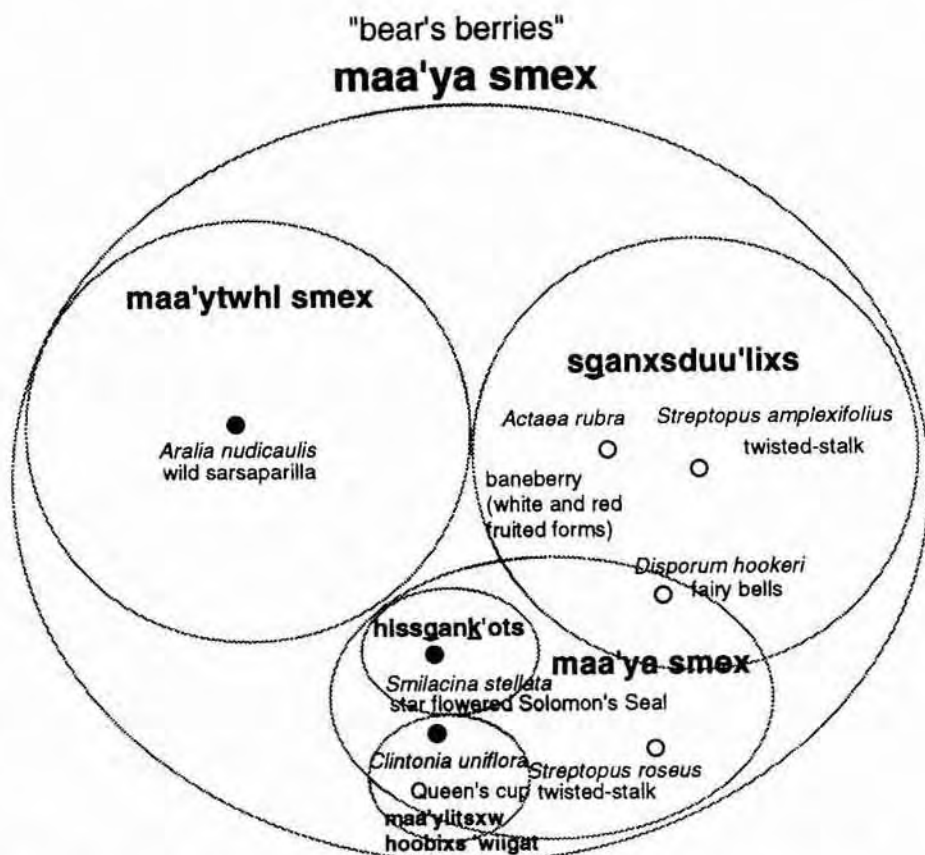


Figure 6.—The "bear's berries" intermediate grouping is a group of two generics of inedible fruits. *Maa'ytwhl smex*, whose name means "bear's berries," is medicinal. *Xsduu'lixs*, whose name refers to tears, is not. A third grouping, called *maa'ya smex*, includes members of three named generics, and rosy twisted stalk. It may be an artifact caused by people referring to the botanical species within it by the intermediate group name, or it may constitute some kind of residuum for speakers who do not use the other generic names for the included forms.

shrubs or herbs, which have edible berries, are named. A number of herbaceous or low-growing perennials are also named and recognized.

The correspondence between species recognized in scientific taxonomy and the generics recognized and named by the Gitksan is variable (Figures 7, 8, and 9). For tree species, and the recognized edible species of the berry group, the correspondence seems to be one to one.<sup>15</sup> The two species of true fir, for example, *Abies lasiocarpa* (by far the most common in Gitksan territory) and *A. amabilis*, were given different names by Jeff Harris Sr., who said in English that *amabilis* fir was a different type of 'balsam' (the local common name of *Abies*). In other cases, a Gitksan generic term may encompass two or more separate species recognized by scientific taxonomy; these may be distantly related from the perspective of scientific botany, with mem-



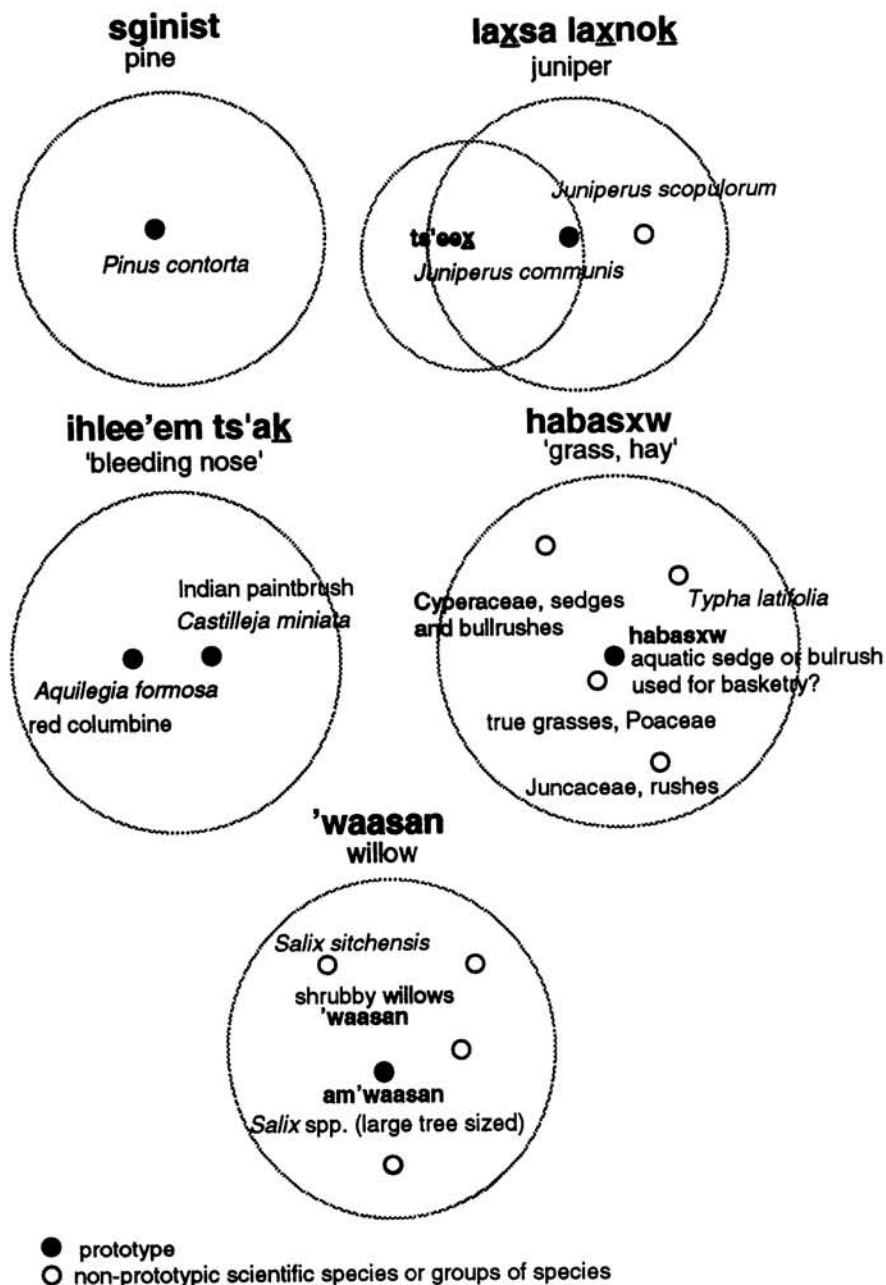


Figure 7.— A series of Gitksan generics, showing a range of relationships between Gitksan generics and scientific botanical species. For some consultants, *Juniperus scopulorum* is united with yew, *Taxus brevifolia*, both being designated 'bow plant' *sganhaxwdaxw*.

