

### The Effect of Humus Type, Soil Nutrition, and Soil Moisture on the Occurrence of Selected Species

<b>Plant Habit</b>	<b>Mor Humus</b> (Strongly acidic, poor nutrition, poor drainage, moist to wet sites)	<b>Moder Humus</b> (Moderately acidic, medium nutrition, good drainage, semi-moist to dry sites)	<b>Mull Humus</b> (Slightly acid to neutral, good nutrition, variable drainage, moist to semi-dry sites)
Trees	Amabilis fir ( <i>Abies amabilis</i> ) Shore pine ( <i>Pinus contorta</i> ) Western hemlock ( <i>Tsuga heterophylla</i> )	Arbutus ( <i>Arbutus menziesii</i> ) Garry oak ( <i>Quercus garryana</i> ) Douglas-fir ( <i>Pseudotsuga menziesii</i> ) Shore pine ( <i>Pinus contorta</i> ) Grand fir ( <i>Abies grandis</i> )	Bigleaf maple ( <i>Acer macrophyllum</i> ) Garry oak ( <i>Quercus garryana</i> ) Red alder ( <i>Alnus rubra</i> ) Western redcedar ( <i>Tsuga heterophylla</i> )
Shrubs	Falsebox ( <i>Pachistima myrsinites</i> ) Hairy Manzanita ( <i>Arctostaphylos columbiana</i> ) Huckleberries/blueberries ( <i>Vaccinium</i> spp.) Kinnickinnik ( <i>Actostaphylos uva-ursi</i> ) Salal ( <i>Gaultheria shallon</i> ) Sweet gale ( <i>Myrica gale</i> )	Baldhip rose ( <i>Rosa gymnocarpa</i> ) Dull Oregon-grape ( <i>Mahonia nervosa</i> ) Orange honeysuckle ( <i>Lonicera ciliosa</i> ) Oceanspray ( <i>Holodiscus discolor</i> ) Saskatoon ( <i>Amelanchier alnifolia</i> ) Salal ( <i>Gaultheria shallon</i> )	Douglas maple ( <i>Acer glabrum</i> ) Indian-plum ( <i>Oemleria cerasiformis</i> ) Nootka rose ( <i>Rosa nutkana</i> ) Red elderberry ( <i>Sambucus racemosa</i> ) Salmonberry ( <i>Rubus spectabilis</i> ) Snowberry ( <i>Symphoricarpos albus</i> ) Tall Oregon-grape ( <i>Mahonia aquifolium</i> ) Thimbleberry ( <i>Rubus parviflorus</i> ) Vine maple ( <i>Acer circinatum</i> )
Forbs	Broad-leaved stonecrop ( <i>Sedum spathulifolium</i> ) Queen's cup ( <i>Clintonia uniflora</i> ) Bunchberry ( <i>Cornus canadensis</i> ) Twinflower ( <i>Linnaea borealis</i> )	Blue-eyed Mary ( <i>Collinsia</i> spp.) Common camas ( <i>Camassia quamash</i> ) Desert-parsley, Spring Gold ( <i>Lomatium</i> spp.) Hooker's & Nodding onion ( <i>Allium</i> spp.) Pearly everlasting ( <i>Anaphalis margaritacea</i> ) Satinflower ( <i>Olsynium douglasii</i> ) White fawn lily ( <i>Erythronium oregonum</i> ) Woolly sunflower ( <i>Eriophyllum lanatum</i> ) Yarrow ( <i>Achillea millifolium</i> )	Bleeding-heart ( <i>Dicentra formosa</i> ) Chocolate lily ( <i>Fritillaria lanceolata</i> ) Common and Great camas ( <i>Camassia quamash</i> , <i>C. leichtlinii</i> ) False lily-of-the-valley ( <i>Maianthemum dilatatum</i> ) Foam flowers (3 spp.) ( <i>Tiarella</i> spp.) Large-leaved avens ( <i>Geum macrophyllum</i> ) Pacific sanicle ( <i>Sanicula crassicaulis</i> ) Piggy-back plant ( <i>Tolmiea menziesii</i> ) Red columbine ( <i>Aquilegia formosa</i> ) Shootingstars ( <i>Dodecatheon</i> spp.) Tall fringe-cup ( <i>Tellima grandiflora</i> ) Vanilla-leaf ( <i>Achlys triphylla</i> ) Wild ginger ( <i>Asarum caudatum</i> )

Environmental factors and their influence on species selection and site design. John Dick, GOERT Native Plant Propagation Subcommittee

			Wood sorrel ( <i>Oxalis oregana</i> )
Grasses	Western fescue ( <i>Festuca idahoensis</i> )	Idaho fescue ( <i>Festuca idahoensis</i> ) Roemer's fescue ( <i>F. roemeri</i> ) California oatgrass ( <i>Danthonia californica</i> )	Columbia brome ( <i>Bromus vulgaris</i> ) Tufted hairgrass ( <i>Deschampsia cespitosa</i> ) Blue wildrye ( <i>Elymus glaucus</i> )
Ferns	Deer fern ( <i>Blechnum spicant</i> )	Lady fern ( <i>Athyrium felix-femina</i> ) Swordfern ( <i>Polystichum munitum</i> )	Maidenhair fern ( <i>Adiantum pedatum</i> ) Oak fern ( <i>Gymnocarpium dryopteris</i> ) Swordfern ( <i>Polystichum munitum</i> )

Source: Klinka, K, V.J. Krajina, A. Ceska, A. Scagel. 1995. Indicator Plants of Coastal British Columbia. UBC Press, Vancouver