Department of Horticulture
FACT SHEET
THE CONSUMER HORTICULTURE CENTER

Shade Tolerant Trees, Shrubs, and Groundcovers

Plants and Shade

Most plants grow best in full sunlight and all plants need some light to survive. The amount of shade a plant is growing under will directly affect the density of the foliage, as well as the flowering and fruiting characteristics. In choosing plants, the level of light the plant will receive should be taken into consideration. To properly select plants suitable to your site, defining the level of shade or sun the plant will receive is helpful. For instance, heavy shade can be characterized as a site where no direct sunlight reaches the site such as that found at the base of a north-facing wall or below dense evergreens (e.g., under hemlocks). Conversely a full sun site would receive full direct sunlight for at least six hours per day. Light shade sites are those exposed to partially filtered sun such as that found under open canopied trees (e.g., honey locust, ash, and birch). Moderate shade sites could be defined as those receiving mostly reflected light found at the floor of a typical hardwood forest. Planters should understand that generally, plants grown in shade will not be as dense as the same plants under full sunlight. Usually fewer flowers develop on plants in the shade. Frequently, fall color or unique foliage colors (e.g., maroon foliage of 'wine and roses' Weigela and red leafed Japanese maples) will not be as intense or maybe greener in color under shade conditions. Moisture availability is a secondary factor in choosing shade adaptable plants—some plants may survive under shade conditions but require supplemental water to assure complete survival. Comparing your plant choices with a list of dry site tolerant plants will assure that you are making the most informed decision when choosing plants to fit the site.

Trees

Few trees require shade to thrive, however, some will adapt to these conditions rather well. The deeper the shade, the more difficult it will be for any tree to develop properly. In deep shade, many of the flowering trees will not set flowers or fruit as will similar plants given more sunlight.

	Shade Type			USDA Hardiness Zone
Common and Scientific Name	**Light**	**Moderate**	**Heavy**	
Concolor fir, *Abies concolor*	X			4-7
Hedge maple, *Acer campestre*	X			5-8
Japanese maple, *A. palmatum*	X	X		5-8
Red maple, *A. rubrum*	X	X		3-9
Sugar maple, *A. saccharum*	X	X		4-8
Freeman maple, *A. x freemanii*	X	X		4-7
Red buckeye, *Aesculus pavia*	X	X		5-9
Black alder, *Alnus glutinosa*	X	X		4-7
Juneberry, serviceberry, *Amelanchier arobrea* and *A. canadensis*	X	X		4-9
Allegheny serviceberry, *A. laevis*			X	4-8
Pawpaw, *Asimina triloba*	X	X	X	5-8
European hornbeam, *Carpinus betulus*	X	X		5-7
American hornbeam, *Carpinus carolina*	X	X	X	3-9
Eastern redbud, *Cercis canadensis*	X			4-9

Common and Scientific Name	Shade Type Light	Moderate	Heavy	USDA Hardiness Zone
White fringe tree, *Chionanthus virginicus*	X			4-9
Pagoda dogwood, *Cornus alternifolia*	X			3-7
Flowering dogwood, *Cornus florida*	X	X		5-8
Kousa dogwood, *Cornus kousa* and *C. kousa* x *C. florida* hybrids	X	X		5-8
Redvein enkianthus, *Enkianthus campanulatus*	X			5-7
European beech, *Fagus sylvatica*	X	X		4-7
Carolina silverbell, *Halesia tetraptera*	X	X		4-8
American holly, *Ilex opaca*	X			5-9
Sweetbay magnolia, *Magnolia virginiana*	X	X		5-9
Black gum, *Nyssa sylvatica*	X	X		4-9
Ironwood, American hophornbeam, *Ostrya virginiana*	X			3-9
Sourwood, *Oxydendrum arboreum*	X			5-9
White spruce, *Picea glauca*	X			2-6
Staghorn sumac, *Rhus typhina*	X	X		4-8
Japanese snowbell, *Styrax japonicus*	X			5-7
Western arborvitae, *Thuja plicata*	X			2-7
Amercan basswood, *Tilia americana*	X			3-8
Canadian hemlock, *Tsuga canadensis*	X	X		3-7
American elm, *Ulmus americana* (specifically new hybrid elms e.g., 'Valley Forge, New Harmony')	X	X		3-9
Lacebark elm, *U. parvifolia*	X	X		5-9

Shrubs

The following shrubs will tolerate shade conditions better than most. Some shrubs require some protection from direct sunlight to avoid leaf burn during the day for example mid morning to late afternoon.