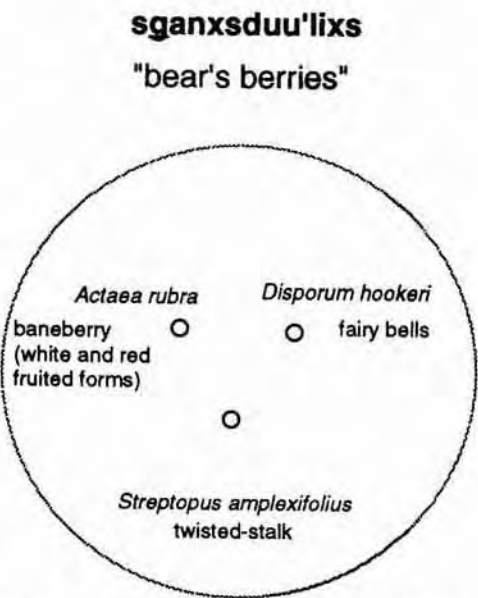


Figure 8.– The inedible fruit generic *xsduu'lixs*, red fruited large leaved herbaceous plants with leafy stems. The scientific genera include monocotyledonous forms of the lily family (*Streptopus* and *Disporum*), and *Actaea rubra*, a poisonous member of the dicotyledonous buttercup family.

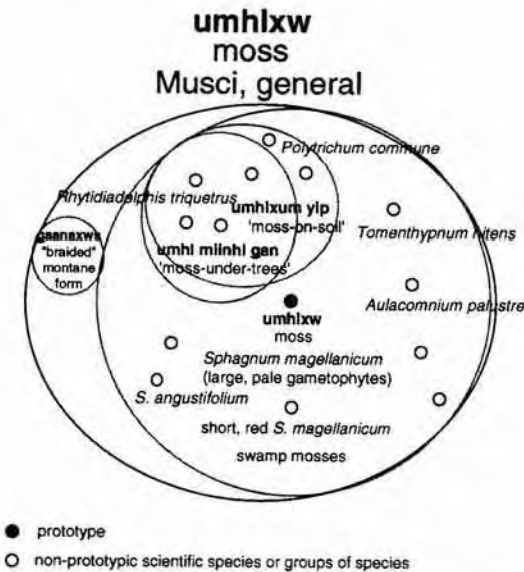


Figure 9.– Subtypes and distribution of scientific species within the bounds of the major plant class/ generic *umhlxw* 'moss.' Many more scientific species of bryophytes than those indicated are included in the moss category; for clarity only types that have been identified as *umhlxw* by consultants and determined to species by a bryologist are named here.

bers drawn from different botanical families. The nomenclatural uniting of two botanical species of juniper, *Juniperus communis*, a prostrate shrub, and *J. scopulorum*, a slow-growing tree, often with multiple stems, as *laxsa laxnok* is an example of two related species united as one generic. (Sometimes the tree form *J. scopulorum* may also be called "bow plant" and conceptually united instead with yew, *Taxus brevifolia*, which does not occur in Gitksan territory, though yew wood was obtained by trade). Two other pairs of scientific species united as single generics are the herbaceous flowering generics, *ihlee'em ts'ak* 'bleeding nose,' and *xsneenauntwxt*. As noted previously, 'bleeding nose' denotes red columbine (*Aquilegia formosa*: Ranunculaceae), and Indian paintbrush, (*Castilleja miniata*: Scrophulariaceae), two species classified scientifically in different plant families, but which share the feature of striking scarlet flowers. The nectaries of the first are sucked by children, while the paintbrush may have been used medicinally in the past (Smith 1926:181).<sup>16</sup> *Xsneenauntwxt* comprises yarrow (*Achillea millefolium*) and pearly everlasting (*Anaphalis margaritacea*), two common white flowered herbaceous plants in different subfamilies of the Asteraceae. The two subtypes have different uses, yarrow as a medicinal, and everlasting traditionally used for grave offerings. As discussed above, *damtz* 'inedible fern rootstock,' is defined by an economic character, lack of harvestable rhizomes. It comprises two Linnean species and part of a third (see Table 1) and is differentiated from *ax*, an edible fern rootstock, part of *Dryopteris expansa*, by either small size of rhizomes or woody, inedible texture. Another generic defined by disutility is *xsduu'lixs* (Figure 7). *Xsduu'lixs* 'tears' are large leaved herbaceous plants of approximately 30 cm height with leafy stems and red, inedible red fruits. The scientific genera include monocotyledonous forms of the lily family (*Streptopus* and *Disporum*) and a dicotyledonous form from the buttercup family, the poisonous *Actaea*. Another liliaceous herb of very similar appearance to *Disporum* and *Streptopus*, but with edible fruit, the false Solomon's seal (*Smilacina racemosa*) has a distinct name, *k'ots*.<sup>17</sup> If habit and morphology were the primary diagnostic characters of *k'ots*, rather than the edibility of its fruits, I would expect it to be included in *xsduu'lixs* rather than given a distinct name.

The exact boundaries of generics may be rather fuzzy, making it a judgement call whether a given cluster of forms should be considered one generic with a prototype and various satellite types of variable distance from the center (cf. Berlin 1992), or an intermediate composed of a focal type and a cluster of other generics related by coordination (cf. Hunn and French 1984). The naming and recognition of smaller and less perceptually salient plants is more variable than that of large, salient species like the common tree species, important berry plants, or significant shrubs. In particular, I noted variability in the referents of *maawin* 'scouring rush' and *hismaawintxw*. All apply to species of *Equisetum*, both of 'horsetail' and 'scouring rush' form. For one consultant, both the northern scouring rush *Equisetum hyemale*, and the meadow horsetail, *E. pratense*, were *maawin*, the prototype of this group, while common horsetail, *E. arvense*, and the small scouring rush, *E. scirpoides*, were peripheral, being designated by *hismaawintxw*. For other informants, *E. hyemale* and the woodland horsetail *E. sylvaticum* were also designated by *hismaawintxw*.

Three distinct species of clubmoss (*Lycopodium* species) are designated as *belena* 'watsx', 'otter belt', by modern consultants (see Table 1). A fourth species of *Lyco-*

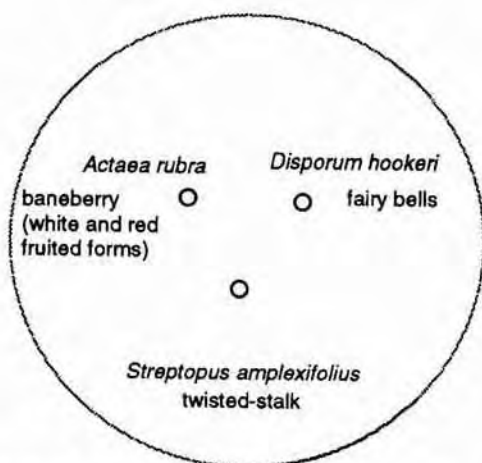
**sganxsduu'lixs****"bear's berries"**

Figure 8.— The inedible fruit generic *xsduu'lixs*, red fruited large leaved herbaceous plants with leafy stems. The scientific genera include monocotyledonous forms of the lily family (*Streptopus* and *Disporum*), and *Actaea rubra*, a poisonous member of the dicotyledonous buttercup family.

