Uses and Characteristics of Plant Materials in West Virginia

All of us depend on plants for our survival, but through a lack of understanding or disrespect, we don't realize the benefits they can provide. Our attitudes are formulated by our perception of the environment surrounding us. Many times plants are stereotyped as being just cosmetic elements beautifying the landscape.

Plant materials provide many functions that we take for granted, such as space articulation, directing, regulating, and manipulating us through a space. Plants function as atmospheric purifiers capable of absorbing large quantities of noxious gases, objectionable odors, dust and dirt particles. These are just a few of the benefits that plants provide us every day of our lives.

The following tables will suggest some uses of plants commonly found in this part of the United States:

Many varieties selected for erosion control also beautify construction sites

TABLE 1 — Ground Cover, Vines, Shrubs, and Trees for Urban Areas in West Virginia

Common Name Botanical Name	Size Height-Spread	Growth Rate	Soil Suitability	Shade Tolerant	Diseases/Insects	Habit	Landscape Value	Winter Aspects	Spacing of Plants (Feet)
Washington Hawthorn (Crataegus phaenopyrum)	25' by 20'	Medium	Average Soil	1/2 or Full Sun	Fire-Blight	Upright, Columnar, Dense Thorny Tree, Rounded Crown, Multi-Stemmed, Some Irregular Growth	Attractive Specimen Plant, Screen, Border, Hedge, Nice Year Round, Good Fall Color, and Fruit-Red Lasts All Winter	Deciduous	5-9
European Black Alder (Alnus glutinosa)	40'-60' by 20'-30'	Fast	Tolerant	1/2 or Full Sun	Cankers, Leaf Rust, Mildew, Aphid, Lace Bug	Irregular Shape, Pyramidal Habit, Multi-stemmed	For Difficult Sites, Good In Sterile Soils, Can Fix Atmospheric Nitrogen	Deciduous	5-9
Japanese Larch (Larix leptolepis)	70' by 25'	Medium to Fast	Tolerates Wet Swampy Conditions	Full Sun or Light Shade	Larch Case-Bearer, Rust, Cankers, Wood Decay, Beetles	Narrow Pyramidal to Wide Spreading, Open Horizontal Branching	Fine Specimen, Good in Large Areas, Good Screen, Nice Character	Deciduous	5-9
Scotch Pine (Pinus sylvestris)	30'-60' by 30'-40'	Medium	Tolerant	Full Sun	Dry Rot, Fungus	Irregular Pyramidal, Open, Wide Spreading, Round-Topped	Picturesque Character, Specimen, Mass, Not a Shade Tree, Unique Form and Color, Rugged Conifer	Evergreen	5-9
Virginia Pine (Pinus virginiana)	15'-40' by 10'-30'	Slow	Very Tolerant	Full Sun	None	Broad, Open, Pyramidal, Irregular, Scrubby Appearance	Not Ornamental, Use in Poor Soils, Good Cover, Rugged Use Where Other Plants Will Not Grow	Evergreen	5-9
Common Juniper (Juniperus communis)	5'-25' by 8'-12'	Slow	Very Tolerant	Full Sun	Juniper Blight, Bagworm	Pyramidal, Ascending & Spreading Branches, Medium-Size	Handsome, Best for Poor, Dry, Sterile Soils, Very Tolerant	Evergreen	4-6
Eastern Red Cedar (Juniperus Virginiana)	30'-90' by 8'-20'	Slow to Medium	Very Tolerant	Full to 1/2 Sun	Cedar Apple Rust, Bagworms	Densely Pyramidal, Ascending Branches, Horizontal Branches in Old Age	Excellent Specimen, Mass, Windbreak, Shelterbelts, Hedge, Commercial Value	Evergreen	5-7

TABLE 2 — Ground Cover, Vines, Shrubs, and Trees for Urban Areas in West Virginia