Common and Scientific Name	Shade Type Light	Moderate	Heavy	USDA Hardiness Zone
Glossy abelia, *Abelia* x *grandiflora*	X	X		6-9
Red chokeberry, *Aronia arbutifolia*	X	X		4-9
*Wintergreen barberry, *Berberis julianae*	X			6-8
Mentor barberry, *Berberis* x *mentorensis*	X	X		5-8
Japanese barberry, *Berberis thunbergii*	X			4-8
*Boxwood (*Buxus microphylla* and *B. sempervirens*)	X	X		6-8
Common sweetshrub, *Calycanthus floridus*	X	X		4-9
Summersweet, *Clethra alnifolia*	X			4-9
Sweetfern, *Comptonia peregrina*	X	X		2-5
Corneliancherry dogwood, *Cornus mas*	X			4-7
Gray dogwood, *Cornus racemosa*	X	X	X	3-8
Buttercup winter hazel, *Corylopsis pauciflora*	X	X		6-8
Hazelnut, *Corylus* species	X			4-8
*+Daphne, *Daphne* species	X	X		4-7
Dwarf fothergilla, *Fothergilla gardenii*	X			5-8
Witchhazel, *Hamamelis* species	X	X		4-8
Oakleaf hydrangea, *Hydrangea quercifolia*	X	X		5-9
Aaronsbeard St. Johnswort, *Hypericum calycinum*	X			5-8
*Holly, *Ilex* species	X	X		5-8
Virginia sweetspire, *Itea virginica*	X	X		5-9
*Laurel, *Kalmia* species	X	X	X	4-9
Japanese kerria, *Kerria japonica*	X	X	X	4-9
*+Leuocothoe, *Leucothoe* species	X	X		5-8
Privet, *Ligustrum* species	X	X		4-7

Common and Scientific Name	Shade Type Light	Moderate	Heavy	USDA Hardiness Zone
*Oregon hollygrape, *Mahonia aquifolium*	X	X		5-7
Northern bayberry, *Myrica pensylvanica*	X	X		3-6
*Heavenly bamboo, *Nandina domestica*	X	X		6-9
*Paxistima, Canby, *Paxistima canbyi*	X	X		3-7
Mock orange, *Philadelphus coronarius*	X			4-8
*Pieris, *Pieris japonica* and cultivars	X	X		4-7
*Scarlet firethorn, *Pyracantha coccinea*	X	X		6-9
*+Rhododendron, *Rhododendron* species	X	X		4-8
Black jetbead, *Rhodotypos scandens*	X	X	X	4-8
Fragrant sumac, *Rhus aromatica*	X	X		3-9
Coralberry and Snowberry, *Symphoricarpos* species	X	X	X	4-7
*Yew, *Taxus* species	X	X	X	4-7
Viburnum, Mapleleaf, *Viburnum acerifolium*	X	X	X	4-8
Viburnum, Arrowwood, *Viburnum dentatum*	X	X		3-8
Blackhaw, *Viburnum prunifolium*	X	X		3-9

Ground Covers

Common and Scientific Name	Shade Type Light	Moderate	Heavy	USDA Hardiness Zone
Bishop's weed, *Aegopodium podagraria*	X			4-9
*Bugle-weed, *Ajuga reptans*	X			3-9
Bearberry, *Arctostaphylos uva-ursi*	X			5-8
Wild Ginger, *Asarum canadense*	X	X	X	4-8
Astilbe, *Astilbe* species and cultivars	X			3-8
Japanese painted fern, *Athyrium niponicum* 'Pictum'			X	5-8
Plumbago, *Ceratostigma plumbaginoides*	X			6-9
Lily of the Valley, *Convallaria majalis*			X	4-9
Barrenwort, *Epimedium* species	X			5-9
*Wintercreeper, *Euonymus fortunei*	X			5-9
Sweet woodruff, *Galium odoratum*		X	X	4-7
*Creeping wintergreen, *Gaultheria procumbens*	X	X		3-5
*Box huckleberry, *Gaylussacia brachycera*	X	X		5-7
*English Ivy, *Hedera helix*			X	5-11
Lenten rose, *Helleborus orientalis*	X			4-9
Coral bells, *Heuchera* species and hybrids	X			3-8
Foam bells, *Heucherella* hybrids			X	3-8
Plantain-lily, *Hosta* species and cultivars	X			4-9
St Johnswort, *Hypericum calycinum*	X			5-9
Crested iris, *Iris cristata*	X	X	X	3-8
*Yellow archangel, *Lamiastrum galeobdolon*			X	4-8
*Deadnettle, *Lamium maculatum*	X			4-8
Lily-turf, *Liriope spicata*, *L. muscari*	X			6-11
Creeping Jenny, *Lysimachia nummularia*	X			4-8
*Russian arborvitae, *Microbiota decussata*	X			3-8
Mondo grass, *Ophiopogon japonicus*	X			6-11
*Allegheny spruge, *Pachysandra procumbens*		X	X	5-9
*Japanese Spurge, *Pachysandra terminalis*		X	X	4-8
*+Sweet box, *Sarcococca hookeriana* var. *humilis*		X	X	6-8
Stonecrop, *Sedum* species				
Foam flower, *Tiarella cordifolia*	X	X	X	3-7
*Periwinkle, *Vinca minor*	X	X	X	4-9

* Indicates Evergreen.

❍ Indicates plants that require shade during a portion of the day (midmorning to late afternoon) or season to prevent desiccation injury or sunscald.

Prepared by N. Robert Nuss, retired professor of horticulture

Reviewed and revised by Scott Guiser, Bucks County extension educator and Jim Sellmer, associate professor of ornamental horticulture

PENN STATE COLLEGE OF AGRICULTURAL SCIENCES
DEPARTMENT OF HORTICULTURE
102 TYSON BLDG.
UNIVERSITY PARK, PA 16802
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