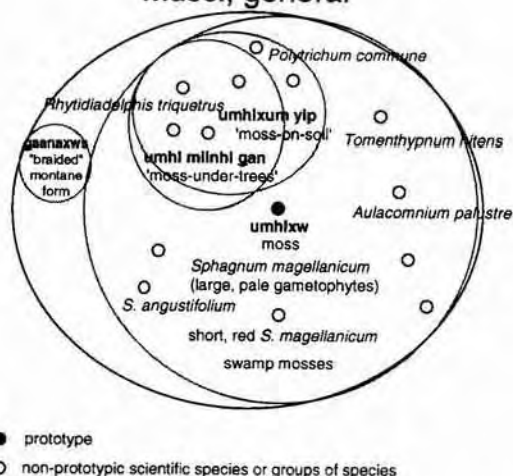
**umhlxw****moss****Musci, general**

Figure 9.— Subtypes and distribution of scientific species within the bounds of the major plant class/ generic *umhlxw* 'moss.' Many more scientific species of bryophytes than those indicated are included in the moss category; for clarity only types that have been identified as *umhlxw* by consultants and determined to species by a bryologist are named here.

same botanical species, but not to be identical in meaning. *Laxsa laxnok* / *sgannaxnok* was given above for juniper (usually referring to *Juniperus communis*). An unrelated term, *ts'ex*, is also glossed as 'juniper'. However, there is evidence that, for at least some informants, *ts'ex* and *laxsa laxnok* may represent different ecotypes, and that only the latter is 'supernatural' and spiritually powerful in medicinal contexts (Tribal Convention Notes October 16, 1986).<sup>20</sup> Other consultants appear to lump all juniper as *laxsa laxnok*. Should these be considered two generics? One generic with two species? One generic with three synonyms? Another case where two related forms appear to designate different portions of the named entity is with *'waasan* and *am'waasan*. *'Waasan* "willow" is the more common term, and applies broadly to shrubby or tree *Salix* species;<sup>21</sup> the consultant Jeff Harris Sr. who provided the term *am'waasan* apparently meant to contrast large, lowland tree-sized willows from shrubby species we encountered on a forested mountain slope. The tree sized willows have economic value for their tough and durable inner bark, used for tying and lashing. Shrubby willows are not utilized. Are these one generic with two species? Or two generics? I would prefer to regard them as prototype and extension of one broad generic.

A third area of uncertainty is whether the terms postulated for "empty life forms" are also generic concepts. There has been quite a bit of discussion of this issue in the literature (Atran 1990; Berlin 1992). Berlin (1992:175) rejects monogeneric life forms, and the idea that the same term can contrast both at the life form and at the generic level; he prefers to think of these as unaffiliated generics. I have tallied *majagalee* 'flower,' *habasxw* 'grass,' *umhlw* 'moss,' and *gayda ts'uuts* 'mushroom, fungus' as generics as well as major plant groups, because they are used in conversation to designate specific plants, contrasting with other (botanically) more restricted names at the generic level. However, I am uncertain if *'yans* / *'yens* can be considered a generic rather than an ecological term, and catch-all for things not important or salient enough to distinguish with individual names. Taylor's distinction between residual taxa and residues would suggest that, at the generic level, *'yens* would not be a residual taxon, but would simply be a residue of unnamed forms (Taylor 1990: 64-65), with the possible exception of the use of the term to designate lettuce.

Reviewing the Gitksan terms on Table 1, Gitksan Generics, there are 85 clearly distinct generics. When synonyms are reviewed to see if the concept apparently named is identical, that is, if the different consultants who gave the names would likely recognize the named entities as the same, five more distinct generics can be counted, for a total of ninety. Two forms may be subgeneric categories, (*gadimis*, the black fruited form of the black huckleberry, which is contrasted with *simmaa'y* proper, the large, succulent, dark bronze fruited form), and *'waasan* / *'waasen*, which appears to represent either the total category 'willow', or the non-prototypical upland forms), and several forms appear to describe ecological variants which might also be subgeneric categories (*hlguugan*, timberline mountain hemlock; *habaasxum t'ax* 'lake grass,' cattail, sedge and bullrush; and *umhlxum miinhl gan* and *umhlxum 'yip*, 'moss under trees' and 'moss on soil,' respectively). Of these 90 types (excluding the subgeneric and ecological types), 84 represent vascular plants and 6 represent mosses, fungi and lichens. This is not an exhaustive list of Gitksan floral terms; a few terms have been omitted from the potential list

because their referents were not identified, and the terms were from secondary sources. Neither have I included terms elicited by Smith in the 1920s in my tally unless I have obtained modern confirmation of their referents.

The fuzzy boundaries of the poorly differentiated less salient taxa makes exact determination of the proportion of the flora named difficult. If the more difficult and less salient fungi and mosses are eliminated, it becomes somewhat more manageable to compare the boundaries of indigenous taxa with those of botanical taxa and to arrive at a rough proportion of the total vascular flora named. However, general "catchall" terms like *majagalee* 'flower' and *habasxw* 'grass' or 'hay' still make closure difficult. Excluding these problematic terms, the 87 Gitksan vascular plant generics designate in total at least 103 different botanical species. As with the neighbouring Witsuwit'en (Johnson-Gottesfeld and Hargus 1998), this accounts for only about 10% of the vascular plant species occurring in Gitksan territory.<sup>22</sup> The majority of these generics correspond with single biological species, but some forms encompass two or more distantly related species, as discussed previously. For woody species, different members of the same botanical genus present in the local flora are usually classified as distinct Gitksan generics. Many herbaceous plants are not differentiated, but are unnamed or subsumed in broad categories such as the mentioned two above, 'flower' and 'grass' or 'hay.'

A final area of difficulty is the degree of uniformity of cultural knowledge of plants; clearly, in all societies, some people know more about a given area of cultural knowledge than others. For most of the names recorded in Table 1, at least two consultants confirmed the validity and referent of the term; usually this was two living consultants, but in a few cases, living elders confirmed or offered terms recorded by Smith in 1925-26. In a minority of instances, only one consultant provided the name. In these instances, a few especially knowledgeable people knew the names and uses of plants no longer remembered by others. These elders were recognized in the community as the people to consult about unusual or difficult plants or terms. Sixteen terms given in Table 1 were provided by these elders.<sup>23</sup> Where one is dealing with a small speech community and memory ethnography, the possibility of idiosyncratic terms or referents cannot be ruled out, but I have chosen to accept them as valid names and count them as part of the Gitksan botanical lexicon.

## NAMING

Gitksan plant names fall into several groups. Some names are simple, unanalysable lexemes such as *seek̓s* 'spruce,' which signify only the plant in question and have no other meaning in the language. Other names may be descriptive, indicate utility, be metaphoric, or refer to animals or to legend. Plant names may also refer to other plant species in coordinate fashion. Also, some names are evidently borrowed from other languages. Two names of important economic plants, *ax̓* (spiny woodfern) and *gahldaats* (yellow pondlily), have an Athapaskan origin (Gottesfeld 1993). A third term, *ts'ex̓*, (designating a form of juniper/ krumholz conifer growth) is shared with Witsuwit'en and Sekani (Johnson-Gottesfeld and Hargus 1998).