Common Name Botanical Name	Size Height-Spread	Growth Rate	Soil Suitability	Shade Tolerant	Diseases/Insects	Habit	Landscape Value	Winter Aspects	Spacing of Plants (Feet)
Black Locust (Robinia pseudoacacia)	30'-50' by 20'-35'	Fast	Tolerant	Tolerant	Locust Borer, Canker, Leaf Miner	Upright, Open, Straight Trunks, Narrow Crowns, Ragged & Irregular with Age, Legume	Very Tolerant, Will Grow Just About Any-Where, Strip Mines, Cut & Fills, Flowers are Fragrant, Not for the Residential Landscape	Deciduous	8-10
White Pine (Pinus strobus)	50'-80' by 20'-40'	Fast	Tolerant	3/4 Sun	Blister Rust, Pine Weevil	Rounded to Pyram-idal, Horizontal or Ascending Branches-Distinctive Form	Very Handsome Speci-men, Mass, Sheared Hedge, a Beautiful Native Pine, Grows Well in Tough Areas	Evergreen	5-9
Northern White Cedar (Thuja occidentalis)	40'-60' by 10'-20'	Slow	Moist Soils, Deep Well Drained Soils	Full Sun	Bagworms, Spider Mites	Dense Broad Pyram-idal, Ascending Branches	Good Specimen, Accent Plant, Screen, Hedge, Windbreak, Good for Wet Sites	Evergreen	5-9
Eastern Hemlock (Tsuga canadensis)	40'-70' by 25'-35'	Medium	Well Drained Soils	Tolerant	Cankers, Rust, Blight, Leaf Miner, Scale	Pyramidal with Pendulous Branches, Dense Foliage	Graceful Hedge, Screening, Accent, One of Our Best Evergreens	Evergreen	5-9
Norway Spruce (Picea abies)	40'-60' by 25'-30'	Medium to Fast	Tolerant	1/2 Shade	Trunk & Root Rot, Budworm	Pyramidal, Pendulous Branches, Graceful, Stiff, Vigorous	Much Overused, Screen-ing Hedge, Windbreak, Critical Areas	Evergreen	5-9
Austrian Pine (Pinus Nigra)	50'-60' by 20'-40'	Fast	Very Tolerant	1/2 Shade	Dieback, Blight	Dense, Pyramidal, Broad Spreading Branches	Very Adaptable, Stiff Specimen, Screen, Wind-break, Mass	Evergreen	5-9

TABLE 3 — Ground Cover, Vines, Shrubs, and Trees for Urban Areas in West Virginia

Common Name Botanical Name	Size Height-Spread	Growth Rate	Soil Suitability	Shade Tolerant	Diseases/Insects	Habit	Landscape Value	Time To Form Cover (Years)	Spacing of Plants (Feet)
Arnold Dwarf Forsythia (Forsythia arnoldi)	4'-6'	Fast	Adaptable	1/2 Shade	Crowngail, Spider Mites	Low Dwarf, Arching Branches, Fibrous Roots, Stems Root When Touch Soil	Bank Cover, Ground Cover Massing, Critical Area, Yellow Flower	2	2-3
Fragrant Sumac (Rhus aromatica)	3'-8'	Slow	Adaptable	1/2 to 3/4 Shade	None Serious	Low, Irregular, Spreading, Suckers from Roots, Dense Stems, Root When Touch Soil	Fast Bank Cover, Massing, Ground Cover, Critical Area, Yellow Flower	2	2-3
Hardhack Spirea (Spirea tomantosa)	3'-4'	Fast	Adaptable, Well Drained	1/2 Shade	None Serious	Upright, Clump, Branches Will Root	Mass or Naturalizing, Rose-Red Flowers	2	2-3
Black Chokeberry (Aronia melanocarpa)	3'-5'	Slow	Adaptable Wet or Dry Soils	Full or 1/2 Shade	None Serious	Suckers Profusely, Fibrous Roots, Upright, Spreading, Multi-Stemmed Shrub, Open, Leggy with Age	Good in Wet Areas, Naturalizing, Border, Massings, Attractive Fruit, Red Fall Color	2-3	2-3
Siebold Forsythia (Forsythia suspensa seboldi)	3'-9' by 7'-10'	Fast	Adaptable	Full Sun	None Are Extremely Serious	Pendulous, Arching, Spreading Shrub, Branches Root Rapidly, Vigorous Growth	Flower Color Yellow, Can be Used Effectively, Good for Bank Protection, Mass, Border	2	3-4
Snowberry (Symphoricarpos albus)	3'-6' by 3'-6'	Fast	Very Tolerant	Full to 1/2 Shade	Authracinose, Berry Rot Rust	Bushy, Ascending Shoots, Twiggy	Fruit Can be Interesting, Good for Stabilizing, Cuts, Slopes, Fills, Ornamental Fruit	2	2-3
Billard Spirea (Spirea billardi)	6'-6'	Fast	Tolerant	1/2 to Full Shade	None Serious	Erect Arching, Shrub Increases by Underground Stems, Quickly Forming a Dense Mass of Growth	Mass Planting, Slopes, Nice Flowers, Rose-Red	2	2-3

