

Selecting tree species based on site characteristics

0 to 1	not tolerant
> 1 to 2	
> 2 to 3	intermediate tolerance
> 3 to 4	
> 4 to 5	most tolerant

Broadleaf species			Growing tolerances/preferences			
Enw Cymraeg	English name	Latin name	Shade tolerance	Drought tolerance	Waterlogging tolerance	UK Native
Llarwydden Ewrop	Alder	<i>Alnus glutinosa</i>	2.7	2.2	3.9	Yes
Onnen	Ash	<i>Fraxinus excelsior</i>	2.7	2.5	2.7	Yes
Aethnen	Aspen	<i>Populus tremula</i>	2.2	2.9	2.1	Yes
Helygen Bêr	Bay Willow	<i>Salix pentandra</i>	1.9	0.5	4.0	Yes
Ffawyddden	Beech	<i>Fagus sylvatica</i>	4.6	2.4	1.0	Yes*
Coeden Geirios Yr Adar	Bird Cherry	<i>Prunus padus</i>	3.3	1.9	3.2	Yes
Gwyddfif	Black berried honeysuckle	<i>Lonicera nigra</i>	3.8	3.0	2.5	No
Poplysen Ddu	Black Poplar	<i>Populus nigra</i>	2.5	2.2	3.7	Yes
Draenen Ddu	Blackthorn	<i>Prunus spinosa</i>	1.9	3.5	1.7	Yes
Banhadlen Ddu	Common broom	<i>Cytisus scoparius</i>	1.2	3.5	1.0	Yes
Eithinen Ffrengig	Common Gorse	<i>Ulex europaeus</i>	1.9	3.0	1.8	Yes
Draenen Wen	Common Hawthorn	<i>Crataegus monogyna agg.</i>	1.9	3.5	1.7	Yes
Coeden Ellyg	Common pear	<i>Pyrus communis</i>	2.7	2.7	1.2	Yes
Coeden Afalau Surion	Crab Apple	<i>Malus sylvestris</i>	2.3	3.2	1.7	Yes
Helygen Frau	Crack Willow	<i>Salix fragilis</i>	1.4	1.2	3.9	Yes

* Not necessarily native to Wales.



Enw Cymraeg	English name	Latin name	Shade tolerance	Drought tolerance	Waterlogging tolerance	UK Native
Bedwen Lwyd	Downy Birch	<i>Betula pubescens</i>	1.9	1.3	3.0	Yes
Ysgawen	Elder	<i>Sambucus nigra</i>	2.3	3.0	1.7	Yes
Llwyfen Lloegr, Llwyfen Fanddail	English Elm, Small leaved Elm	<i>Ulmus minor</i>	3.4	3.4	2.1	No
Masarnen Fach	Field Maple	<i>Acer campestre</i>	3.2	2.9	1.9	Yes
Helygen Ddeilgron	Goat Willow	<i>Salix caprea</i>	2.2	2.2	2.8	Yes
Tresi Aur	Golden chain	<i>Laburnum anagyroides</i>	1.0	3.0	1.5	No
Helygen Lwyd	Grey Willow	<i>Salix cinerea</i>	1.9	0.1	4.1	Yes
Collen	Hazel	<i>Corylus avellana</i>	3.5	3.0	1.7	Yes
Celyn	Holly	<i>Ilex aquifolium</i>	3.9	3.0	1.4	Yes
Oestrwydden	Hornbeam	<i>Carpinus betulus</i>	4.0	2.7	1.7	Yes*
Castanwydden Y Meirch	Horse chestnut	<i>Aesculus hippocastanum</i>	3.4	2.8	1.4	No
Pisgwydden Dail Mawrion	Large leaved lime	<i>Tilia platyphyllos</i>	4.0	2.5	1.0	Yes
Helygen Wiail	Osier Willow	<i>Salix viminalis</i>	1.9	0.5	3.9	Yes
Derwen Mes Coesynnog	Pendunculate/ English Oak	<i>Quercus robur</i>	2.5	3.0	1.9	Yes
Yswydden	Privet	<i>Ligustrum vulgare</i>	2.3	3.5	1.9	No
Criafolen	Rowan/Mountain Ash	<i>Sorbus aucuparia</i>	2.7	2.1	1.8	Yes
Derwen Ddigoes	Sessile Oak	<i>Quercus petraea</i>	2.7	3.0	1.2	Yes
Bedwen Arian	Silver Birch	<i>Betula pendula</i>	2.0	1.9	1.7	Yes
Pisgwydden Dail Bach	Small leaved lime	<i>Tilia cordata</i>	4.2	2.8	1.8	Yes
Piswydden	Spindle	<i>Euonymus europaeus</i>	3.0	3.0	2.1	Yes

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Enw Cymraeg	English name	Latin name	Shade tolerance	Drought tolerance	Waterlogging tolerance	UK Native
Castanwydden Bêr	Sweet chestnut	<i>Castanea sativa</i>	3.2	3.5	1.3	No
Masarnen	Sycamore	<i>Acer pseudoplatanus</i>	3.7	2.8	1.1	No
Coeden Cnau Ffrenig	Walnut	<i>Juglans regia</i>	2.3	3.0	1.4	No
Gwifwrnwydden	Wayfaring tree	<i>Viburnum lantana</i>	1.9	3.5	1.7	Yes
Helygen Wen	White Willow	<i>Salix alba</i>	2.0	2.0	4.1	Yes
Cerddinen Wen	Whitebeam	<i>Sorbus aria</i>	3.0	3.6	1.3	Yes *
Ceirios Gwylt	Wild Cherry/ Gean	<i>Prunus avium</i>	3.3	2.7	1.2	Yes
Cerddinen Wylt	Wild Service tree	<i>Sorbus torminalis</i>	3.4	3.7	1.0	Yes
Llwyfen Lydanddail	Wych Elm	<i>Ulmus glabra</i>	3.5	2.4	2.0	Yes
Ywen	Yew	<i>Taxus baccata</i>	4.4	3.0	1.3	Yes

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Coniferous species			Growing tolerances/preferences			
Enw Cymraeg	English name	Latin name	Shade tolerance	Drought tolerance	Waterlogging tolerance	UK Native
Ffynidwydden Douglas	Douglas fir	<i>Pseudotsuga menziesii</i>	2.8	2.6	1.8	No
Llarwydden Ewrop	European Larch	<i>Larix decidua</i>	1.5	2.3	1.1	No
Sbriwsen Norwy	Norway spruce	<i>Picea abies</i>	4.5	1.8	1.2	No
Pinwydden Yr Alban	Scots pine	<i>Pinus sylvestris</i>	1.7	4.3	2.6	No
Aethnen	Western Hemlock	<i>Tsuga heterophylla</i>	5.0	1.2	1.0	No
Thwia Blethog	Western Red Cedar	<i>Thuja plicata</i>	4.7	2.2	1.0	No
Pinwydden Yr Alban	Scots pine	<i>Pinus sylvestris</i>	1.7	4.3	2.6	Yes*
Sbriwsen Sitca	Sitka spruce	<i>Picea sitchensis</i>	3.9	1.5	2.0	No

Data source; Ülo Niinemets and Fernando Valladares. 2006. Tolerance to shade, drought, and waterlogging of temperate Northern Hemisphere trees and shrubs. Ecological Monographs 76:521–547.

See also (<https://www.forestry.gov.uk/esc>) for a more detail on selecting species based on site conditions.

Contact Coed Cymru for further advice and information
(www.coed.cymru)

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