Plant names may reflect utility, such as *am'mel*, 'good for canoe,' the name for



black cottonwood. One of the two alder classes, *amluux*, means 'good for neckring' and refers to the red dye which can be made from alder bark, which was used to dye cedarbark red for ceremonial items such as Secret Society neckrings. The bark of the other named alder category, *giist*, cannot be used for red dye. One of the names of western red cedar, *amh'a'tal*, means 'good for cedar bark', one of the main uses of the cedar tree. The name for western yew, *Taxus brevifolia*, is *haxwdakw* 'bow plant',<sup>24</sup> because of its dense, hard, springy wood, ideally suited to bow construction. Sometimes a sapling sized Rocky mountain juniper, *Juniperus scopulorum*, is also called *sganhaxwdakw* 'bow plant,' because it too was utilized for bow construction. Perhaps allied in concept to utility are the names of the junipers, 'boughs of the supernatural,' or 'supernatural plant.' Juniper can be used for smudges, as well as having other medicinal uses.

Descriptive plant names may indicate form or colour. *Maa'y hagwilhuxw* 'rope-berry' is the term for strawberry bramble, *Rubus pedatus*, a trailing vine with small tart fruit. *Maa'ya gaak* 'crow berry' is the word for black twinberry, which has inedible glossy purple-black fruit. *Gesgsan* 'tree-hair' and *ligimtxgan* 'tree-fur,' referring to black hairlike arboreal lichens, are also clearly named descriptively. The name for soapberry, *is*, means 'urine,' and refers to the foam which develops as the soapberry whip *yal'is* is prepared, which resembles that which develops when a person urinates on the ground. One of the names for birch fungus, *mihlxw*, refers particularly to the appearance of cinder conk, *Inonotus obliquus*, and means 'charred.' The term for the rootstock of *Veratrum viride*, *malgwasxw*, means 'something burnt.' I am uncertain if this refers to the dark colour of the dried rhizome, or to the fact that the rhizomes are commonly burned for purification.

Inedible berries may be named by reference to animals, as in in 'crowberry' above, and the various fruits grouped as 'bear's berries' (*maa'ytwahl smex*).<sup>25</sup> Names of inedible or unused plants may also be metaphoric or refer to legends. *Clintonia uniflora*, Queen's cup, an understory lily which has a single inedible blue berry, has been called by three different names: *hoobixs 'wiigat* 'Wiget's spoon,' a reference to a story in which the legendary trickster/creator figure uses the spatulate leaves as a spoon; *maa'yhl litsxw* 'blue grouse's berry'; and *maaya smex* 'bear's berry.' The inedible and unusual appearing white-fruited snowberry is called *sgantya'ytxw* (E), which means 'thunder plant,' or *maa'ya luulak* (W) 'ghost berry.' The names for mushroom, 'bird hat' or 'penis' (*gayda ts'uuts*) and puffball (*masxwa luulak* 'ghost fart') are metaphoric descriptions. The picturesque name for the nodding onion is *ts'anksa gaak*, translates as 'raven's underarm-odour' (People of Ksan 1980). The name of the lichen species known in English as lungwort (*Lobaria pulmonaria* and *L. linata*) is *gwilalh ganaaw*, 'frog blankets,' conveying the similarity in texture and appearance of the hydrated lichen thallus to the back of a frog or toad. This species was used medicinally. Two large herbs, *Angelica genuflexa* and *Delphinium Brownii* [sic] are reported in Smith (1926) to be named 'frog parsnip.' These are plants which in some wise resemble the important edible and medicinal herb cow parsnip or 'wild rhubarb' (*ha'mook*), but are smaller and not edible. In some sense, this is a type of coordinate naming (see below), naming by reference to another plant, as well as indicating lack of edibility by reference to an animal. However, the cloudberry *Rubus chamaemorus* (People of Ksan 1980), and/or possibly the dewberry, *Rubus pubescens* (Smith 1926) and strawberry

TABLE 6.– Coordinate Names

Gitksan term	English meaning	Scientific Names	Gitksan name	English Name	Scientific Name
<b>hissgant'imi'yt</b>	wintergreens or false box	<i>Pyrola</i> , <i>Orthilia</i> and <i>Chimaphila</i> spp.; <i>Pachystima myrsinites</i>	<b>t'imi'yt</b>	kinnikinnik	<i>Arctostaphylos uva-ursi</i>
<b>hishahldaatsxw</b>	wild calla or water arum	<i>Calla palustris</i>	<b>gahldaats</b>	yellow pond lily	<i>Nuphar polysepalum</i>
<b>hisha'mookxwit</b>	Northern rein orchid	<i>Platanthera hyperborea</i>	<b>ha'mook</b>	cow parsnip	<i>Heracleum lanatum</i>
<b>hisdemktxwt</b>	licorice root fern	<i>Polypodium glycyrrhiza</i>	<b>demkt</b>	inedible fern rhizome	<i>Athyrium felix femina</i> , small <i>Dryopteris</i> , etc.
<b>hismaawintxw</b>	horsetails & scouring rushes	<i>Equisetum arvense</i> , <i>E. variegatum</i> , <i>E. hyemale</i> , and <i>E. sylvaticum</i>	<b>maawin</b>	common scouring rush, meadow horsetail	<i>Equisetum pratense</i> and <i>E. hiemale</i>
<b>hishgamaawin</b>	northern scouring rush & common horsetail	<i>Equisetum variegatum</i> and <i>E. arvense</i>	<b>maawin</b>	common scouring rush, meadow horsetail	<i>Equisetum pratense</i> and <i>E. hiemale</i>
<b>his'waasantxwit</b>	unknown	unknown	<b>'waasan</b>	willow	<i>Salix</i> spp.
<b>hissgank'ots</b>	small Solomon's seal plant	<i>Smilacina trifoliata</i> <sup>1</sup>	<b>k'ots</b>	false Solomon's seal	<i>Smilacina racemosa</i>
from Smith (1926):					
<b>hisleekxwit</b>	sweet cicely & goat's beard	<i>Osmorrhiza</i> sp. and (probably) <i>Aruncus sylvestris</i>	<b>leek</b>	spreading dogbane	<i>Apocynum androsimaefolium</i>
<b>hisk'aawtsit</b>	heal all	<i>Prunella vulgaris</i>	<b>k'aawts</b>	lupine	<i>Lupinus arcticus</i>
<b>hissgant'imi'yt</b>	false box	<i>Pachystima myrsinites</i>	<b>t'imi'yt</b>	kinnikinnik	<i>Arctostaphylos uva-ursi</i>
<b>hisnisko'otxwit</b>	white geranium	<i>Geranium richardsonii</i>	<b>nisko'o</b>	thimbleberry	<i>Rubus parviflorus</i>
<b>hishaawakxwit</b>	yellow mountain avens	<i>Dryas drummondii</i>	<b>haawak</b>	birch	<i>Betula papyrifera</i>
<b>hishaastxwit</b>	agrimony	<i>Agrimonia gyrosepala</i>	<b>haast</b>	fireweed	<i>Epilobium angustifolium</i>
<b>hishabasxwit</b>	harebell	<i>Campanula rotundifolia</i>	<b>habasxw</b>	grass or hay	Gramineae, Cyperaceae etc.
<b>hishinakxwit</b>	one-flowered rein orchid	<i>Habenaria obtusata</i>	<b>hinak</b>	skunk cabbage	<i>Lysichiton americanum</i>
<b>hissgank'ots</b>	star flowered Solomon's seal	<i>Smilacina stellata</i>	<b>k'ots</b>	false Solomon's seal	<i>Smilacina racemosa</i>
<b>hismaawintxw</b>	"branched horsetail rush"	<i>Equisetum arvense</i> ?	<b>maawin</b>	"horsetail rush"	<i>Equisetum hyemale</i> (?)
<b>hishanthoot</b> <sup>2</sup>	hardhack, spiraea	<i>Spiraea douglasii</i> var. <i>menziesii</i>	<b>?</b>	unknown	

<sup>1</sup> This identification was made by Art Mathews from a photograph in Plants of Northern British Columbia and appears in Mathews n.d.<sup>2</sup> This spelling has not been changed to modern orthography as I am not certain of the word.

bramble, *Rubus pedatus*, which have been called '*miiganaa'w* (frogberry), may be an exception to this generalization. None of these types of berry is large or abundant, and the cloudberry grows in wetlands, which might be metaphorically associated with frogs, but they are edible and palatable berries.