TABLE 4 — Ground Cover, Vines, Shrubs, and Trees for Urban Areas in West Virginia

Common Name Botanical Name	Size Height-Spread	Growth Rate	Soil Suitability	Shade Tolerant	Diseases/Insects	Habit	Landscape Value	Time To Form Cover (Years)	Spacing of Plants (Feet)
Red-Osier Dogwood (Cornus stolonifera)	9'-IO'	Fast	Very Adaptable	1/2 to Full Shade	Canker, Scale	Loose, Broad-Spreading, Rounded Multi-Stemmed Shrub, Horizontal Branches Found in Swampy Areas, Branches are Bright Red	Excellent for Massing, Shrub Border Bank Cover	2	3
Bayberry (Myrica pensylvanica)	5'-12' by 9'	Medium	Adaptable, Good in Poor Soils	1/2 to Full Shade	None Serious	Deciduous-semi-Evergreen, Upright, Rounded, Dense, Withstands Salt-Spray	Excellent in Mass, Border, Use in Poor Soil Sites, Aromatic Leaves, Showy Berries	3	3
Winter Creeper (Euonymus fortunei)	4"-6" Spread 10'	Fast	Tolerant	Tolerant	Crown Gall, Aphids, Scales	Evergreen, Ground Cover or Vine	Excellent on Steep Slopes, Ground Cover, Vine, Wall Cover, Low Hedge, Forms a Weed Free Mat	I-2	I-2
Virginia Creeper (Parthenocissus quinquefolia)	Spread 15'	Fast	Tolerant	Tolerant	Canker, Mildew, Leaf Spot, Beetles, Scales	Deciduous Vine, Ability to Cement Itself to Walls, Very Long Branches, Difficult to Kill	Tough, Low Maintenance Cover, Will Cover Anything, Walls, Trellises, Rock Piles, Slow to Reestablish	2-3	2-3
Korean Bittersweet (Celastrus flagellaris)	Spread 20'	Fast	Tolerant	Full Sun	Leaf Spots, Aphids, Mildews, Crown Gall, Canker	Vigorous, Deciduous Vine, Quick To Cover, Twining Vine	Tough Plant, Best Used Only in Hard to Establish Areas, Allow to Ramble, Thorny Branches, Handsome Fruit, Good Barrier Plant, Will Grow as Long as There is Something to Grow on	1-2	2-3

TABLE 5 — Ground Cover, Vines, Shrubs, and Trees for Urban Areas in West Virginia