Names may also be given in reference to other plants, as in the common practice of calling something *his*\_\_\_ 'resembling \_\_\_,' as in *hisgant'imi'yt* 'resembling kinnikinnick.' Table 6 shows five such present day names and ten collected by Smith in the 1920s. Three of Smith's terms are the same as terms collected in the 1980s and 1990s. I have interpreted these terms as coordinate (Hunn and French 1984), or as peripheral members of a loose grouping named in reference to a specific prototype, usually a plant which is either more salient or of higher utility. Some descriptive terms or 'resembling' names may be more spontaneous inventions and may not be stable names.<sup>26</sup> The temporal stability of such terms, or their use by consultants from different families or villages can serve as indications these terms can be taken as names.

Lending credence to the reality of *his*\_\_\_ names is the fact that not all plants are instantly dubbed with such terms; some plants are said to have no name. Often these are plants which have not been noticed by the consultant prior to questioning, although they certainly occur in the region. Table 7 lists 13 plant species presented to Gitksan consultants which were not named. Harlan Smith (n.d.) reports a number of plants, usually small herbaceous forms, which were said to

TABLE 7.— Plants Unnamed in Gitksan

English Name	Scientific Name	Consultant
alpine willow	<i>Salix arcticus</i> ssp. <i>crassujulis</i>	OR
rattlesnake plantain	<i>Goodyera oblongifolia</i>	OR, DG
northern bedstraw	<i>Galium boreale</i>	OR
sweet cicely	<i>Osmorhiza</i> sp.	OR, DG
heartleaved twayblade	<i>Listera cordata</i>	OR
river beauty	<i>Epilobium latifolium</i>	OR
wild mint <sup>1</sup>	<i>Mentha arvensis</i>	OR, DG?, PM
alpine clubmoss	<i>Lycopodium</i> cf. <i>sitchense</i>	DG
fir clubmoss <sup>2</sup>	<i>Huperzia selago</i>	DG
one-sided wintergreen	<i>Orthilia secunda</i>	DG
green wintergreen	<i>Pyrola chlorantha</i>	OR
Prince's pine <sup>3</sup>	<i>Chimaphila umbellata</i>	OR
oak fern	<i>Gymnocarpium dryopteris</i>	OR

<sup>1</sup> DG's first reaction was to begin talking about *isxumsgan'isxw*, 'smelly plant'? *Valeriana sitchensis*. He seemed confused when I said the specimen was mint.

<sup>2</sup> Fir clubmoss was lumped with moss by OR, and likened to *xaadax* by DG, who did not give it a name.

<sup>3</sup> This was called *hisgant'imi'yt* by DG.

TABLE 8.—Plants Said to Have No Name by Harlan Smith's Consultants, 1925-1926 (Smith 1926)

English Name	Latin Name
northern bedstraw	<i>Galium boreale</i>
twinflower	<i>Linnea borealis</i>
aster	<i>Aster junceus</i> Ait.*
daisy fleabane	<i>Erigeron philadelphicus</i>
goldenrod	<i>Solidago canadensis</i> var. <i>subserrata</i>
arnica	<i>Arnica cordifolia</i>
ragwort	<i>Senecio cymbalarioides</i>
ragwort	<i>Senecio balsamitae</i> Muhl.*
rosy pussy toes	<i>Antennaria rosea</i>
wooly thistle	<i>Cirsium (Carduus) undulatum</i> (Nutt.) Spreng *
hawksbeard	<i>Crepis elegans</i>
yellow rattle	<i>Rhinanthus crista-galli</i>
penstemon, turtlehead	<i>Nothochelone nemorosa</i>
blue-eyed mary	<i>Collinsia parviflora</i>
blue-bells	<i>Mertensia paniculata</i>
gilia	<i>Gilia linariis</i>
gilia	<i>Gilia gracilis</i>
showy Jacob's ladder	<i>Polemonium pulcherrimum</i>
buckbean, bogbean	<i>Menyanthes trifoliata</i>
pacific starflower	<i>Trientalis arctica</i> *
Indian Pipe	<i>Monotropa uniflora</i>
pink wintergreen	<i>Pyrola asarifolia</i>
Prince's pine	<i>Chimaphila umbellata</i>
silverweed	<i>Potentilla viridescens</i> Rydb. *
saxifrage	<i>Saxifraga tricuspidata</i> (probably <i>S. bronchialis</i> )
grass-of-parnassus	<i>Parnassia fimbriata</i>
marsh grass-of-parnassus	<i>Parnassia palustris</i>
ball mustard	<i>Neslia paniculata</i> (L.) Desv. *
draba	<i>Draba lutea</i> Gilib. *
rock cress	<i>Arabis hirsuta</i> (L.) Scopt. *
wormseed mustard	<i>Erysium cheiranthoides</i> L. *
creeping buttercup	<i>Ranunculus repens</i> L.
violet	<i>Viola canadensis</i>
violet	<i>Viola adunca</i>
northern geranium	<i>Geranium erianthum</i>
alpine milk vetch	<i>Astragalus alpinus</i>
field crazy weed	<i>Oxytropis monticola</i> *
birdfoot clover	<i>Hosackia denticulata</i> *

\* Scientific names may be obsolete or misapplied

have no name (Table 8). Other plants are recognized by the consultant, but he or she cannot remember what it is called. These are considered to have names, although in some cases the name can no longer be recorded because no one recalls what it is.<sup>27</sup>

Subtypes of moss are called by their place of growth, as *umhlw minhl gan* 'moss beneath the trees' or *umhlxum yip* 'moss-on-soil,' differentiated from the prototypical *umhlw* which grows in swamps. A subtype of 'grass' (*habasxum t'ax*) is also named by habitat: it is 'lake grass.' I am not certain if these constitute true names or are simply spontaneous coinages, although the term *habasxum t'ax* for cattails was given by two different consultants.

Not included in Table 1 or subsequent tables are a handful of terms of recent origin which refer to cultivated plants. After the penetration of their territories by traders and missionaries, the Gitksan learned about and learned to cultivate common garden vegetables such as carrots, potatoes, turnips, cabbages, and rhubarb. The terms for these new plants are almost all borrowed from European languages, usually English, sometimes through Chinook jargon, the regional trade argot of the nineteenth and early twentieth centuries. These forms include *k'awts* (carrots), *sgusiit* (potatoes, from 'good seed'), *selali* (celery), *sganapils* (apple tree), *maaxwsxwa k'awts* (parsnip, 'white carrot'), and *kaabits* (cabbage). The derivation of *k'inuu*, turnips, is not obvious, and lettuce is simply called *yens* 'leaves.'<sup>28</sup>

In contrast to other groups such as the Sahaptin (Hunn and French 1984) or the Tobelo (Taylor 1990:22), the Gitksan do not seem very concerned with whether a designation is a true name or just something a thing is called.<sup>29</sup> A core of terms are very stable, exhibiting little temporal or geographic variation. Another grouping exhibits only the generalized phonological variation between eastern and western dialects (indicated on Table 1 by (E) and (W)). Other terms are more variable. Generally these refer to smaller, herbaceous plants which may be little or unutilized, though perhaps common or widespread, such as Queen's cup, discussed above, for which three distinct names were collected in the course of my fieldwork; one of the three terms, *hoobixs Wiiget* (W), was in use seventy years ago in Gitwingax when Harlan Smith did his field work.

#### RELATIONSHIP OF PLANT GROUPINGS TO UTILITY AND PLANT PATRONS

The Gitksan have several terms which describe the parts of plants. These are listed in Table 9. Trees have wood (*gan*) and bark (*maas*). Coniferous trees, and the shrubby juniper species, have boughs/needles designated by *laxs*. Horsetails and clubmosses have small simple needle like or rather obscure leaves, which can be called *laxs* like conifer needles. In contrast, herbaceous plants and deciduous trees and shrubs have leaves, *yens* (W)/*yans* (E). Conifers have hard dry cones, *meek*; one deciduous tree genus, *Alnus*, also has woody catkins that are called *meek*. Fleshy fruits of angiosperms are called 'berry.'<sup>30</sup> Ferns, horsetails, and clubmosses lack both *maa'y* and *meek*.<sup>31</sup>

Plants in general, both herbaceous and woody, have roots, *wis*. Plants also have a plant body, designated at least for intermediate sized to small perennial plants by *sgan*. This term seems to connote stem or supporting structure (Compton



TABLE 9.— Plant Organs or 'Partons' and Associated Plant Groups

Gitksan term	English meaning	Associated Plant Groups
<b>gan</b>	wood	<b>gan</b> , 'trees'
<b>gult</b>	dry conifer needles	coniferous trees
<b>hlagant</b>	stem	<b>sgan</b> , 'plants'
<b>laxs</b>	conifer bough or needles	coniferous trees; clubmosses and horsetails
<b>maas</b>	bark	<b>gan</b> , 'trees'; <b>sgan</b> , 'plants' (part)
<b>maa'y</b>	berry or fruit	<b>maa'y</b> , 'berries'; <b>sgan</b> , 'plants' (part)
<b>majagalee</b>	flower	<b>majagalee</b> , 'flowers'; <b>sgan</b> , 'plants' (part)
<b>meek</b>	cone	coniferous trees (and alder)
<b>sgan</b>	pitch	coniferous trees
<b>wiis</b>	root	<b>gan</b> , 'trees'; C; ? <b>majagalee</b> , 'flowers'
<b>'yens (W) / 'yans (E)</b>	leaf	<b>gan</b> , 'trees' (part); <b>gan</b> , 'trees'; <b>'yens</b> , 'leaves'
<b>hla'ushl 'waasen</b>	willow catkin	willows
<b>binaakt</b>	thorns	some <b>sgan</b> , 'plants'
<b>siiswgit</b>	thorns	some <b>sgan</b> , 'plants'

et al. 1997), though by extension, it includes the entire plant. There is also a word which specifies stem, *hlagandit*. Grasses, in contrast, lack large fleshy or woody roots, and lack (in general) obvious erect stems or broad, discrete leaves. The below-ground part of grasses may be referred to as *miinyip* or *miinhabasxw* 'under ground' or 'under grass.' Mosses contrast with other plants in lacking evident roots and stems, and in having extremely small and simple leaves.

Plants, particularly angiospermous shrubs and herbs, may also possess flowers, *majagalee*. This term both signifies the plant organ (as a rose flower), and serves as a catchall term for plants which are not perceptually salient except for their flowers. Flower here is intended in the folk sense of a relatively large, brightly coloured, often scented, reproductive organ or inflorescence, and does not include the inflorescences of grasses or sedges, nor the catkins of trees and shrubs in the Salicaceae and Betulaceae. The catkins of willows can be called *hla ushl 'waasen* (Mathews n.d.)

These terms define fundamental aspects of plant appearance and properties; by extension, presence or absence of parts influences the potential utility of plants. Trees, *gan*, are defined by wood (*gan*), a polysemous situation reported for the Montagnais (Clément 1995) and many other groups (Brown 1984, 1991). The utility of wood, for technology, construction and, important in a northern latitude, fuel, is significant, and pervasive. Trees also have *maas* 'bark' and *wis* 'large woody roots,' which are used both for medicine and technology. A class of medicines whose main ingredients are barks of trees and large shrubs is *haldowkumgan*, translated as 'wood medicine.' The edible inner bark *k'anix* of several tree species was important for food. In addition, trees form the predominant vegetative cover, aggregated as forest.

The loose "plant" grouping, in contrast, is not tidily defined by partons. Plants do have a plant body, cf. 'stem' (*sgan*). This varies from woody perennial stems with well developed and usable bark (e.g. *Sambucus racemosa*) to weak and thin perennial or biennial stems and leaves (e.g. the various species of *Rubus*), to the



prostrate stems and leaves of evergreen subshrubs (e.g., kinnikinnick, *Arctostaphylos uva-ursi*), or simply petioles and leaves and runners of perennial herbs such as bunchberry, *Cornus canadensis*. They also possess leaves, '*yens*', usually relatively large, and often possess fleshy edible (or sometimes inedible) fruits, *maa'y*. Both trees and "plants" have roots, *wis*, which may be useful for technology or medicine. I am uncertain if rhizomes such as those of the yellow pond lily are called *wis* along with true roots.<sup>32</sup>

The "berry" grouping, which is obviously defined by possession of (edible) fleshy fruits, "berries" (*maa'y*), overlaps substantially with the "plant" grouping. Berries are seen as a key identifying character of plants which are not trees; edibility or inedibility of the berries is of high cultural significance, given the paucity of other types of carbohydrate foods. Inedible "berry" types may be marginal to the grouping, and be more properly considered as "plants" (*sgan*).

The residual groupings of herbaceous plants, '*yens*' and *majagalee* are obviously defined by characteristic partons: prominent leaves with no woody stem, and conspicuous flowers, also without woody stem. They also seem to be defined by disutility.<sup>33</sup>

More problematic is the graminoid *habasxw* group. The term *habasxw* also means 'covering' (Rigsby, personal communication 1996).<sup>34</sup> Rigsby feels the term carries more the sense of the graminoid growth form than of a specific plant structure. The group *umhlw* is similar in that the group is simply called "moss," which is not a term for a part of a plant, but a type of plant or growth form.

Fungi in some sense resemble "leaves" and "flowers" in being a residual grouping, but the plant parton in this case is essentially the entire visible structure, which is the fungal fruiting body, either a fleshy mushroom or a woody bracket fungus or "conk." The group name *gaydats'uuts'* is a metaphoric descriptive term for a typical mushroom.