Common Name Botanical Name	Size Height-Spread	Growth Rate	Soil Suitability	Shade Tolerant	Diseases/Insects	Habit	Landscape Value	Time To Form Cover (Years)	Spacing of Plants (Feet)
Creeping Juniper (Juniperus horizontalis)	2'-4'	Slow to Medium	Very Tolerant	1/2 Shade	Juniper Blight Can be Extremely Serious	Low Prostrate, Long Tailing Branches Forming Dense Mats	Valued for Adaptability to Soils Tolerates, Hot, Dry, Sunny Locations, Used on Slopes as Ground Cover, Massing	2-3	3-4
Sargent Juniper (Juniperus chinensis sargenti)	18"-24" by 7'-9'	Slow to Medium	Alkaline Moist, Well Drained Soils	1/2 Shade	None Serious	Low Prostrate, Creeping, Forming a Dense Mat, Tolerates Salt-Spray	Excellent Ground Cover or Mass Plant	2-3	3-4
Canadian Yew (Taxus canadensis)	3'-6' by 6'	Slow	Moist Sandy Loam	1/2 Shade	None Serious	Loose, Straggling, Long-Lived Shrub, Leader Branches Root in Ground	Ground Cover in a Cool Shaded Situation	2-3	2-3
Pfitzer Juniper (Juniperus chinensis pfitzeriana)	5'-10'	Slow to Medium	Alkaline Moist, Well Drained Soils	1/2 Shade	Juniper Blight	Wide, Spreading Varies in Form, Long-Lived	Slope Cover, Critical Area, Massing	2	3-4
Japanese Yew (Taxus cuspidata)	Variable 10'-40' by 30'	Slow	Well Drained But Adaptable	Tolerant	None Serious	Irregular, Spreading or Upright-Spreading, Multi-Stemmed Shrub or Tree Long-Lived	Excellent for Screen, Hedge, Mass, Bank Cover	2-3	3
Mugo Pine (Pinus mugo)	8'-15' by 20'	Slow	Deep Moist Loam	Tolerant	Scale Rust, Wood Rot, Borers, Sawflies	Variable, Prostrate or Pyramidal, Low Broad Spreading, Bushy Plant	Masses, Hedge, Critical Area Plantings, Dwarf Forms are Used Extensively, Tremendous Variety in Size	3	3

Table 6 — Ground Cover, Vines, Shrubs, and Trees for Urban Areas in West Virginia

Common Name Botanical Name	Size Height-Spread	Growth Rate	Soil Suitability	Shade Tolerant	Diseases/Insects	Habit	Landscape Value	Time To Form Cover (Years)	Spacing of Plants (Feet)
Bugle Weed (Ajuga reptans)	4"-12"	Fast	Well Drained Acid Soils	Prefers Shade	None Serious	Perennial Evergreen, Spreads by Runners	Excellent Ground Cover Under Other Plants, Accent or Border Plant, Specimen or Mass Plantings	2	1
Lilyturf (Liriope muscari)	8"-12"	Medium	Tolerant	Tolerant	None Serious	Dense Spreading, Semi-Evergreen Spreads by Underground Stems	Ground Cover for Shady Slopes, Salt Tolerant	2	1
Tawny Daylily	18"-24"	Medium to Slow	Tolerant	Tolerant	None Serious	Slow to Cover, Sparse at First	Needs Companion Cover Crop, Mass Plantings, Critical Area	2-3	1-2
Baltic English Ivy (Hedra helix baltica)	6"-12"	Fast	Somewhat Tolerant	Tolerant	Leaf Spot, Canker, Aphids, Caterpillars	Low Hugging, Evergreen, Ground Cover	Ground Cover Can be Used in Heavy Shade, Vigorous	2	1
Common Periwinkle (Vinca minor)	3"-6"	Medium to Fast	Tolerant	1/2 Shade	Blight, Canker, Leaf Spots	Low Growing, Prostrate Evergreen, Forms a Dense Mat	Excellent Ground Cover, Dainty Blue Flowers	1-2	1
Littleleaf Cotoneaster (Cotoneaster dammeri radicans)	10"-15"	Fast	Tolerant	Tolerant	Aphids	Low, Prostrate, Evergreen, Semi-Evergreen, Creeping Branches	One of the Best Evergreen Ground Covers, Banks, Masses, or Shrub Border	2	1
Japanese Spurge (Pachysandra terminalis)	6"-12"	Slow	Moist, Well Drained Acid Soil (pH 5 . 5-6 . 5), Organic Matter	Shade	Blight, Scale, Mites	Evergreen, Ground Cover, Spreading by Rhizomes	Best Ground Cover for Deep Shade, Critical Areas	2	.5-1