## SUMMARY AND CONCLUSIONS

Gitksan plant classification differs from scientific taxonomy in being of shallow hierarchy, in having overlapping and at least partially utilitarian major plant groupings or "life forms", and in lack of focus on reproductive parts of plants to indicate true relationships. It is similar to other indigenous classification schemes documented for northwestern and northern North America. As in other documented ethnobotanical taxonomies in this region, vines are not a life form, where berry/fruit plants, mosses, and fungi are recognized life forms (e.g. Compton 1993; Gottesfeld 1993; Johnson-Gottesfeld and Hargus 1998; Turner 1974, 1987, 1989; Turner et al. 1990). In common with many other folk taxonomies, small and perceptually less salient forms such as mosses, fungi, lichens, and graminoid plants are underdifferentiated in comparison to Western scientific taxonomy (Atran 1985: 300; Berlin 1992: 25, 60-61). This results in so called "empty life forms", which are taxonomically diverse groups (in scientific classification) of ecological importance and distinctive habit, but which contain few or no named subdivisions in the indigenous taxonomy (Turner 1974). As Brown (1985) found in the classification systems of other foraging cultures, binomial terms and subgeneric taxa are very weakly developed in Gitksan plant classification.

The Gitksan classification system is not a unified abstract whole, but a mixture of partial classifications built for different purposes and using diverse criteria, prominently including utility. Morphology, as in all ethnobiological classification systems, is a fundamental basis of classification. Utility, as Clément (1995) has pointed out, bears a relationship to plant partons, which create morphological differences between plant types that make them suitable for different uses. Morphology and utility are thus intertwined. Symbolic and ecological characters clearly also have a role in Gitksan plant classification.

Naming among the Gitksan includes the use of animal terms and mythological references to indicate disutility or inedibility. The naming of plants by reference to other plants, usually with the term *his-*, stands out, and recalls coordinate naming by the Sahaptin (Hunn and French 1984) and Wet'suwet'en (Gottesfeld 1993 and Johnson-Gottesfeld and Hargus 1998). Some names are also directly utilitarian ('good for canoe,' 'wiping plant'). Unlike some groups, the Gitksan do not seem overly concerned with true names; more to the point is "what they call it." Many plants, especially herbaceous and weedy forms, are unnamed, and others are referred to in very broad "catch-all" categories. The few terms for cultivated plants (as one might anticipate), are apparent European borrowings. Binomial names in the classic sense, are extremely rare.

I would like to close with a brief consideration of emic views of classification. In the course of 1996 field work, two Gitksan speakers I worked with expressed discomfort with the whole orientation of this project. One consultant commented that it was difficult to render the meaning of the term *sgan* in English, that English terms like tree and shrub didn't really have the same connotation. She then tried to express how this term for her encompassed many aspects of the relationship of plants to the cycle of the year, to the bearing of fruit.

The second consultant expressed dissatisfaction with the way that English always wanted to divide things into boxes. She commented, "Why do outside people have to put things in boxes—the way we think there's a time for all these [plants] and they're all linked together. These little plants have a purpose, to help the other ones grow" (S. Howard notes 9/14/96.) For her, the appropriate way to look at plants was to see them in relationship. She said:

Life cycle—the cycle continues. Plants start growing, leaves open. Trees first. It feeds the animals. The cycle continues. Then salmon comes. In the fall are the animals. That's how the life cycle continues. There's a certain time for something which helps sustain the life of another being, and that's where the chain link comes in. You have to preserve the link. If you ever destroy that link, then the rest is destroyed (S. Howard 9/14/96.)

## NOTES

<sup>1</sup> Names and/or scientific identifications were sought for all species mentioned by people or noted by people in the course of field trips, and for some species I collected in the course of fieldwork which I had no previous indication were named or used, such as several species of wild orchids, sedge, and grasses. The extent of some classes was probed by bringing several related botanical species to experts for naming, as, for example the various species of *Equisetum*. In addition, fieldwork in 1996 was directed at clarifying some questions regarding classification which had arisen in the course of preliminary analysis of Gitksan plant classification.

<sup>2</sup> Gitksan words in this article are spelled in the practical orthography used by the Gitksan dictionary committee. There are two dialects, the upstream or eastern dialect, and the downstream or western dialect, which differ somewhat in spelling. Where both spellings are given for a single word, I have indicated dialect with E or W. The spelling of "Gitksan" actually differs between the dialects, being best rendered Gitksan for the eastern dialect, and Gitksen for the western. Therefore, I have retained the standard spelling "Gitksan" for the people and language in this work.

In the Gitksan orthography, underlined stops and fricatives indicate velar sounds as opposed to palatal sounds. /g/ (voiced stop) /k/ (voiceless stop) and /x/ (fricative) can exist as both velar and palatal variants. *hl* indicates a lateral fricative. Glottalized consonants (m, w, y) are written with ' , as 'm, 'y or 'w. Glottal stops are indicated with '. Ejectives are written with the ' after the consonant or digraph, as in *ts'ilasxw*. Spellings have been checked by Bruce Rigsby, University of Queensland, and Art Mathews Jr. of the Gitksan Dictionary Committee. Any errors that remain are my own.

<sup>3</sup> One anonymous reviewer points out, however, that coral root *Corallorhiza* spp., and Indian pipe *Monotropa uniflora* and similar saprophytic vascular plants do have somewhat similar appearance and ecology to macrofungi.

<sup>4</sup> Modern classification schemata often include five Kingdoms: Plantae, Animalia, Fungi, Protista (unicellular eucaryotic organisms) and Monera (procaryotic organisms including blue green algae and various groups of bacteria) (cf. Curtis 1983: 385; Barrett et al. 1986: 1069-1074).

<sup>5</sup> "Berry" is used here in the popular sense of small fruits. Morphologically, the fruits utilized by the Gitksan include drupes, pomes, berries, and aggregate fruit, as well as one aberrant example of a spheroidal coloured fleshy leaf.

<sup>6</sup> A complete listing of Gitksan, English, and scientific names, with authorities, is given in Table 1.

<sup>7</sup> Art Mathews Jr. mentioned the name *gaanaxws* of the moss or liverwort and related it to a locality called *Wilp Gaanaxws* on his traditional territory which was named after it because it is abundant in that area. He offered an identification as a leafy liverwort based on an illustration in Plants of Northern British Columbia (MacKinnon et al. 1992) and also thought it resembled a picture of a *Dicranum* with falcate second leaves.

<sup>8</sup> Interestingly, the type pointed out to me by this name, *Lycoperdon* sp., bears a Latin name which also alludes to an uncanny character and metaphoric farting; the generic name translates as 'wolf fart.' The smokelike puff of spores that ejects out of a pore in the top of a ripe fruiting body when squeezed or stepped on is the 'fart' described in the names.

<sup>9</sup> In 1996, Art Mathews indicated that dandelion was called *baxbok* in the Eastern dialect area, although the Western dialect apparently lacks a name for it. Smith's consultant was from Gitw'ingax in the Western dialect area.

<sup>10</sup> "*Huwehl gangan, 'yens ganhl majagalee*" (western dialect), Gitxsanimx - Gitxsanimax to English Dictionary, Learner's Edition, Volume 1 by the Aboriginal Education Branch, British Columbia Ministry of Education, Gitksan Wet'suwet'en Education Society School District #88, Sim'algyax Working Group, n.d.

<sup>11</sup> The plants I specifically asked about were yellow pondlily, riceroot lily, cow parsnip, Queen's cup, devil's club, yarrow/everlasting, red osier dogwood, water arum, Sitka valerian, moss, grass/hay, and stonecrop. Art Mathews Jr. added fireweed to the list, and suggested one only says *sgan haast* when it is necessary to clarify that one is referring to a plant (floral form) rather than a dog (animal) when speaking to Coast Tsimshian people. Dog *aas*, is similar to fireweed *haast* in Coast Tsimshian, where they are unambiguous about Gitksen.

<sup>12</sup> This similarity is also recognized in England, where 'osier' means willow; both shoots of true willow and the red osier are used for willow basketry (wickerwork).

<sup>13</sup> The name means 'covers to the hips/groin' and presumably indicates the general stature of the plant.

<sup>14</sup> Several other lichen names given in Art Mathews n.d. probably belong in this intermediate. I have not included these groups in the present paper because the extension and identity of their referents have not been checked, nor have field specimens been obtained for technical determination. Mathews lists *ges 'wiiget* as *Bryoria lanestrus*, *hla'yimkhl gan* as *Alectoria sarmentosa* and *hla'anisihl sginist* as *Usnea lapponica*. He based his identifications on pictures in Plants of Northern British Columbia (MacKinnon et al. 1992).

<sup>15</sup> The term *gadimis* is a possible exception; it is a term denoting a less preferred form of the black huckleberry, *Vaccinium membranaceum*. The name is not related linguistically to *simmaa'y*, 'real berry,' which applies to the species in general, and to the preferred large, dark bronze fruited form. The difficulty is deciding if the term is best considered a second generic, or whether it is a specific or some other type of subdivision (see discussion of growth phases and sex phases of animals in Clément 1995). An exception which overgeneralizes is the typical inclusion of both *Picea* x Roche and *Picea mariana* in *seeks*, though recognition of different species of spruce in the Skeena Valley, where at least *Picea sitchensis*, *P. engelmanni*, and *P. glauca* hybridize and intergrade, is arbitrary at best.

<sup>16</sup> "As there are two plants called by this name, this one [*Castilleja miniata*] is called short, the other...[*Aquilegia formosa*] tall" (Smith 1926: 181). Smith (1986) reports two medicinal uses for *Castilleja*: a decoction of the whole plant for "nose bleed, bleeding, stiff lungs, bad eyes, and lame back, possibly caused by kidney trouble," and a decoction used for cough.



<sup>17</sup> The smaller species *S. stellata* was named in coordination to *S. racemosa* by Smith's informant in 1926 (see Table 6) and was called *hissgank'ots*.

<sup>18</sup> However, *amk'ooxst* means "aspen," while *k'ooxst* means "maple." Another exception is *am'mel*, which means "cottonwood," but '*mel*' means 'canoe.'

<sup>19</sup> A related problem occurs when different consultants, speaking different dialects, give the same term for two unrelated botanical species. This occurred with the use of *sgantya'utxw*(E)/*sgantye'txw*(W) for snowberry, *Symphoricarpos albus*, and fool's huckleberry, *Menziesia ferruginea*. Possibly the name 'thunder plant' is a "catchall" term uniting several shrubs which have *næ*edible berries.

<sup>20</sup> Although it is tempting to think that the names may correlate with the two botanical species, most of the time people are thinking only of *Juniperus communis*, which is far more widely distributed, and is the species I have observed being collected for medicine. The elders who first gave the two Gitksan terms and discussed their contrasting uses were from Git-anmaaxs and Gisbayakws, where there is no *Juniperus scopulorum* nearby. However, the occurrence of the *ts'ex* form in the unrelated Athapaskan language Witsuwit'en, where it seems to indicate conifers of scrubby or krumholz growth form (Johnson-Gottesfeld and Hargus 1998), does confuse the issue.

<sup>21</sup> '*Waasenl'waasan*' apparently does not apply to the perennial montane prostrate willows, also botanically placed in the genus *Salix* (Olive Ryan interview transcript 7/25/95). Olive Ryan did not apply any name to a specimen of the prostrate alpine willow *Salix arctica* ssp. *crassujulis*, although she readily named a leafy sprig of *Salix scouleriana*, the common tree size willow of upland sites in that area.

<sup>22</sup> Dr. Jim Pojar of the British Columbia Forest Service gave an estimate of 900-1000 vascular plant species for the Bulkley River drainage for that work (personal communication 1997). As vascular plant diversity is similar for the adjacent Gitksan territories, a figure of 1000 vascular plant species present in the local flora is a reasonable working hypothesis.

<sup>23</sup> The elders were David Green, the late Olive Ryan, Pete Muldoe, the late Jeff Harris Sr., and a somewhat younger but very knowledgeable man, Art Mathews Jr. (Dinim Gyet), whose recently deceased father knew a great deal and also contributed to this project. The terms are *gaanaxws*, *gadimis*, *gesgan*, *hisgahldaatsxw*, *hlit*, *isxum sgan'isxw*, *ligimtxgan*, *maa'yhl litsxw*, *maa'yim hagwilhuxw*, *maa'y welgan*, *maa'ya luulak'*, and the descriptive phrases *umhlxum yip* and *umhlxum miinhl gan*.

<sup>24</sup> This name was also given by Pet Muldoe to the short tree sized juniper *Juniperus scopulorum*; he said that slender young trees were used for bow construction. The late Olive Ryan in 1996 also provided this name for a photograph of a tree sized Rocky Mountain Juniper.

<sup>25</sup> Gottesfeld (1993) and Johnson-Gottesfeld and Hargus (1998) discuss this phenomenon for the Wet'suwet'en and other northwest Coast groups. Compton (1993) also mentions this phenomenon.

<sup>26</sup> For example, Olive Ryan described false box (*Pachystima myrsinites*) as "waxberry" (*t'imi'yt*), but mentioned that the real kind has berries. Other consultants have called it *hissgant'imi'yt*.



<sup>27</sup> An interesting case is presented by *Arnica cordifolia*, heart-leaved arnica, an indigenous plant which has a medicinal use, but which was simply called, in English "sunflower" and no Gitksan name was offered.

<sup>28</sup> These forms were provided by Art Mathews Jr., though my orthography is slightly different.

<sup>29</sup> Possibly Gitksan people are comfortable with multiple names of different formality applying to plants, because people, too, have various names depending on context and circumstance. Now, of course, people have legal English names which are registered with the government. Traditional Gitksan names include a series of names of different status and rank which a person may hold in the course of his or her lifetime. An adult of high status may hold more than one chiefly name and one or more *naxnok* names at the same time. These names are passed on separately in the lineage group. In addition, many people have nicknames by which they may be called for most of their lives; I believe this practice antedates the introduction of European Christian names and surnames, and may have leant some consistency of reference to individual people as they assumed a series of different names throughout their lives.

<sup>30</sup> The fruits of all local species of angiosperms are relatively small and berry-like, although botanically they include a diversity of fruit types. In addition there are, of course, various dry capsules and legumes, which do not seem to be named in *sim'algyax*.

<sup>31</sup> This is reflected in the popular naturalist's term in English "ferns and fern allies" for vascular plants that produce spores, although the groups so included are diverse groups of very distant relationship and distinct morphology which are distinguishable in the Carboniferous Period of the Paleozoic and have been distinct for more than 300 million years.

<sup>32</sup> When asked directly if one could call the rhizome of yellow pond lily, or Indian hellebore *wis*, several consultants replied that they could not, and on one occasion suggested that one could use the term for these rhizomes (interview notes 1996).

<sup>33</sup> I am uncertain if named flowers of some utility, such as the peavines, *hagingasx* 'wiping plant,' belong in this group. The use of *'yens* to designate lettuce might also be mentioned here.

<sup>34</sup> *Habasxw* is an antipassive nominalisation (a noun) of the verbal root /hap-/ "to cover," "covering (n.), what covers" (Rigsby, personal communication 1996-1997).

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